



BLUE ECONOMY ROADMAP

ADVANCING MARINE AND COASTAL ECO-PRACTICES IN EGYPT



2024

SwitchMed II Project (Policy Component)
to accelerate the implementation of Sustainable Consumption and Production, Circular Economy and Blue Economy

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LIST OF ACRONYMS

ACCNDP	Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management Project
AICZMP	Alexandria Integrated Coastal Zone Management Project
CBD	Convention on Biological Diversity
CDWS	Chamber of Diving & Watersports
CE	Circular Economy
CEDARE	Center for Environment and Development for the Arab Region and Europe
COP	Conference of the Parties
COVID	Coronavirus Disease
EEAA	Egyptian Environmental Affairs Agency
EHA	Egyptian Hotel Association
ESTP	Egyptian Sustainable Tourism Portal
ETF	Egyptian Tourism Federation
EU	European Union
GA	Gulf of Aden
GAFI	General Authority for Investment and Free Zones
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFCR	United Nations Global Fund for Coral Reefs
GPS	Global Positioning System
HEPCA	Hurghada Environmental Protection and Conservation Association
HESBERSGA	Harnessing Marine Ecosystem Services and Transforming to Sustainable Blue Economy in the Red Sea and Gulf of Aden
ICZM	Integrated Coastal Zone Management
IMAP-MPA	Integrated Monitoring of Protected Areas project
IMCAM	Integrated Marine, and Coastal Area Management
KPI	Key Performance Indicator
MBDT	Mainstreaming Biodiversity into Egypt's Tourism
MCPA	Marine and Coastal Protected Areas
MPAs	Marine Protected Areas
NCS	Nature Conservation Sector
NDC	Nationally Determined Contribution
NGOs	Non-Profit Organisations
NWRC	National Water Research Center
OECMs	Other Effective Area-Based Conservation Measures
PA	Protected Areas
PERS	Regional Organization for the Conservation of the Environment of the Red Sea &
RSPs	Red Sea Protectorates
SCA	Suez Canal Authority
SCP	Sustainable Consumption and Production
SDGs	United Nations Sustainable Development Goals
SDG 12	Sustainable Development Goal 12, Titled «Responsible Consumption and Production»
SDG 14	Sustainable Development Goal 14, Titled "Life Below Water"
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States International Aid
USD	United States Dollar



I. EXECUTIVE SUMMARY





The Coastal and Marine Eco-Tourism roadmap, developed within the framework of the EU-funded SwitchMed II project in collaboration with the United Nations Environment Programme (UNEP), is a strategic initiative aimed at promoting sustainable practices in the Mediterranean region. Facilitated by the Centre for Environment and Development for the Arab Region and Europe (CEDARE) on behalf of the Ministry of Environment, the roadmap aligns with Egypt's national blue economy framework, focusing on the «Coastal and Marine Eco-Tourism» sub-sector. Emphasizing the importance of responsible tourism, the roadmap reflects Egypt's commitment to the United Nations Sustainable Development Goals, particularly SDGs 12 and 14¹, and engages a wide range of stakeholders in a participatory approach.

The roadmap serves multiple purposes, including aligning with the national blue economy framework, outlining the Ministry of Environment's priorities in coastal and marine eco-tourism, synergizing with Line Ministries, addressing challenges, and leveraging existing initiatives. It also builds on prior collaboration within the context of the SwitchMed Project with UNEP to promote sustainable consumption and production (SCP) to align the country's economic efforts to a circular economy. It adopts the same participatory approach and the overarching goals and objectives of the "Egypt Action Plan for Sustainable Consumption and Production" SCP NAP that was launched back in 2015.

Its methodology involves a participatory approach, stakeholder mapping, a data-driven process, and the collaboration of technical experts in eco-tourism, marine ecology, and biodiversity. Three consultation sessions and several interviews were conducted to gather insights and feedback from key stakeholders, ensuring the roadmap's realistic understanding of the current status of coastal and marine tourism in Egypt.

Through this roadmap, the Ministry of Environment envisions coastal and marine eco-tourism in Egypt as a sustainable and harmonious fusion of economic growth, environmental preservation, and cultural enrichment. Aligned with the country's 2030 strategy for sustainable development, the vision positions coastal and marine tourism as a key driver of Egypt's blue economy. The Ministry's strategic objectives until 2030 underscore the rational and sustainable management of natural resources, pollution reduction, ecosystem, and biodiversity balance, and fulfilling international environmental commitments.

(1) SDG 12 deals with Sustainable Consumption and Production while SDG 14 deals with life below water.

To realize this vision, the roadmap outlines four strategic interventions to promote sustainable consumption and production practices built within the promotion of the blue economy approach:



The roadmap also identifies cross-cutting economic, environmental, and social strategic drivers that have helped in developing the above four strategic interventions. Under each of the four interventions:

- o **Institutional challenges are mapped; and**
- o **Actionable recommendations and initiatives are suggested.**

The success of the roadmap and its interventions hinges on several critical enablers:

1. **Alignment and Integration:** The roadmap must align with Egypt's blue economy framework, ensuring a cohesive approach to economic growth while maintaining environmental sustainability. Integration of the roadmap into the broader national strategy is essential for coherent policy implementation.
2. **Complementarity with SCP Efforts:** Ensuring synergy and alignment with ongoing Sustainable Consumption and Production (SCP) initiatives. This involves coordinating efforts to minimize environmental impact throughout the entire life cycle of products, initiatives and services related to coastal and marine eco-tourism.
3. **Time Frame and KPIs:** There should be clear timelines and Key Performance Indicators (KPIs) for the execution of actions within each of the four proposed interventions. This will provide measurable objectives and facilitate tracking of progress.
4. **Institutional Oversight:** A dedicated body, possibly a permanent committee led by the Ministry of Environment, should be established. This committee would include representatives from all relevant stakeholders identified in the roadmap to supervise the effective execution of the plan.
5. **Project Catalogue Development:** Initiatives and actions suggested in the roadmap should be detailed further to create a comprehensive project catalogue. This catalogue would guide the implementation of each intervention.
6. **Finance Taskforce Formation:** A finance taskforce should be formed to explore and secure funding opportunities for the projects. This team would investigate aid programs, international funds, and donors, and consider innovative sustainable finance instruments like blue bonds.
7. **Monitoring and Evaluation:** Establishing a robust monitoring and evaluation framework to track progress, assess the impact of interventions, and identify areas for improvement of the roadmap.
8. **Partnerships:** Encouraging collaboration with national and international organizations, private sector entities, and academia to pool resources, share expertise, and foster a collaborative approach to achieving common goals of the roadmap.
9. **Community Engagement:** To ensure the successful implementation of the Blue Economy Roadmap, it is recommended to prioritize enhanced engagement with local NGOs, volunteer initiatives, and community-based organizations. This includes establishing structured mechanisms for consultation, collaboration, and capacity-building to harness the full potential of grassroots stakeholders in advancing sustainable blue economy practices.



III. ABOUT THE ROADMAP



BACKGROUND

The development of this strategic roadmap has been undertaken by CEDARE upon request by the Ministry of Environment within the policy component of the EU-funded SwitchMed II project, coordinated by the United Nations Environment Programme (UNEP).

The SwitchMed project, an initiative aimed at promoting sustainable consumption and production (SCP) practices and circular economy in the Mediterranean region, provides a solid foundation for the creation of this document, leveraging the expertise and resources made available through this collaborative effort. The SwitchMed project has worked on introducing SCP principles through supporting initiatives launched by the Ministry of Environment including the development of Egypt's national action plan for sustainable consumption and production. This roadmap is the latest activity to highlight the crosscutting nature between SCP and the blue economy through the umbrella of coastal and marine eco-tourism.

CONTEXT

In alignment with Egypt's overarching national blue economy framework and forthcoming blue economy strategy, the roadmap represents a pivotal and visionary component within this comprehensive framework. This roadmap serves as a dedicated response to the vital sub-sector identified within the country's blue economy framework as «Coastal and Marine Eco-Tourism,» reflecting Egypt's commitment to harnessing the wealth of its coastal and marine resources for sustainable economic growth and environmental stewardship. Moreover, it remains steadfastly aligned with all newly initiated blue economy-related projects under the purview of the Ministry of Environment.

The roadmap operates on the fundamental principle that by promoting eco-tourism practices, the government is steadily advancing toward a sustainable development model within the tourism sector. This approach reinforces Egypt's dedication to implementing the United Nations Sustainable Development Goals (SDGs), with particular emphasis on SDG goal number 14. This goal underscores the imperative of conserving and sustainably utilizing oceans, seas, and marine resources to facilitate sustainable development. Through proposed interventions to promote SCP actions within eco-tourism practices, the roadmap will further show how switching towards SCP and CE (SDG12) behaviors and practices can support blue economy efforts, biodiversity conservation and fight climate change.

It embodies a holistic approach that encapsulates the aspirations, knowledge, and expertise of a broad spectrum of relevant stakeholders. It is the product of a participatory approach that has engaged industry experts, environmental advocates, civil society, and government agencies in an ongoing, inclusive dialogue.

As the Ministry of Environment assumes a leadership role in supporting eco-tourism initiatives, this roadmap empowers its endeavors by offering a strategic roadmap that is both visionary and practical. It outlines key principles, objectives, and actionable steps to ensure that Egypt's coastal and marine environments are not only preserved but also harnessed for the sustainable benefit of local communities and the nation as a whole.

It is a forward-looking and comprehensive roadmap based on the essential message that: "Responsible and sustainable tourism practices can coexist with the conservation of natural treasures to provide economic value added to the Egyptian economy. Egypt's coastal and marine ecosystems are invaluable assets that, when managed wisely, can yield economic prosperity, promote sustainable consumption and production in addition to achieving ecological resilience."

PURPOSE

The Coastal and Marine Eco-Tourism roadmap serves a multifaceted purpose, with its overarching objective aimed at achieving a harmonious blend of environmental conservation and sustainable economic development within Egypt's coastal and marine regions. To this end, it has the following key objectives:

1. **Alignment with National Blue Economy Framework:** One of the primary goals is to synchronize the initiatives of the Ministry of Environment related to coastal and marine eco-tourism with Egypt's overarching national blue economy framework.
2. **Identification of Ministry Priorities:** It lays out the Ministry of Environment's key priorities for the forthcoming period concerning coastal and marine eco-tourism in alignment with ongoing eco-tourism efforts led by relevant Line Ministries.
3. **Complementing the work of Line Ministries:** In tandem with national efforts, the Coastal and Marine Eco-Tourism roadmap seeks to synergize with Line Ministries, particularly collaborating with the Ministry of Tourism and Antiquities. By aligning with the Ministry's eco-tourism strategy and plans, this objective aims to enhance the overall effectiveness of eco-tourism initiatives.
4. **Addressing Challenges and Policy Implementation:** Recognizing that challenges exist within this sector, the roadmap is designed to identify and articulate these challenges comprehensively. Moreover, it outlines the policies and actionable measures required to effectively tackle these issues under each identified priority area. This proactive approach ensures a structured and strategic response to the challenges at hand.
5. **Showcasing the Role of Eco-Tourism in Promoting SCP:** Highlighting the pivotal role of eco-tourism in advancing Sustainable Consumption and Production (SCP) principles. The roadmap aims to showcase how eco-tourism practices can contribute to minimizing environmental impact, promoting responsible consumption, and fostering sustainable production methods throughout the coastal and marine regions.
6. **Leveraging Existing Ministry Initiatives:** Building upon the foundation of previous efforts, the roadmap seeks to amplify and expand on the Ministry of Environment's ongoing initiatives that support various facets of eco-tourism, particularly those pertaining to coastal and marine tourism. By doing so, it ensures continuity and maximizes the impact of existing programs and projects.

METHODOLOGY

The methodology for designing and collecting data was characterized by a participatory approach that engaged a diverse array of stakeholders, facilitated consultation meetings, and leveraged the expertise of technical specialists. This inclusive and data-driven methodology ensured that the resulting roadmap provided a realistic understanding of the current status of coastal and marine tourism in Egypt, responsive to the needs of all stakeholders, and aligned with international best practices in biodiversity conservation, marine ecosystems, and eco-tourism.

Stakeholder Mapping:

The development of the roadmap commenced with a comprehensive stakeholder mapping exercise. This step aimed to identify and engage all relevant actors, ensuring a holistic and inclusive approach to roadmap development. Stakeholders ranged from government bodies, local communities, and NGOs to academic institutions, industry experts, and tourism operators. This mapping process formed the foundation upon which our participatory approach was built. Annexed to the document is a list of interviews conducted.

Data-Driven Approach:

Throughout the participatory journey and expert consultations, a substantial body of qualitative data was diligently accumulated. This data encompassed stakeholders on ground facts, in-depth assessments, comprehensive, and policy evaluations. This comprehensive dataset underwent rigorous analysis to unveil pivotal trends, potential opportunities, daunting challenges, and plausible solutions. For this purpose, the collaboration of three distinguished technical experts, each renowned within their respective domains of biodiversity, marine ecosystems, and eco-tourism were enlisted to support the development of the roadmap process. These experts were selected based on their profound knowledge, extensive experience, and noteworthy contributions to their respective fields².

(2) Details of the specialized expertise can be found in the annex.

Consultation Sessions³:

Three purposeful consultation meetings were thoughtfully orchestrated at multiple junctures during development. These sessions provided fertile ground for stakeholders to partake in open discourse, exchange insights, and offer valuable feedback. Key stakeholders, including governmental representatives, environmental advocates, and tourism experts, were invited to these gatherings. During these consultation meetings, stakeholders were actively encouraged to articulate their perspectives on:

- Overview of the sector in focus.
- Existing policies and regulations.
- The global scenario for the sector.
- Suggestions for short- and medium-term strategies.
- Assessment of challenges within subsectors under the theme of coastal and marine eco-tourism.
- Role of the government and the private sector.
- Policy recommendations.

KEY DEFINITIONS

In order to ensure clarity and precision in our discourse, it is essential to establish key definitions that underpin the Coastal and Marine Eco-Tourism roadmap. These definitions provide a shared understanding of pivotal concepts central to the proposed actions for implementation:

1. **Blue Economy:** on a global level there is no one unified definition of blue economy, but in general the term's most used definition is the one cemented by the EU which refers to a sustainable and integrated approach to economic development that seeks to harness the economic potential of oceans, seas, and coastal areas while simultaneously preserving their ecological balance. It encompasses a wide range of sectors, including fisheries, shipping, renewable energy, and tourism, with an emphasis on responsible and sustainable practices.

This is also in alignment with UNEP's definition which underscores the importance of equity and ocean health. It seeks to find a harmonious balance between the three pillars of sustainable development: economic growth, social inclusion, and environmental protection. This understanding promotes a form of growth that is sustainable, with an emphasis on economic activities that minimize environmental harm, loss of biodiversity, and the unsustainable exploitation of resources. At the same time, it aims to maximize both economic returns and social benefits.

Within the Egyptian context, the interpretation of the blue economy extends beyond ocean-centric sectors. The concept of blue economy, as proposed in the Egyptian context:

Refers to an economy that is associated with the sustainable utilization of water resources such as oceans, seas, lakes, and rivers to achieve economic growth and social well-being. This involves providing adequate means of livelihood, creating employment opportunities, and ensuring food security for future generations while guaranteeing respect for the environment, cultural values, and biodiversity.

(3) Details of the consultation sessions can be found in the annex.

2. **Coastal and Marine Tourism:** Coastal and marine tourism, often referred to as "blue tourism" is a subset of the tourism industry that involves travel to coastal and marine areas for leisure, recreation, and sightseeing purposes. It covers a wide range of activities such as beach tourism, boating, yachting, diving, surfing, water sports, snorkeling, wildlife viewing, marine based wellbeing treatments, marine life observation and cruise tourism, among others. The blue tourism or coastal and marine tourism are also considered as a subsector of a wider concept of the "Blue Economy".

This sector is not limited to activities on the water or underwater, but also includes those on land but are directly related to the marine environment like visiting coastal walks, coastal parks, birdwatching, and coastal hiking. Coastal and marine tourism also includes the provision of accommodation, food, and other services that cater to tourists in these areas. While this sector brings significant economic benefits, it is also associated with various environmental and social impacts.

3. **Coastal and Marine Eco-Tourism:** Describes the same range of activities undertaken under coastal and marine tourism but implemented in a sustainable way to ensure that these activities do not harm the environment, natural resources, and marine life. It is characterized by responsible travel practices that prioritize the conservation of marine and coastal ecosystems, the well-being of local communities, and the education of visitors about the value of these ecosystems. This form of tourism seeks to minimize negative impacts on the environment while providing meaningful and immersive experiences for tourists. It can also be described as "sustainable blue tourism or blue eco-tourism."

GUIDING CONCEPTUAL FRAMEWORK

The framework of this document, including the discussions, solutions, and recommendations developed during consultation meetings, is rooted in a commitment to align with core CBD principles: the ecosystem management approach, integrated marine, and coastal area management (IMCAM), and an integrated coastal zone management (ICZM) approach. These approaches serve as the conceptual underpinning for our work and shape our approach to marine and coastal eco-tourism solutions and recommendations. They also guided the selection of these priority areas as the main pillars of this roadmap at hand.

Ecosystem Management Approach

The Ecosystem Management Approach is a process that considers the entire ecosystem, including its structure, functions, and processes, to strive for sustainable use and conservation. This concept is particularly pertinent to marine and coastal eco-tourism, as it places a strong emphasis on the interdependence of land, water, and living resources. Utilizing this approach ensures that the development and implementation of eco-tourism strategies do not compromise the ecological integrity of the marine and coastal ecosystems.

This approach acknowledges the inherent interconnectedness of ecosystems, promoting the management of resources in a way that maintains the health of the entire system rather than focusing solely on individual components. For marine and coastal eco-tourism, this approach is extremely crucial.

It means that any development, whether it is building new tourism facilities or creating new tourist activities, must consider the potential impacts on the entire ecosystem. This includes understanding how changes might affect the relationships between different species, how it could alter the physical environment, and how it might impact ecosystem processes like nutrient cycling.

The approach also recognizes the importance of social, economic, and cultural factors in managing ecosystems. In the context of eco-tourism, this means considering the needs and interests of local communities, recognizing the economic value of the ecosystem (both in terms of its natural resources and its appeal to tourists), and respecting local cultures and traditions.

Integrated Marine and Coastal Area Management (IMCAM)

IMCAM is an approach that brings together all stakeholders involved in the development, management, and use of marine and coastal resources and areas. It aims to balance environmental conservation, economic productivity, and societal goals through holistic management strategies. It involves bringing together all the stakeholders involved in the development, management, and use of marine and coastal resources in a particular area. The main goal is to harmonize the different, often conflicting, interests and activities to achieve a sustainable balance among environmental, socio-economic, and cultural objectives.

This approach is particularly relevant to eco-tourism as it fosters a cooperative framework where the competing demands of various stakeholders, such as local communities, tourists, and conservationists, are addressed and harmonized.

Integrated Coastal Zone Management (ICZM)

ICZM is a dynamic, multidisciplinary, and iterative process to promote sustainable management of coastal zones. It incorporates the complexity and fragility of coastal ecosystems, the diversity and dynamics of their uses, and the nature of inherent risks. For eco-tourism, ICZM is crucial because it ensures that tourism development does not harm the coastal environment and is, in fact, an integral part of the solution to coastal management challenges.

It considers the temporal and spatial variability of the coastal zone, as well as the evolving needs of the communities that depend on its resources. The approach is also iterative, meaning that management plans are regularly revised based on new scientific knowledge and stakeholder feedback.

ICZM is multidisciplinary, drawing from fields such as ecology, sociology, economics, and engineering to understand the complex interactions between human and natural systems. This allows for a more comprehensive understanding of the coastal zone, leading to more effective management strategies.

Sustainable Consumption and Production (SCP)

SCP serves as a foundational guiding principle for eco-tourism, embodying a holistic approach that prioritizes environmental and social responsibility throughout the entire lifecycle of tourism activities. In the context of eco-tourism, sustainable consumption implies minimizing the negative impact on natural ecosystems and local communities while maximizing the positive contributions to biodiversity conservation and cultural preservation. Travelers are encouraged to make conscious choices that support environmentally friendly practices, such as opting for eco-friendly accommodations, engaging in low-impact recreational activities, and patronizing local businesses committed to sustainable practices. This approach ensures that tourism activities align with the principles of SCP, promoting the responsible use of resources and reducing the ecological footprint associated with travel.

Furthermore, sustainable production within the realm of eco-tourism emphasizes the development and implementation of tourism services and infrastructure that adhere to eco-friendly and socially inclusive practices. This entails integrating renewable energy sources, employing waste reduction strategies, and fostering community engagement in the design and management of tourism initiatives. Sustainable production principles in eco-tourism aim to create a symbiotic relationship between the tourism industry and the natural and cultural assets of the destination. By adopting SCP as a guiding principle, eco-tourism not only enhances the overall visitor experience but also contributes positively to the conservation of biodiversity, preservation of local cultures, and the long-term well-being of host communities.



III. STATUS OF COASTAL AND MARINE ECO-TOURISM IN EGYPT



This section serves as an assessment of the existing landscape within the coastal and marine eco-tourism sector. Its primary objective is to shed light on the ongoing sustainable practices that are actively unfolding on the ground. Within this segment, the current state, the challenges, and drivers, and the promising prospects embedded in Egypt's coastal and marine eco-tourism industry are reviewed and discussed. The insights gleaned from this evaluation will serve as the compass guiding the subsequent actions undertaken within the critical and priority areas addressed by this roadmap.

PRESENT STATE OF THE BLUE ECONOMY

Egypt, with its extensive coastline along the Mediterranean Sea and the Red Sea, is primed to harness the potential of the blue economy, and recent strides have been made in this direction. The current status of the blue economy in Egypt paints a picture of significant promise and potential. The maritime sector, including shipping, fishing, and tourism, has traditionally been a cornerstone of Egypt's economy. There are around 53 seaports in Egypt, all of which play an important role in the country's logistical, industrial, commercial, and transportation sectors. However, the nation is increasingly recognizing the broader spectrum of opportunities that the blue economy presents, from renewable energy generation to marine biotechnology.

The blue economy is of paramount importance to Egypt for a multitude of reasons. Foremost, it is a significant contributor to the nation's economic growth. Coastal tourism, for instance, attracts visitors from around the world to explore Egypt's rich underwater ecosystems and pristine beaches. Furthermore, the maritime transport and logistics sector is indispensable for facilitating the movement of goods and people. Additionally, the blue economy plays a crucial role in bolstering food security, particularly through supporting sustainable fishing practices and aquaculture.

As a country facing ongoing challenges related to water scarcity and climate change, Egypt also recognizes the blue economy's potential in water desalination and harnessing offshore renewable energy sources, which are essential for meeting the nation's growing energy needs while mitigating environmental impact.

International Blue Economy Drivers for Egypt

The blue economy is also an integral part of addressing environmental concerns through the Rio Conventions and other agreements, about biodiversity, desertification, and climate change. Increased pollution, flooding, tsunamis, shoreline erosion, rising sea levels, and water acidification are all threats that can impact the determinants of a blue economy. It is therefore an obligation for Egypt to introduce sustainable and integrated coastal management, conserve and nurture fisheries and lakes, and protect marine biodiversity and aquaculture. Egypt is a signatory to:

- Sustainable Development Goals (SDGs): Particularly SDG 14, which aims to "conserve and sustainably use the oceans, seas and marine resources for sustainable development." This goal sets specific targets and indicators for marine conservation and sustainable use.
- Convention on Biological Diversity (CBD), which involves the sustainable use of components of biological diversity, including marine and coastal biodiversity, especially the Kunming-Montreal Global Biodiversity Framework.
- The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) includes consideration of the oceans, particularly about climate change mitigation and adaptation.
- The Barcelona Convention, specifically calls for fighting pollution in the Mediterranean Sea area and enhancing its marine environment. Egypt also signed all relevant and complementary protocols under the umbrella of the Barcelona Convention.
- The Jeddah Convention (known as PERSEGA), is a UNEP Regional Seas Convention for the Red Sea and the Gulf of Aden. The convention sets out the terms of regional cooperation among the signatory parties in regard to marine and coastal environmental protection.

To fully realize the potential of the blue economy, Egypt is actively engaged in developing comprehensive strategies, policies, and frameworks that prioritize sustainable practices. The importance of the blue economy in Egypt cannot be overstated; it represents a pathway to economic diversification, job creation, food security, and ecological sustainability.

Developing a National Blue Economy Framework and Strategy

Under the auspices of the Prime Minister's office, a notable milestone was achieved in 2022 with the establishment of a dedicated committee, composed of the Ministry of Environment, the Ministry of Transport, and the Ministry of Petroleum. The committee is headed and managed by the Suez Canal Authority.

The committee is expected to spearhead the development of Egypt's blue economy sector. It has been engaged to develop a national blue economy framework that can be used to further develop a full-fledged blue economy strategy for the country. The committee had been tasked with formulating a work plan to study all relevant sectors to the blue economy as part of Egypt's plan to develop many areas most importantly the Mediterranean's coastal areas as well its economic zone. The development of this strategy comes in the face of increasing pressure from climate change on all aspects of life, especially the water sector. The strategy will be developed in alignment with the previously launched National Climate Change Strategy 2050⁴. It is expected to:

- o Maximize the management of marine natural resources and achieve sustainable development.
- o Safeguard marine cultural heritage and bolster conservation initiatives for marine protected areas.
- o Implement integrated coastal zone management approaches for coastal areas.
- o Support the inflow of investment capital that will support the protection of natural resources especially marine and water resources.
- o Focus on nature-based solutions and ecosystem services for biodiversity in the Red Sea, North Coast, and several other regions.
- o Reduce the environmental footprint of marine transportation and enhance its resilience against losses caused by natural disasters and climate change.

First and foremost, the committee initiated a vital dialogue with esteemed experts in the field to comprehensively identify priority sectors within the vast expanse of the blue economy. This crucial exercise ensured a clear focus on areas that would yield the greatest socio-economic and environmental impact. Moreover, a pivotal step was taken in crafting the initial blueprint of a blue economy strategy in the form of a framework. Through this framework, the committee unveiled its priority key sectors. These include⁵:

1. **Fishing and Aquaculture:** A sector that holds immense potential for both economic growth and food security.
2. **Coastal & Marine Tourism:** Tapping into the allure of Egypt's coastal and marine attractions to promote sustainable tourism.
3. **Maritime Transport, Logistics, and River Transportation:** Facilitating efficient and environmentally responsible movement of goods and people.
4. **Maritime Mining:** Harnessing marine resources while maintaining ecological integrity.
5. **Offshore Renewable Energy:** Leveraging clean energy sources to meet power demands.
6. **Water Desalination:** Addressing water scarcity through innovative desalination technologies.
7. **Marine-Related Biotechnology:** Exploring the untapped potential of marine biotechnology for various applications.

The first four sectors are categorized as traditional, with ongoing progress and established frameworks. In contrast, the last three are designated as emerging sectors, still in the nascent phase of development, but with promising prospects. Within these priority sectors, the focus of the current roadmap is on coastal and marine eco-tourism.

(4) Ministry of Environment Documentation

(5) Ibid

SIGNIFICANCE OF THE TOURISM SECTOR IN EGYPT

Recognized for its rich cultural and archeological heritage, diverse landscapes, abundant natural resources, and favorable climate, Egypt's tourism sector plays a crucial role in its economic and societal growth. This industry acts as a vital catalyst for national development, generating expansive employment opportunities.

Despite the significant turbulence experienced due to the COVID-19 pandemic, the sector has shown remarkable resilience, adapting to evolving economic and global circumstances. Tourism revenue in Egypt surged to 10.70 USD billion in 2022, up from 4.90 USD billion in 2021, indicating a recovery rate of 121.1% from the pandemic's impact⁶.

Accounting for approximately 15% of the total GDP, the sector gives rise to around 3.1 million job opportunities and contributes to nearly 13% of total foreign exchange.⁷ The tourism industry, being labor-intensive, employs 3 million individuals directly and indirectly, which represents about 12.6% of Egypt's total workforce⁸.

Egypt welcomed 7 million tourists in the initial five months of 2023, with April seeing a record high of 1.35 million tourists, marking the highest ever in a single month⁹. The nation saw about 11.7 million tourists in 2022, a substantial increase from 8 million in 2021, 3.7 million in 2020, and closely aligned with 13.1 million in 2019¹⁰.

The first half of the fiscal year 2022/2023 (July/December period) recorded an average increase of 27.2% in tourist nights, totaling approximately 78.4 million nights, as per data from the Central Bank.¹¹ Furthermore, 2022 witnessed a 39.7% rise in tourist nights, reaching 131 million, compared to 93.8 million in 2021 and 43 million in 2020, according to statistics released by the Central Agency for Public Mobilization and Statistics in June 2023.¹²

STATUS OF COASTAL AND MARINE ECO-TOURISM

Over the years, Egypt has significantly diversified its tourism offerings, branching out beyond traditional cultural tourism into various sub-sectors. These include eco-tourism, adventure tourism, medical and wellness tourism, and religious tourism, amongst others. Each of these sub-sectors offers unique experiences catering to different traveler interests, thereby adding to Egypt's allure as a comprehensive tourist destination.

Eco-Tourism and Biodiversity

As a form of sustainable travel, eco-tourism plays a critical role in preserving the natural and cultural heritage of Egypt. The coastal and marine eco-tourism sector, in particular, presents both challenges and opportunities, with the potential for sustainable development that respects the environment while boosting the economy. Egypt's unique ecosystems—especially its coastal and marine areas—offer excellent opportunities for eco-tourism.

(6) <https://english.ahram.org.eg/News/509648.aspx>

(7) <https://draya-eg.org/en/2023/07/16/tourism-in-egypt-positive-indicators-and-constructive-proposals-to-strengthen-the-sector/>.
<https://english.ahram.org.eg/News/511714.aspx>.

(8) <https://www.sis.gov.eg/PDF/Ar/1/4.pdf>.

(9) <https://english.ahram.org.eg/NewsContent/1/1238/502350/Egypt/Tourism/Recordbreaking--million-tourists-visit-Egypt-in-Ap.aspx>

(10) Ibid

(11) <https://www.egypttoday.com/Article/3/124143/Egypt-s-tourism-revenues-jump-25-7-percent-in-the>

(12) <https://draya-eg.org/en/2023/07/16/tourism-in-egypt-positive-indicators-and-constructive-proposals-to-strengthen-the-sector/#:~:text=During%202022%2C%20the%20number%20of,and%20statistics%20in%20June%202023.>

A significant part of tourism activities in Egypt is focused around its coastal and marine tourism practices and related sites. Egypt has a coastline of around 3,000 Kms; 1,150 Kms on the Mediterranean Sea and around 1,850 Kms on the Red Sea, including those in the Gulf of Suez and the Gulf of Aqaba.¹³

Egypt's coastal and marine environments are some of the most biodiverse in the world. The coastal areas in Egypt are characterized by diversity in natural resources, environmental systems, and natural habitats. This rich diversity lends these areas aesthetic beauty and makes them significant as natural reserves, tourist attractions, and hubs for a variety of human activities.

The Red Sea coast, a biological treasure trove known for its pristine coral reefs, recognized globally for their beauty and diversity, are among the world's most exceptional. These coral reefs serve as a vital lifeline to coastal communities, providing a myriad of ecosystem services from provisioning different types of seafood to habitat maintenance. The coral reefs, famous for the Red Sea region, cover approximately 3,412 square kilometers, with a minimal 0.7% of the area affected by coral bleaching. These reefs boast an average live coral cover of 48% of the Red Sea coastline, with the highest coral diversity concentrated in the northern Red Sea.¹⁴

The Egyptian coral reefs are home to 325 species of coral, hundreds of fish species including an abundance of butterflyfish, parrotfish, snapper, grouper, and a variety of sharks. Out of the total fish diversity, 17% of reef fish in Egypt's Red Sea are endemic. Other threatened or vulnerable species relying on Red Sea reefs include marine turtles (hawksbill and logger-head turtle), as well as the endangered Napoleon fish.¹⁵

Also, it is known that these reefs are associated with over 400 species of Mollusca, more than 500 species of Crustaceans, and nearly 1,000 species of fishes.¹⁶

They also play a significant role in shoreline protection and offer recreational opportunities like diving and snorkeling. Renowned cities such as Hurghada and Sharm El Sheikh offer unbeatable diving and snorkeling experiences, further enhancing the allure of the Red Sea coast.

The Red Sea holds a reputation for being a sanctuary for a diverse range of endangered fish species and hosting unique marine ecosystems. These ecosystems, with their array of habitats including sea-grass beds, salt pans, and mangroves, underscore the Red Sea's ecological prominence. Coastal regions of the Red Sea are adorned with mangrove trees and vibrant coral reefs, weaving a rich biodiversity tapestry, both marine and coastal. The area teems with coastal migratory birds, turtles, and an extensive variety of fish species, accentuating its ecological value.

The Red Sea is home to 26 distinct mangrove stands, spanning an estimated total area of 550 hectares, further emphasizing its environmental significance. These mangrove ecosystems include more than 22 fish species, 36 species of algae, and 40 insect species.¹⁷

The Mediterranean coast, on the other hand, boasts beautiful sandy beaches, lagoons, and wetlands, which are home to a wide variety of bird species, making it a hotspot for birdwatchers. Meanwhile, the El Alamein coast is gaining popularity for its unspoiled beaches and clear waters.

(13) Ministry of Environment documentation.

(14) Dr Mahmoud Hanafy (2022), Red Sea Living Resources: Opportunities and Challenges for Sustainable Uses, HEPCA, November. Environics (2022), Strategic Environmental Assessment for the Southern Red Sea Tourism Sector, Egypt (SEA Report).

(15) Ibid

(16) Ibid

(17) Dr Mahmoud Hanafy (2022), Red Sea Living Resources: Opportunities and Challenges for sustainable uses, HEPCA, November.

Eco-Tourism Activities and Conservation for Economic Value Creation

Eco-Tourism also plays a significant role in conservation. It promotes the preservation of biodiversity by generating income from activities that depend on a healthy ecosystem, such as diving and birdwatching. This creates an incentive for local communities and authorities to protect and manage these resources sustainably.

Egypt's commitment to safeguarding its natural resources and biodiversity has been evidenced by the significant measures it has undertaken. As part of these efforts, the country has designated 30 protected areas, which account for 13.6% of its total area, as protected areas to conserve their natural treasures. Additionally, it has established six marine protected areas, primarily in the Gulf of Aqaba and the Red Sea, to shield marine biodiversity, especially coral reefs, and associated ecosystems. These efforts reflect Egypt's dedication towards preserving its natural wealth.¹⁸

Alongside conservation, Egypt has also been successful in promoting sustainable tourism. The 297 centers dedicated to diving and marine activities serve as a testament to this commitment. This synergy of conservation and tourism is evident in the surge of tourists visiting these protected areas. For instance, the Red Sea's Hurghada and Marsa Alam welcomed an unprecedented 2.4 million tourists in the first half of 2023. Further, in 2022, resorts and hotels in the Red Sea governorate saw an influx of over four million tourists from various nationalities.¹⁹ In 2022, Hurghada and Marsa Alam Airports saw an influx of over 4.6 million tourists, which is a significant increase from the previous 2 years that were affected by COVID.²⁰

Based on the information provided by the Authority of the Red Sea Protectorates, the total number of boat trips and visitors to the two protected areas, Northern Island, Wadi El-Gimal, and Far Islands, was estimated at 8,454 trips and 635,814 visitors in 2022.²¹ The revenue collected from entrance fees is estimated at approximately \$4,552,000, with a rate of \$40 per boat of over 30 meters in length per day and \$5 per visitor per night.²²

The total expenditure by divers and snorkelers for these trips is estimated based on the assumption that the average cost per visitor per day for the Northern and Far Islands (Safari trips) is \$125, while it is \$100 per visitor per day in the Wadi El-Gimal Protected Area. This estimation totals to approximately \$73,662,250.²³ The interrelationship between these two aspects - conservation and tourism - accentuates Egypt's success in not only preserving its natural heritage but also in leveraging these conservation sites as sustainable tourism hotspots. These achievements highlight how effective conservation can contribute towards a thriving tourism industry, thereby creating a sustainable model for the future.

Yachting and Cruising

Egypt also boasts a robust infrastructure for yacht and cruising tourism activities. The country is home to 23 yacht marinas and berths, each offering unique services.²⁴ These include the Naama Bay Marina in Sharm El-Sheikh, and the Taba Heights Marina, both equipped to cater to up to 50 yachts and provide comprehensive maintenance services.

(18) Ministry of Environment documentation.

(19) <https://www.dailynewseggypt.com/2023/08/09/tourism-rebound-in-egypts-red-sea-resort-fuels-optimism-for-strong-growth/>

(20) Ibid

(21) Dr Mahmoud Hanafy (2022), Red Sea Living Resources: Opportunities and Challenges for Sustainable Uses, HEPCA, November.

(22) Ibid

(23) Ibid

(24) 'Possibilities And Opportunities of Transition to The Blue Economy in Egypt', Deraya: The Strategic Forum for Public Policies and Development Studies <https://enterprise.press/hardhats/egypt-wants-position-emerging-yacht-tourism-magnet-global-scale/>.

The Abu Tig Marina in El-Gouna and the Hurghada Marina also add to the luxury yachting scene, with the latter having the capacity to serve 188 yachts simultaneously.²⁵ On the North Coast, the Porto Marina stands out as the first international yacht marina in Eastern North Africa, capable of accommodating over 1,400 yachts.²⁶

The newest addition to this impressive list is the Marassi Marina, which can house over 260 yachts. These marinas not only contribute to Egypt's tourism sector but also underscore the country's commitment to providing top-tier facilities for luxury tourism.²⁷

Challenges and Pressures Faced by Coastal and Marine Eco-Tourism

Eco-tourism, specifically coastal and marine eco-tourism, in Egypt holds immense potential and is undeniably attractive. However, it is currently grappling with serious issues, primarily due to unsustainable tourism practices and other environmental pressures.

Overcapacity and Over-usage

The increasing demand for tourism, if not managed effectively, could gravely harm the region's distinct and fragile ecosystems. There exists a precarious equilibrium between exploiting the economic benefits of tourism and the preservation of natural resources, which is now being threatened by the overburdening and overexploitation of resources in major tourist hotspots.

In Egypt, the Red Sea region, a world-renowned haven for biodiversity, attracts both foreign and local tourists. However, the steadily increasing influx of tourists to this part of Egypt is having adverse effects on its pristine ecosystem. While tourists, beach lovers, and water sport enthusiasts continue to revel in the beauty of this coastline, many are unaware of their adverse impact. Their activities contribute to waste production, littering, and adverse diving and snorkeling practices, as well as harm marine species through feeding and collection. These human-induced pressures often lead to coral diseases, affecting not only the coral populations but also the species dependent on the reefs.

Overcapacity is an issue particularly in the Red Sea area, where popular diving and snorkeling sites are seeing an influx of visitors that greatly exceeds the carrying capacity of these fragile ecosystems. This exorbitant number of tourists puts an enormous strain on the marine environment, leading to physical damage to the coral reefs and a decline in marine biodiversity.

Visits to Egypt's Red Sea reefs represent approximately 3.5% of the total GDP generated by tourism.²⁸ The growing demand has driven the aggressive development of hotels and the issuance of diving/snorkeling permits, ultimately leading to the overexploitation of biodiversity, including coral reefs, and the disruption of sensitive habitats critical to species such as dolphins' resting areas, turtle feeding grounds, and dugong habitats.

Similarly, on the Mediterranean coast, the uncontrolled growth of tourism and related infrastructure development is encroaching upon vital habitats, such as lagoons, saltmarshes, and wetlands, disturbing the local bird populations, and the coastal and marine habitats and species.

(25) <https://www.al-monitor.com/originals/2022/09/egypt-invests-suez-canal-revenues-three-yacht-ports#:~:text=President%20Abdel%20Fattah%20al%20Sisi,to%20support%20the%20national%20economy>

(26) <https://enterprise.press/hardhats/egypt-wants-position-emerging-yacht-tourism-magnet-global-scale/>
<https://egyptianstreets.com/2022/10/15/is-egypt-set-out-to-become-a-global-yacht-tourism-destination/>

(27) <https://enterprise.press/hardhats/egypt-wants-position-emerging-yacht-tourism-magnet-global-scale/>
<https://egyptianstreets.com/2022/10/15/is-egypt-set-out-to-become-a-global-yacht-tourism-destination/>

(28) Expert Feedback.

Furthermore, the swift advancement of tourism in locations like Hurghada, Sharm El-Sheikh, and the Gulf of Aqaba has triggered the construction of more hotels to cater to the rising number of domestic and international tourists. This expansion adds more strain to the delicate ecosystems in these regions.

These issues are primarily rooted in the fact that Egypt's tourism sector's growth and success is measured by the surge in tourist numbers, the frequency of their visits, and the room capacity of hotels and resorts. This focus on quantity over quality, without proper oversight and management of natural resources, endangers the very attractions that draw tourists. Vital natural resources like coral reefs and marine biodiversity, which are critical to diving and other marine recreational sites, are at risk.²⁹

Current tourism practices and national tourism performance indicators, if not revised, could jeopardize the sustainability of marine and coastal eco-tourism destinations. It is crucial that we reassess and recalibrate these measures to ensure the longevity and preservation of these unique ecosystems.

Other related Environmental and Social Pressures

Despite concerted national initiatives to safeguard coastal regions and alleviate their degradation, the impact varies across different areas. Numerous regions grapple with problems impacting water quality, land utilization, natural habitats, beach erosion, and coastal submersion. Moreover, climate change has emerged as a significant worry due to its evident effect on most coastal territories, especially those at lower elevations. Coral reef formation and maintenance are susceptible to environmental shifts, such as climate change. Detrimental practices also pose a threat to the survival of coral reefs, including sewage discharge, spillage, and human interaction. Below table³⁰ presents a range of mapped drivers and pressures:

MAPPING OF DRIVERS TO THREATS AND ACTIONS NECESSARY										
DRIVERS		Insufficient mainstreaming of biodiversity in development sectors	Rapid population growth	Development based on quantity rather than quality (intensive approach)	Insufficient knowledge on sustainable use of biodiversity	Confliction, lack of willingness, and weakness among governance	Climate change & research weakness	Poverty and insufficient livelihoods	Insufficient data on monitoring of biodiversity	Low fertility of the sea water (oligotrophic)
THREATS	Over-use and mis-use of the diving reefs by divers and pleasure boats	X	X	X	X	X	X	X	X	
	Irrational shoreline development	X	X	X	X	X				
	Illegal, Unreported, Unregulated (IUU) fishing and overfishing	X	X	X	X	X		X		X
	High confliction rate on marine living resources	X	X	X	X	X	X			
	Pollution	X			X	X				
	Un-adequate management effectiveness	X		X		X	X		X	
	Solid waste mismanagement	X	X	X	X	X	X		X	
	Lack of information & knowledge	X	X	X	X	X	X	X		
Climate change		X	X	X		X		X		

(29) Expert Feedback

(30) Dr Mahmoud Hanafy (2023), Status, current challenges, and opportunities for coastal and marine eco-tourism in Egypt.

Climate change triggers detrimental effects on the tourism sector, particularly manifesting in the loss of biodiversity in the marine and coastal areas. Prime attractions such as the coral reefs in Red Sea resorts are under severe threat due to this ecological imbalance, leading to a potential slump in tourism activities. The effects of climate change on marine ecosystems, particularly the functionality and biodiversity of the Red Sea, is a critical yet under-studied area. One ecosystem that has been extensively researched is the coral reef ecosystem. Numerous scientific publications, over 50 in fact, have convincingly demonstrated that the Egyptian coral reefs in the Red Sea may serve as one of the last bastions for coral survival globally. As a result, these reefs have been aptly named "The Great Fringing Reef of Egypt."³¹

This globally recognized coral reef system is home to an abundant variety of marine life. Scientists who have studied these reefs suggest that they are far from ordinary - they are known to be among the most climate-tolerant reefs globally. These reefs represent not only a symbol of hope for the preservation of coral reefs, the most biodiverse and valuable ecosystem on earth, but also for biodiversity as a whole.³²

The Great Fringing Reef of the Egyptian Red Sea is believed to have the resilience not only to withstand the current committed heating due to climate change, unlike most remaining reefs, but also to potentially aid in repopulating surrounding reefs over time, thereby helping to revive coral reefs from the brink of extinction. What further underscores the global significance of this potential Hope Spot is its symbol as a beacon of hope. It can be used to raise awareness about the precarious state of coral reefs and the critical importance of meeting the Paris Agreement's target.

The rising sea levels and the salinization of ground water, primarily affecting the Mediterranean coasts, are a major concern of climate change, with predictions indicating an increase in severity by the century's end.

However, this is not an isolated impact, as it poses a grave risk to marine biodiversity by causing some species to become extinct, promoting dominance of certain others, and introducing new, non-native species. This also disrupts fish dynamics and migration patterns and increases ocean acidity. The pressure and impacts of global warming are particularly felt in the distinct ecosystems of the Red Sea, such as the coral reefs that suffer from 'reef bleaching', posing a significant threat to biodiversity and its equilibrium.³³

Environmental contamination, characterized by its diverse origins and pollutant types, presents a significant challenge to Egypt's coastal and marine ecosystems. Marine debris, including solid and plastic waste, stands as a major hurdle to the health of seas and oceans, thereby hindering the progression of the blue economy. The residue from seaport operations and marine transportation activities also poses a significant threat to the marine environment, particularly affecting the ecological health of ports. This is a result of the escalating quantity of waste generated by ports, and the subsequent rise in air and water contamination rates. Oil spills, whether from commercial shipping incidents or from onshore and offshore oil fields, are viewed as some of the most hazardous marine contaminants, damaging not only the marine ecosystem but also the economic viability of these areas.

In the years 2019 and 2020, 23 and 14 oil pollution incidents were reported, respectively, with seaports bearing the brunt of these incidents.³⁴ The management of waste, especially marine debris and waste, demands rigorous efforts and policy implementation to curb their relentless increase and their severe and harmful effects. Joint efforts are necessitated at the international, regional, and local levels to realize a prosperous future through a sustainable blue economy.

(31) Ibid

(32) Ibid

(33) Ibid

(34) Ibid

Institutional Limitations

Despite Egypt's admirable efforts to establish protected areas, particularly marine ones, the enforcement of regulations and overall management of these areas demand further attention. Many protected zones lack the essential infrastructure and resources to facilitate effective management, leading to instances of unauthorized fishing, pollution, and destruction of habitats. This situation underscores a significant gap between policy formulation and its actual implementation, thereby necessitating stronger enforcement of environmental regulations.

A comprehensive and holistic approach to sustainable tourism development is warranted. This approach should factor in not only the economic profits of tourism but also its environmental and societal consequences. Possible strategies could involve setting caps on tourist numbers in vulnerable areas, enforcing stringent regulations on water and energy usage in tourist facilities, and bolstering the management and enforcement capabilities of protected areas. It's essential to recognize that the sustainability of Egypt's coastal and marine eco-tourism industry is fundamentally tied to the conservation of its distinctive natural resources. Hence, sustainable tourism practices are not just beneficial, but they are critical for the long-term success of the industry.

Egypt is incredibly rich in marine habitats. However, it faces challenges such as pollution and coastal ecosystem erosion. Pollution stems from land-based sources such as harbors and tourism development initiatives. Safeguarding the marine environment during the planning and development phases of the country's tourism industry is crucial among the different stakeholders responsible for policies and regulations and management of the tourism sector. The coastal zone experiences severe and escalating pressure. Hence, the activation and the integration of an integrated coastal zone management plan among different stakeholders are important.

GOVERNANCE OF THE COASTAL AND MARINE ECO-TOURISM SECTOR

The governance framework for Egypt's coastal and marine eco-tourism sector is intricate and comprehensive, mirroring the complex management of natural resources and tourism activities. It encompasses a diverse array of stakeholders, including ministries and authorities with distinct roles and responsibilities:

Ministry of Tourism and Antiquities: This central authority holds a pivotal role in the regulation and oversight of the entire tourism industry, including coastal and marine eco-tourism. Responsibilities encompass policy formulation, issuance of operational permits for various facilities, hotels, resorts, diving and marine centers, and ensuring compliance with national regulations.

Ministry of Environment: Overseeing protected areas, including marine protected sites, and setting environmental guidelines to promote sustainability and eco-friendly practices within the tourism sector. Collaborating with the Ministry of Irrigation and Water Resources to combat water pollution and maintain pristine marine ecosystems, while also minimizing the impact of marine transport and related industries.

Ministry of Transport: Responsible for the development of policies, economic viability of marine transport, and the management and allocation of ports, transport of products, and marine logistics.

Suez Canal Authority: Leads the newly established committee for the blue economy and has assumed oversight of foreign yacht tourism and associated docking ports.

Egyptian General Authority for Shores Protection: Affiliated with the Ministry of Irrigation and Water Resources, it plays a crucial role in safeguarding Egyptian shores, overseeing environmental compliance, and issuing permits. Additionally, it is responsible for developing and implementing protection and conservation projects in aquatic environments.

Tourism Development Authority: Primarily focused on establishing and enforcing regulations for tourism projects and investments, facilitating land provision, and enabling access to financing for infrastructure development. A significant portion of these tourism projects is situated in coastal regions.

Egyptian Tourism Authority: Tasked with promoting inbound and domestic tourism, managing the diversification of the tourism product, and supporting eco-tourism initiatives, both nationally and internationally.

High Committee for Coastal Licensing: Governed by the Ministry of Irrigation and Water Resources, this committee, in collaboration with the Ministry of Environment and other relevant members, ensures the protection of beaches and approves licenses for establishments along Egypt's coastline. It also oversees compliance with required shore and water proximity regulations.

Local Governance: Governorates and municipalities, such as the Red Sea Governorate along the coastal regions, possess a significant role in regulating and developing tourism activities within their respective jurisdictions. They work in coordination with national authorities to align tourism practices with local goals for environmental and cultural preservation.

Other Relevant Stakeholders: Additional stakeholders include the Egyptian Tourism Federation (ETF), particularly the Chamber of Tourism Establishments, and the Chamber of Diving and Water Sports. The Chamber of Diving and Water Sports is a non-profit organization, founded by Egypt's Ministry of Tourism in 2007 with a goal to improve quality, safety and standard of services in the diving and water sports industry, as well as to preserve the unique environment of the Red Sea. These bodies collaborate closely with the Ministry of Tourism in tourism planning and skills development. By law, the ETF's opinions are considered before any new legislative measures are implemented.

POLICIES AND REGULATIONS GOVERNING COASTAL AND MARINE ECO-TOURISM

To safeguard coastal and marine resources and tourist sites, and promote sustainable tourism practices, Egypt has established a comprehensive framework of policies and regulations. These measures ensure that the nation's marine and coastal treasures remain pristine while providing visitors with unforgettable eco-tourism experiences. This section delves into the regulatory landscape that governs coastal and marine eco-tourism.

Egyptian Constitution of 2014 and Law 4 of 1994

The constitution, in Article 45, stipulates that the state is committed to protecting its shores, seas, and waterways, as well as its lakes. It establishes protections for seas, beaches, waterways, groundwater, and natural reserves, and prohibits pollution in those areas; it further explicitly protects endangered species, plants, livestock, and fisheries.

Additionally, Law No. 4 of 1994 (amended by Law 9/2009) on environmental protection, along with its executive regulations and amendments, outlines the principles of coastal management, including: Article 1, Item 39 defines the coastal zone as “the area extending from the coasts of Arab Republic of Egypt encompasses the territorial sea, exclusive economic zone and continental shelf, and extending landward to areas of active interactions with the marine environment for that not exceeding 30 km in the desert areas, unless major topographical features interrupt this stretch, while in Nile Delta would extend up and contour (+3 m)”.³⁵

Item 40, defines integrated coastal management as "an approach that involves the collaboration of all relevant entities to coordinate in a manner that ensures the preservation of the environment in coastal areas."³⁶

While Article 48 emphasizes the importance of managing coastal areas comprehensively to achieve sustainable development, particularly in terms of protecting water environments from pollution. It assigns the relevant ministry responsible for environmental affairs to coordinate with relevant authorities to achieve environmental protection and the objectives of integrated environmental management in coastal regions.³⁷

The law also requests each of the coastal governorates to define their coastal zone according to its physical conditions and environmental resources, which should not in any case be less than “10 km” landward from shoreline.

Other numerous local ministerial decrees related to the conservation and sustainable use of biodiversity are established and implemented dealing with: regulating fishing activities, forbidding fishing of sharks and sea cucumber, strengthening the environmental law enforcement, protection of coral reefs, environmental risk assessment, forbidding trade in ornamental marine species such as corals, coral reef fishes, shells and other coral reef organisms for aquarium trade, minimizing the pollution, strengthening biodiversity conservation law enforcement, etc.

Marine Protected Areas

Egypt is considered to have a significant history in conservation of natural resources and habitats by issuing Law 102 of 1983.³⁸ This legislation provides the regulatory foundation for the creation and administration of protected areas in Egypt. These areas are defined as any land, coastal, or inland water regions distinguished by unique flora, fauna, and natural features holding cultural, scientific, aesthetic, or tourism significance.

The Law strictly forbids any actions, procedures, or initiatives that could be harmful or destructive to the land, sea, or plant life within these nature reserves, or that could negatively impact their environment's beauty or natural state. Specifically, the legislation bans hunting, fishing, or any other activities that could disturb, damage, destroy, or transport living organisms, such as coral reefs, and geological formations that form these organisms' habitats.

Egypt's protected areas (PAs) are strategically categorized into five geographical units: Sinai, Cairo, the Western Desert, Red Sea, and Upper Egypt. Managing the PA system lies with the Nature Conservation Sector (NCS), an integral part of the Egyptian Environmental Affairs Agency (EEAA). The NCS is legally entrusted with the governance and administration of PAs, as well as addressing matters concerning biodiversity conservation across various landscapes. NCS is instrumental in formulating policies, establishing programs, carrying out research, and executing activities to align with the laws protecting habitats and species, and adhering to international nature conservation conventions.

(35) Environics (2022), Strategic Environmental Assessment for the Southern Red Sea Tourism Sector, Egypt (SEA Report).

(36) Ibid

(37) Dr Mahmoud Hanafy (2023), Status, current challenges, and opportunities for coastal and marine eco-tourism in Egypt.

(38) Ibid

Egypt has marked 30 protected zones, with the intention of maintaining their natural assets. Their commitment to conservation also includes marine biodiversity, with six coastal and marine-related protected areas primarily stationed in the Gulf of Aqaba and the Red Sea as well as another five along the Mediterranean Sea.³⁹

These protected areas also act as a permanent repository for economic, aesthetic, or cultural resources that may be at risk of deterioration or extinction. Protected areas including marine protected areas work on⁴⁰:

- To conserve representative examples of the nation's natural habitats and physiographic regions.
- To help maintain the nation's biological diversity.
- To help maintain the nation's ecological viability.
- To optimize the economic and social return from the nation's natural systems in a manner that ensures their long-term sustainable use.
- To maintain options and choices for future generations.

These protected areas serve as an integral part of Egypt's eco-tourism potential, which includes both coastal and marine tourism. Several activities are permitted within these marine protected areas, generating economic returns while preserving the environment. **These activities include diving, dolphin and shark watching, snorkeling, swimming, recreational cruises, and stays in eco-lodges.**⁴¹

Management of these protected areas is meticulously regulated under specific guidelines, overseen by a team associated with the Ministry of Environment. There is an ongoing commitment to develop modern, efficient management plans and economic strategies that generate income without compromising the natural resources and integrity of these areas. These include:

- The extraction or transportation of any living or dead materials, such as coral reefs, shells, crustaceans, and reef fish, is strictly forbidden.
- The areas must be kept clean; littering or disposing of waste on the land or in the water is not permitted.
- To ensure the preservation of coral reefs, visitors are prohibited from walking or sitting on them.
- Anchors must not be thrown or tied to coral reefs to prevent damage.
- The feeding of fish, which can disrupt the balance of marine ecosystems, is not allowed.
- Hunting within these protected areas is prohibited, including the use of underwater firearms.
- The disposal of oil or petroleum products into the water is strictly forbidden.

The Ministry of Environment has undertaken various initiatives to advance eco-tourism, both within and beyond protected areas. These endeavors encompass the establishment of eco-lodges, the creation of the Sharm El-Sheikh Protectorates Training Center, and the implementation of remediation and recovery programs within the protectorates. Notably, these programs also encompass the training of tour operators to assume roles as environmental guides.

In collaboration with the Ministry of Tourism, the Ministry of Environment has dedicated efforts to empower local communities. This includes initiatives to enhance community awareness, provide skills training programs, and equip locals to serve as protectors in protected areas and as local eco guides. Additionally, the Ministry has facilitated opportunities for local communities to market their handicrafts, organic herbs, and various products. It's important to note that these initiatives have been piloted in specific areas and are poised for expansion, contingent on the availability of resources and concerted efforts.

(39) Ministry of Environment documentation

(40) Expert Feedback

(41) Ibid

The Ministry is also engaging the private sector and potential investors through the facilitation and promotion of eco-tourism investments and projects among other segments of tourism. The Ministry of Environment has created a committee to study and oversee potential projects and investments especially in protected areas and has created a unit for environmental based investments at the Ministry itself.

Sustainable Consumption and Production National Action Plan (SCP NAP)

In 2015, Egypt took a significant step towards environmental sustainability by initiating its Sustainable Consumption and Production National Action Plan (SCP NAP). The plan was formulated with the goal of integrating sustainable practices into the core of Egypt's economic activities. It aimed to shift the consumption and production paradigm towards more sustainable methods that would reduce the environmental footprint while simultaneously promoting economic growth and social development. The SCP NAP was designed to address a range of sectors including energy, water, agriculture, and waste management, with a strong focus on improving resource efficiency and fostering a transition to a green economy.

The SCP NAP for Egypt also highlighted the importance of cross-sectoral collaboration involving governmental bodies, the private sector, civil society, and international organizations. This collaborative approach was essential for addressing the complex challenges associated with sustainable development and ensuring the successful implementation of the plan. One of the key objectives was to encourage eco-friendly industrial processes, promote sustainable tourism, and raise awareness about sustainable lifestyle choices among the Egyptian population. The SCP NAP was aligned with Egypt's national development goals and the United Nations' Sustainable Development Goals, particularly aiming at responsible consumption and production patterns as outlined in Goal 12.

Egyptian Biodiversity Strategy and Action Plan 2015-2030

In 2016, the Ministry of Environment revised its biodiversity strategy and action plan to ensure its alignment to CBD requirements and related international development. The revised strategy acknowledges the crucial role of coastal and marine tourism in Egypt's economy. The strategic goals and priority actions outlined in the plan are intrinsically linked to the sector.

Strategic Goal 1 and Strategic Goal 2 within the strategy stresses the importance of conserving, managing, and sustainably using terrestrial and aquatic biodiversity. These goals directly affect coastal and marine tourism as these areas are prime tourist spots, offering unique biodiversity and natural beauty.

Strategic Goal 4 calls for improving our understanding of biological diversity and ecosystem functioning. This is particularly important for coastal and marine tourism as high biodiversity makes these areas attractive for tourists.

The priority actions mention the development of habitat mapping and sensitivity analysis of the entire coastline, an integral part of the coastal tourism sector. It also talks about preparing and implementing pilot Integrated Coastal Zone Management Plans which would help in maintaining the sustainability of these protected areas for tourism.

The plan also emphasizes conserving key threatened coastal, coral reef, mangrove, and marine species, habitats, and ecosystems. This is directly linked to marine tourism as the preservation of these ecosystems enhances the tourist experience, adding value to the sector.

National Sustainable Development Strategy for Tourism 2030

In 2020, Egypt's Ministry of Tourism and Antiquities launched a noteworthy initiative to revolutionize the nation's tourism sector. The "National Strategy for Sustainable Tourism 2030" marks a significant step forward in the realm of sustainable tourism. To drive this ambition, the Ministry has established the green Tourism Unit, a dedicated entity designed to lead and implement a range of policies and initiatives that foster sustainability within the tourism industry.

The strategy is a comprehensive blueprint for promoting sustainable tourism practices, constructed on six key foundations: legislative reforms, heightened competitiveness, economic goals, social engagement, technology integration, and environmental sustainability. Through these foundations, the strategy advocates for the incorporation and prioritization of environmental aspects in policies and actions within the tourism sector.

It supports eco-tourism through relevant legislation, promoting clean technology, enhancing public awareness, and understanding of eco-tourism, fostering stakeholder collaboration, and maximizing benefits for local populations. It underscores the imperativeness of preserving cultural heritage and bolstering local communities, while also maintaining a strong focus on the conservation of natural resources.

National Strategy for Integrated Coastal Zone Management 2050

The strategy was developed by the Ministry of Environment and the United Nations Development Programme, and it represents a comprehensive and adaptable blueprint, designed to promote sustainable development within Egypt's coastal regions. This strategic framework maintains the flexibility required to accommodate future adjustments in alignment with the overarching goals of the Sustainable Development Strategy Egypt 2030.

A core objective of this strategy is to elevate environmental considerations to a pivotal position within the strategies of all developmental and economic sectors. This approach aims to safeguard natural resources, facilitate equitable resource utilization, and optimize their overall efficiency, all while aligning with the Sustainable Development Goal 14, which underscores the sustainable use and preservation of marine ecosystems.

Integral to this strategy are the principles of circular and blue economies, which emphasize sustainable consumption and production practices. To achieve its ambitious goals, the strategy has identified three primary strategic objectives:

- o **Enhancing Policy and Institutional Frameworks:** This objective centers on strengthening the policies and institutional structures governing integrated coastal zone management. It seeks to establish a robust foundation for the effective coordination and oversight of coastal development initiatives.
- o **Sustainable Planning and Resource Utilization:** The strategy places a significant emphasis on sustainable planning and the optimal utilization of coastal resources, with a strong focus on preservation. This objective underscores the importance of responsible resource management to ensure long-term coastal sustainability.
- o **Building Capacity and Raising Awareness:** The third strategic objective focuses on enhancing local capacity and awareness of integrated coastal zone management issues. It underscores the critical role that informed stakeholders play in the success of this strategy.

In addition to these goals, the strategy provides recommendations for a range of institutional reforms and the creation of structures at both the national and local governorate levels. These measures aim to support more effective natural resource management, optimizing the utilization of coastal resources. Furthermore, the strategy proposes coastal zoning areas to ensure optimal management while suggesting capacity-building efforts to support the successful implementation of the plan.

Post 2020- Regional strategy for Marine and Coastal Protected Areas (MCPA) and Other Effective Area-based Conservation Measures (OECMs) in Egypt's Mediterranean Coastline

It is a newly launched strategy that is part of the government's effort to initiate active integrated coastal zone management and introduce better integrated ecosystem-based management approaches especially in protected areas. The strategy has been developed within the framework of the regional project "Towards Achieving a Good Environmental Status of the Mediterranean Sea and Coast through an Efficiently Managed and Monitored Representative Network of Marine Protected Areas" known as the Integrated Monitoring of Protected Areas (IMAP-MPA) project, funded by the European Union. It consists of five strategic pillars as follow:

- 1. Biodiversity Conservation:** Focuses on maintaining healthy ecosystems, sustainable resource use, and addressing climate change impacts.
- 2. Good Governance and Regulatory Framework:** Emphasizes effective governance structures and regulations to promote sustainability and well-being.
- 3. Social, Economic, and Cultural Engagement:** Encourages local community involvement, including women and youth, for sustainable economic benefits.
- 4. Spatial Planning Integration:** Integrates spatial planning into national development plans for coordinated development and environmental goals.
- 5. Other Effective Conservation Measures (OECMs):** Identifies areas where alternative conservation measures can be applied and requires reporting by relevant authorities.

Other regulatory and guidance related efforts

1. On March 6, 2022, Egypt introduced Law No. 8 of 2022, which replaces the previous Law No. 1 of 1973. This new law is aimed at regulating the licensing and compliance requirements for hotels and tourism establishments in the country. A notable feature of this law is the inclusion of eco-friendly accommodations as part of the diverse range of touristic lodging options in Egypt.
2. To further support eco-friendly accommodations, the Minister of Tourism and Antiquities issued a decree that establishes a distinct licensing category for eco-lodges. This recognition marks eco-lodges as an independent category of tourism establishments, separate from hotels and resorts.
3. In 2022, a ministerial decree was enacted, making it mandatory for all establishments holding tourist licenses in Sharm El-Sheikh, including hotels, cafeterias, and restaurants, to obtain international sustainable practice certificates within a six-month timeframe. This proactive measure resulted in 132 hotels successfully obtaining sustainable certifications.
4. The Ministry of Environment has been actively engaged in collaborative efforts with various public sector stakeholders within the eco-tourism industry. This collaboration includes working closely with the Tourism Development Authority to provide environmental guidance and support. It also involves integrating environmental assessment studies into the authority's land allocation process and the selection of developers for tourism projects. Furthermore, the Ministry has actively promoted the incorporation of natural resource conservation into the authority's strategic planning and objectives.

5. The Ministry of Environment has partnered with the Ministry of Tourism on numerous projects and initiatives. These collaborations focus on the promotion of green and sustainable labels and certifications. Additionally, they aim to develop a set of guidelines and standards to facilitate the establishment of eco-lodges, sustainable practices within hotels and resorts, and the management of protected areas, as well as enhancing environmental sustainability in diving centers.

Yacht Tourism

In 2022, the Higher Ministerial Committee developed a strategy to maximize yacht tourism on a global scale, with the aim of attracting foreign yachts to Egypt's ports. In July of the same year, the Egyptian cabinet approved draft law number 2721 for 2022, which was issued for the purpose of regulating foreign yacht tourism in Egyptian marinas and seaports. As per the new regulation, the Transport Ministry will be the only body responsible for finalizing the procedures for the entry and exit of tourist yachts.

It also called for creating an online platform, "Single-Window for Yacht Tourism," which is meant to supervise implementing and upgrading the yacht tourism strategy and ensuring its sustainability under the scope of the Maritime Transport Sector at the Transport Ministry. The decree permits foreign yachts to depart from any tourist port or marina regardless of point of entry.⁴²

The new online platform will be linked to the official websites of the Passports, Emigration and Nationality Department at the Interior Ministry as well as the Suez Canal Authority (SCA) to help passengers aboard yachts obtain an electronic entry visa in a smooth way. It will streamline and facilitate all procedures for the entry and exit of tourist yachts into the country. Through the platform, yacht owners can now submit the necessary data and documents to apply for entry, pay fixed fees on all state-owned berths, passenger terminals and tourist ports, and receive invoices within three days of application.

The new platform will also allow yachts to choose freely among moorings available at public commercial ports or at private marinas. The bill also called for minimizing different clearance and security approvals for foreign yachts.

Another relevant policy that has been taken by the Ministry of Transport includes the finalization of procedures to obtain the necessary approvals and permits for the yacht within a period not exceeding three days and in case of a repeated visit to the country, the period for obtaining those approvals and permits should not exceed one day.⁴³

And in 2023 with the support of the Ministry of Foreign Affairs, the Ministry of Transport has approved the granting of foreign tourists on board tourist yachts a 3-month residency visa instead of 1 month. Through the Yacht Single Window, foreign yachts can apply for and receive their visas within 30 minutes.⁴⁴

Additionally, the Transport Ministry is currently coordinating with the Ministry of Tourism and Antiquities to launch a marketing campaign to advertise tourist ports and marinas along the Egyptian coastlines with the aim of boosting yacht and ship tourism.

The Transport Ministry also is coordinating with the Finance Ministry to introduce amendments to the bylaws of the Customs Law in order to issue permits for storage of foreign yachts.

(42) <https://english.ahram.org.eg/NewsContent/1/1235/474198/Egypt/Urban--Transport/Egypt-launches-steve-digital-platform-for-yacht-t.aspx>

(43) Ibid

(44) <https://sis.gov.eg/Story/185692/Egypt-grants-arrivals-on-board-tourist-yachts-three-month-visa?lang=en-us>

According to these new developments, the SCA has become the institution that is currently responsible for supporting yacht tourism and is working on developing three yacht ports that are being established from the revenues of the Suez Canal to support the national economy. The ports are part of the state's comprehensive development plan, both in the Mediterranean Sea and the Red Sea, which would generate jobs and attract more tourists for a new type of tourism.

The SCA is working on logistics and services to turn Egypt into a yacht crossing reception corridor. These services include fueling, electricity, water, quick maintenance, yacht reception centers and storage services. This is meant to create an integrated ecosystem that allows the growth of industries, such as shipbuilding and maintenance, financing service offerings and yacht tourism. The new ports are designed to attract new European tourists.

One of these new marinas will be a "green marina".⁴⁵ The marina, to be built in Ismailia on the Suez Canal, will include a hotel and trading zone. It will be powered by renewable energy and extended over an area of 25,000 square meters to accommodate 65 yachts. The state is working to build more marinas, including an international port in New Alamein.⁴⁶

The country is also planning to carry out major expansion and development projects in the ports of Port Said, Ismailia and Port Tawfiq to accommodate the largest number of yachts along the canal line and provide facilities and incentives for anchoring yachts for long periods.

RELEVANT INITIATIVES AND PROJECTS THAT ADDRESS COASTAL & MARINE ECO-TOURISM

The Eco-Egypt Campaign

In 2022, Egypt's Environmental and Tourism Ministries embarked on a three-year initiative known as the Eco-Egypt campaign. This innovative campaign aims to link intrepid travelers with the country's vast array of ecological sites and protected areas, thereby boosting eco-tourism.

The campaign, a joint effort by the Ministries of Tourism and Antiquities, the State of the Media, the United Nations Development Programme (UNDP), and Mainstreaming Biodiversity into Egypt's Tourism (MBDT), is funded by the Global Environment Facility (GEF). Its central focus is to heighten environmental awareness amongst residents, emphasizing the critical importance of Egypt's protected regions and their abundant natural resources.

As part of this endeavor, a dedicated website⁴⁷ and several social media platforms were established to promote Egypt's rich array of protected areas, including stunning landscapes, diverse wildlife, and unique flora. The campaign's outreach extended to 13 specially protected areas, further reinforcing Egypt's commitment to eco-tourism and environmental preservation.

Green Stars Label for Hotels

The Green Star Hotel initiative is a green and sustainable label designed to encourage the incorporation of eco-friendly practices within the tourism sector. This is aimed at both promoting eco-tourism and making hotels more environmentally conscious.

(45) <https://english.ahram.org.eg/News/476757.aspx>

(46) Ibid

(47) <https://ecoegypt.org/>

The rating system awards "Green Stars" based on the environmental performance of the hotel, with additional credits given for social actions and innovative environmental practices. To maintain credibility, the scheme is independently audited, and all mandatory criteria must be met 100%. The scheme carries an annual renewal fee, managed by the chamber of tourism establishments. The level of commitment to sustainability determines whether a hotel can obtain 3, 4, or 5 Green Stars. Many certified hotels are located in coastal areas and offer marine-related recreational services. In response to the increasing popularity of eco-lodges in the country, the program is also developing new ratings tailored specifically for these establishments.

Green Fins Certificate

The Green Fins Certificate is a global certification programme targeting marine and diving centers and their employees in order to mainstream sustainability practices and support the evolution of the eco-tourism industry through a code of conduct programme. Green Fins was piloted in Egypt in 2019 and rolled out nationally in 2020.

It aims to protect coral reefs through environmentally friendly guidelines promoting sustainable diving and snorkeling. It provides the only internationally recognized environmental standards for marine tourism and its robust assessment system measures compliance.

Green Fins encourages and empowers divers, snorkelers, the diving industry, and coastal communities to reduce the pressures on coral reefs by offering marine tourism companies practical, low-cost alternatives to harmful practices – such as anchoring, fish feeding and chemical pollution – as well as providing strategic training, support and resources.

The programme is managed by the Chamber of Diving & Watersports (CDWS) and The Ministry of the Environment. In 2019, Green Fins Egypt completed the training of 11 assessors working for the Chamber of Diving and Water Sports. All assessors are now qualified to conduct assessments nationwide. Subsequently, 11 dive operators' assessments were completed giving Green Fins Egypt an overall picture of the environmental performance and challenges of the sector.

Certified Members are marine tourism operators who have received an in-person assessment from a Green Fins assessor within the last 12 months. Assessors are local to the Green Fins national team in their country and receive formal training to be able to conduct assessments.

The Egyptian Sustainable Tourism Portal (ESTP) and Ecolodge Guidance

It is the first online tool dedicated for hospitality professionals and tourism experts to help integrate environmental and cost-efficient measures in tourism operations, therefore allowing environmental best practices to become an integral part of managerial decision making.

ESTP offers a wide range of tailored sustainable measures, guidelines, and recommendations. These are provided by the department to ensure ease of access and use by all hotel employees and will be available for download through the ESTP platform⁴⁸. The platform has several tools to support hotel establishment.

This includes an innovative online calculator helping industry professionals make quick, efficient, and sustainable decisions on-the-go. ESTP is determined to strengthen the digital and green transformation of the hospitality sector in Egypt. Available are online calculations for a hotel's solid waste index, pool temperature control, piping insulation, and garden lights usage that guarantee increased savings, lower environmental impact, and reduced CO2 emissions.

(48) <https://estportal.org/>

ESTP has been developed in collaboration with the Ministry of Environment, the Ministry of Tourism and Antiquities, the Egyptian Hotel Association (EHA), the UNDP, and the MBDT project. The project is also responsible for the Eco Egypt campaign, booklets, and website.

The project's initiative ECO EGYPT launched Egypt's first-ever Green List to promote the tourism establishments' best practices and products contributing to environmental and cultural heritage preservation. The GL contains leading hotels, diving centers, ecolodges and products that have obtained an eco-label or are adopting significant sustainable practices.

The MBDT project has also launched the national ecolodge guidelines, in cooperation with the Ministry of Environment, Ministry of Tourism and Antiquities and industry leaders, to formalize the licensing and operation of ecolodges across Egypt. The ecolodge guidelines are an important milestone for the growth of eco-tourism and nature-based biodiversity-friendly tourism in Egypt. The components of the qualitative studies, work plans, and strategies undertaken by the project include⁴⁹:

- Conducting a Strategic Environmental Assessment of the Red Sea.
- Conducting a Strategic Environmental Assessment of Saint Catherine City's Grand Lighthouse Project.
- Establishing a detailed work plan structure for implementing policies related to the diving sector.
- Developing a national strategy for sustainable tourism with the Ministry of Tourism and Antiquities.
- Initiating a study on the behavioral change of shark populations.
- Putting together a guide for the repair and replacement of boats and light beach facilities.

The Red Sea Initiative

During the 2022 COP 27 climate discussions hosted in Sharm El Sheikh, the United States Government announced the Red Sea Initiative—a major new initiative aimed at conserving the Red Sea's coastal ecosystem, while promoting high-value, low-environmental impact eco-tourism. It aims to support the resilience of Egyptian Red Sea communities and their reef ecosystems. Through an initial contribution of \$15 million by the US government, the Red Sea Initiative plans to⁵⁰:

- Protect the Red Sea's coral reef and surrounding coastal ecosystem against the impacts of climate change and human activity.
- Empower local communities to lead on climate action.
- Establish a blended finance mechanism to support businesses in building resilience against climate change, reducing emissions, and creating jobs; and
- Partner with private businesses and other donors to leverage up to \$50 million in total funding.

To advance the work of the Red Sea Initiative, USAID will build on this initial \$15 million contribution by collaborating with the United Nations Global Fund for Coral Reefs (GFCR) to enlist additional donors and investors from the public, private, and non-profit sectors to conserve the Red Sea's coastal ecosystem for future generations.

The Egyptian government has also pledged to expand protection to the entirety of the Red Sea Great Fringing Reef. This commitment was publicized on November 16, Biodiversity Day, amidst COP 27. When this pledge comes to fruition, it will result in the entire coral reef region being classified as a protected area.

(49) Ministry of Environment Documentation

(50) <https://www.undp.org/press-releases/action-coral-reefs-cop27-us-pledges-15-million-usd-egyptian-red-sea-and-gfcr-announces-awards-programmes-7-coral>

Presently, only half of the areas encompassing the coral reefs are deemed protected. The coral reef region in Egypt has been designated as a "hope spot" by the global initiative Mission Blue, aimed at preserving coral reefs worldwide. Out of 147 hope spots for marine protected areas, Egypt's coral region is one of them.⁵¹

Banning Single Use Plastic Bags in the Red Sea

The Red Sea Governorate in Egypt initiated a prohibition on single-use plastic items in June 2019. This action targeted plastic bags and other disposable items utilized in shops, restaurants, and cruise ships docking in the region. The objectives of this ban included reducing plastic waste in the sea that endangers marine life, mitigating the harmful effects of plastic on human health, and preserving the local environment, a critical attraction factor for tourists in the area. Other Governor Decrees include No. 54/2000: Banning plastic bags on pleasure boats.

The Red Sea Governorate was responsible for drafting and enforcing the decree, spurred by a suggestion from the Hurgada Environmental Protection and Conservation Association (HEPCA), a non-governmental organization specializing in marine and land conservation in the Egyptian Red Sea. Penalties were established for businesses not adhering to the decree.⁵²

To support the effective implementation of the decree, HEPCA initiated a public awareness campaign and provided certifications for businesses that eliminated the use of single-use plastic products. The decree primarily affects food-related businesses, including hotels, restaurants, and coffee shops, as well as retailers like supermarkets, grocery stores, butcher shops, fishmongers, fruit and vegetable shops, and pharmacies. The ban also applies to safari operators and cruise ships.

Establishing Mooring Systems in the Red Sea

HEPCA is a non-profit NGO dedicated to the conservation and protection of marine and land ecosystems in the Red Sea Governorate, Egypt. HEPCA is actively involved in the implementation, management, and upkeep of a mooring system in the Red Sea. The number of private and commercial vessels utilizing Red Sea water has increased due to increased touristic activities. Unfortunately, anchor-induced physical damage is one of the largest threats to coral reef preservation. However, the introduction of mooring buoy systems can significantly mitigate this damage and remove the necessity for anchoring on reefs.

This initiative, aimed at protecting the delicate coral reefs of the Red Sea, HEPCA, in collaboration with the EEAA, has managed to secure the necessary funds for the installation and maintenance of the mooring buoy system.⁵³

To this end, HEPCA has installed over 1,000 buoys throughout the Red Sea, thereby safeguarding 168 dive sites across eight different zones, including Hurgada, Marsa Alam, Hamata, Safaga, Saint John, Islands, and El Quser. This mooring installation could be classified among large mooring installations for pleasure boats world-wide.⁵⁴

Anchor-induced physical damage to coral reefs is a well-documented issue in marine resource protection. Anchoring and the subsequent underwater chain pressure can cause significant damage to reefs and destroy delicate marine life.

(51) <https://insideclimatenews.org/news/31012023/red-sea-coral-refuge/#:~:text=Based%20on%20those%20findings%2C%20global,the%20reefs%2C%20and%20the%20United.https://www.americanoceans.org/facts/biggest-coral-reefs/>.

(52) Dr Mahmoud Hanafy (2023), Status, current challenges, and opportunities for coastal and marine eco-tourism in Egypt

(53) Dr Mahmoud Hanafy (2023), Status, current challenges, and opportunities for coastal and marine eco-tourism in Egypt

(54) Ibid

Installing mooring buoys to anchor boats is an effective solution to this problem. Besides reducing anchor damage to living corals, buoys can also serve as an important management tool and provide a convenient anchoring point for boats to enjoy the unique coral reef communities.

Marine Litter and Cleanups

In addition to marine-based tourism and coastal management, beach and river cleanup campaigns have been initiated by several NGOs, on their own initiative and in partnership with the private sector, to fight plastic pollution and protect marine life in the country. Coastal and beach cleanups help to remove trash and debris from the sea and coastal areas, which can have a negative impact on marine life and the overall health of the ecosystem.

This debris can harm or kill marine animals, damage coral reefs and other habitats, and affect the aesthetic and recreational value of beaches. Cleaning up these hazards can help make beaches safer and more pleasant places to visit. Marine debris can also affect the local economy by reducing tourism and damaging the fishing industry and other industries that depend on the sea. Coastal and beach cleanups can help to maintain the aesthetic appeal of beaches, thereby encouraging tourism and supporting local businesses. Coastal and beach cleanups can also serve as an opportunity to educate the public about the importance of marine conservation and the impact of litter on the environment.⁵⁵

Verynile, Greenish, Banlastic, and the Plastic Bank in Egypt run programmes to clean beaches, encourage youth volunteers, and encourage companies and employees to participate in beach cleanups. Other non-governmental organizations, such as HEPCA, have also organized beach cleanups and promoted sustainable development. HEPCA has organized around 36 beach cleanups that led to the collection of +100 tons of plastic waste and their cleanup activities are above and underwater in 2023.

Coral Reef Protection Initiatives

Egypt has embarked on an innovative project submerging decommissioned military vehicles in the Red Sea to provide a new attraction for scuba divers and alleviate the pressure on delicate coral reefs. The artificial reef project has been in the pipeline for seven years, and it was four years ago a project by HEPCA with the support of the Ministry of Environment and the Red Sea governorate initiated to deploy several retired military vehicles to the coastal city of Hurgada. The initiative, known as the "Underwater Museum", was delayed due to the Covid pandemic, and has just been formally launched in 2023.⁵⁶

The project will see fifteen "exhibits" placed at three different sites—Sha'ab Al-Saqala, Uruq Al-Tawil and Erq Jame—off the coast of Hurgada. The initiative is a collaborative effort led by Egypt's Ministry of Environment and the Red Sea Governorate, with the Hurgada Environment Protection & Conservation Association (HEPCA) coordinating the project. The primary goal is to redirect divers from overexploited coral reefs, while also highlighting the military's role in Egypt's history. Over time, the exhibits will become home to new corals, algae, and other small organisms, attracting schools of fish. An additional phase of the project is set to kick off in 2024, with plans to enrich four other diving sites off Hurgada.

The Egyptian Tourism Authority has initiated a project, driven by the innovative ideas of young Egyptians, aimed at creating new diving sites to alleviate the pressure on coral reef dive sites. This project involves the use of sculptures, made from recycled and repurposed materials, to attract divers to designated sites. The

(55) Ibid

(56) Ibid

project's primary goal is not just to offer new diving experiences but also to contribute to the preservation of coral reefs. A second phase of the project is currently being prepared.

The PROBLUE Project

PROBLUE is a new Multi-Donor Trust Fund, housed at the World Bank, that supports the development of integrated, sustainable, and healthy marine and coastal resources. Egypt is also benefiting from the PROBLUE program by the World Bank since 2020. The objectives of the program and its outputs are:

- 1- Raising environmental awareness of the dangers of marine pollution, particularly plastic waste (application in one of the districts of Alexandria and the city of Sharm El Sheikh) to reduce pollution entering the marine environment.
- 2- Studying the effects of pollutants on the marine environment, particularly coral reefs in the Sharm El Sheikh area.
- 3- Increasing the involvement of the private sector in managing solid waste, particularly plastic and disposable single-use bags.

Upon the request of the Ministry of Environment, the project will be supporting the creation of the blue economy strategy of the country based on the proposed blue economy framework by the blue economy committee.

In Egypt, PROBLUE is continuing to support cleaner marine and coastal ecosystems. PROBLUE has helped establish a project committee comprising representatives from the Ministry of Environment, and meetings were held to review and agree on the methodological approach and timeline. The four key sectors that will be covered by the project are mainly: marine transport, oil and gas, nature based coastal tourism, and marine ecosystem conservation.

It is also working on clean-up activities in the regions of Dahab and Alexandria. The project also includes launching an extensive underwater cleaning campaign for the Red Seabed in cooperation with the Red Sea Governorate, the Chamber of Diving and Water Sports, and HEPCA.

The Samadai Conservation Project

Sha'ab Samadai is an area just off the coast in the southern region of the Red Sea. It is a crescent-shaped off-shore reef located approximately 5 km from Marsa Alam city. Beneficiaries of the site include:

- Spinner dolphins using Samadai as a resting area.
- Locals gaining economic benefits and Red Sea Protectorates (economic revenues deriving from entry fees).
- Tourists.

The site is often referred to as 'Dolphin House', a reference to the fact that it is a habitat for spinner dolphins a species found worldwide at tropical and subtropical latitudes, which is known to actively travel and feed in open waters at night and to rest in shallow lagoons and bays during the daytime.

By the early 2000's, Samadai was emerging as a major attraction for enthusiastic divers and tourists. Uncontrolled visits, including by swimmers, to the dolphins' resting habitat had skyrocketed towards the end of 2003. In a single day Samadai played host to up to 30 boats and 500-800 people.⁵⁷

(57) Dr Mahmoud Hanafy (2023), Status, current challenges, and opportunities for coastal and marine eco-tourism in Egypt.

Hordes of tourists are said to have come into corresponding close contact with the resting dolphins, with little or no concern for safety aspects, for the ecological fragility of the situation, and for the need of respectful behavior in the presence of the resting wild mammals. Excessive numbers of swimmers and documented objectionable behavior of some visitors within the reef was said to be causing noticeable distress to the dolphins, and there was general agreement that the situation had to be brought under strict control without delay if the continued presence of the dolphins in Samadai was to be ensured.

To curtail the downward spiral at Samadai, immediate actions were taken over the next few years to protect this precious sanctuary and significant tourist site. HEPCA, as an NGO, and the EEAA signed an unprecedented agreement for the establishment of a new protected area, the Samadai Reef in 2001.⁵⁸

As a consequence, in December 2003 a decision was adopted by the local governing authorities to suspend all visits to Samadai reef until a management scheme was in place. The Red Sea Governor issued Decree No. 178 of 2003, which imposed a daily service fee on Samadai Reef visitors. The fee amounted to US\$ 15 per person per day for those on motor/yachts and US\$ 7 per person per day for those on sail/yachts.⁵⁹ The purpose of this fee was to manage the site effectively, with the revenue generated being allocated to a dedicated government fund supporting conservation efforts.

A provisional management scheme was thus implemented starting in January 2004 and some measures were taken to protect the site. Measures included: the subdivision of the reef into three zones; a daily ceiling of 100 snorkelers and 100 divers visiting the reef aboard a maximum of 10 large boats; time limits for visits (from 10.00 to 14.00); limiting admission of swimming visitors to a restricted zone adjacent to what was considered a critical dolphin habitat, under the guidance of certified guides; the adoption of a code of conduct; and the payment of an entrance fee.

The total annual visitation by divers and snorkelers has ranged from 9,929 to 25,968 for snorkelers and 8,281 to 14,086 for divers from 2004 to 2022, with an overall mean of 22,000 snorkelers and 11,000 divers. Snorkelers are primarily drawn to the reef by the dolphins, while divers visit to explore the reef and observe the dolphins.

In terms of job creation, the site has generated approximately 600 jobs, including roles such as boat captains, crew members, dive and snorkeling guides, photographers, rangers, and operators, among others.⁶⁰

The establishment and correct management of the Samadai Dolphin House has demonstrated to locals that protected areas not only can coexist but also even enhance local economies; and a modest entry fee, impacting minimally on the tourist's day-trip package cost, is accruing significantly to the budget of the region's Red Sea Protectorates, also paying the stipends of rangers employed in adjacent protected areas.

Qula'an Eco-Village (The 1st Project on Community-Based Tourism):

The village of Qula'an is an informal settlement located within the core area of Wadi El-Gimal National Park, a region known for its unique *Avicennia marina* mangrove stand. This village is home to around 20 families whose livelihoods primarily depend on fishing. Initially, the village faced harsh living conditions, a low standard of living, and a lack of basic amenities, such as electricity and reliable drinking water supply, which was sporadically delivered by the city council every 10-14 days via a truck.⁶¹ To transform Qula'an into an eco-village, several key initiatives were undertaken⁶²:

(58) Ibid

(59) Ibid

(60) Ibid

(61) Ibid

(62) Ibid

- Improvement of Housing: Upgrading the housing infrastructure for the villagers.
- Solar-Powered Electricity Supply: Providing a consistent source of electricity through solar energy.
- Solar-Powered Desalination Plant: Installing a desalination plant powered by solar energy to ensure a reliable source of freshwater.
- Tourism Facilities: Adding essential amenities, including a kitchen, restaurant, cafeteria, a handcraft shop, beach area, and parking facilities to attract tourists.
- Tourism Promotion: Marketing the village as a tourist destination, attracting a significant number of daily visitors (100–400 visitors per day).

The primary objectives of these developments were as follows⁶³:

- Improvement of Lifestyle: Enhancing the quality of life for the fishing community in Qula'an.
- Community Engagement in Tourism: Involving the local community in the tourism industry to reduce potential conflicts between the community and the tourism sector, which relies on the park's natural resources.
- Diversification of Income Sources: Shifting the fishermen's income source from exploiting biodiversity (fishing) to non-consumptive use (tourism).
- Community Ownership and Conservation: Increasing the local community's sense of ownership and participation in the conservation process.
- Community Benefits from Conservation: Ensuring that the local community benefits from the conservation efforts.

A significant outcome of these efforts was the complete transition of all families in Qula'an to the eco-tourism sector, effectively discontinuing their fishing activities. This shift was crucial in reducing fishing pressure on Wadi El-Gimal National Park, as fish populations had reached critically low levels.

Other Relevant Initiatives:

Other related projects and initiatives include a number of consecutive USAID projects that were carried out with the aim to conserve biodiversity to support responsible and sustainable tourism. These include for instance, but not limited to, the Gulf of Aqaba Protectorates Project (EU funded), Environmental Sustainable Tourism (USAID), Egyptian Environmental Policy Program (USAID), Red Sea Sustainable Tourism Initiatives (USAID), LIFE Red Sea 1 and 2 (USAID), etc.

Another cluster of projects were carried out in the context of focusing on coastal management and tourism; the government has also partnered with international organizations, especially UNDP to launch projects that target coastal management and limit the impact of climate change on coastal zones. Main previous projects included⁶⁴:

- UNDP project "Enhancing Climate Change Adaptation in the North Coast and Nile Delta in Egypt" hosted by the National Water Research Center (NWRC), which is the research arm of the Ministry of Water Resources and Irrigation. The objective of the project is to reduce coastal flooding risks in Egypt's North Coast due to the combination of projected sea level rise and more frequent and intense extreme storm events. Outputs include the construction of sand dune dikes along five vulnerable hotspots within the Nile Delta and the development of an integrated coastal zone management (ICZM) plan for the entire North Coast. The project is also working on the institutional setup for Integrated Coastal Zone Management (led by the Ministry of Environment).

(63) Ibid

(64) SwitchMed & UNEP (2021), Assessing Egypt's national action plan for sustainable consumption and production.

- Adaptation to Climate Change in the Nile Delta Through Integrated Coastal Zone Management Project with UNDP: it aims to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone in the Nile Delta.
- The Integrated Coastal Zone Management in the Northern Coast of Egypt – a Scoping Study is an initiative of the Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management Project (ACCNDP), to define the scope of establishing an ICZM Plan along the Mediterranean Coast of Egypt.⁶⁵
- The study aimed at achieving a sustainable management of the Egyptian northern coastal area through the holistic understanding of coastal threats and opportunities, and through the provision of adequate institutional framework.
- The Alexandria Integrated Coastal Zone Management Project (AICZMP) Environmental and Social Impact Assessment is another initiative to be mentioned. It contributes to a reduction in the load of land-based sources of pollution entering the Mediterranean Sea, especially from Lake Mariout, through the hot spots of El-Mex Bay and Alexandria⁶⁶.

In addition to these projects, there are newly launched projects such as “Green Sharm El Sheikh”, which is in cooperation with South Sinai Governorate and the UNDP. The objective of this project is to turn Sharm El Sheikh into a model integrated and ecologically sustainable tourism city of national and international importance through the adoption of further low-carbon technologies, proactive waste prevention and management practices and a further-enhanced protection of its natural capital including related marine protected areas.

Another relevant project is the ‘Greening Hurghada’ project that aims to reduce the environmental pressure of the tourism sector and related activities to mitigate GHG emissions and preserve biodiversity in the coastal area of Hurghada through mainstreaming climate smart technologies and sustainability practices in tourism, energy, and transport infrastructure. The project will be working on supporting the adoption of new, innovative regulations of economic activities in Hurghada (including e.g.: zonation, licensing of all marine developmental activities, diving centers carrying capacity, boat sizes, economic alternatives, monitoring, boat radar system).

Egypt is also participating in the “An Inclusive Approach for Harnessing Marine Ecosystem Services and Transforming to Sustainable Blue Economy in the Red Sea and Gulf of Aden (HESBERSGA)”. This is a new project funded by a global environment facility and implemented by the Regional Organization for the Conservation of the Environment of the Red Sea & Gulf of Aden (PERSGA). The project aims to strengthen management of Red Sea and Gulf of Aden ecosystems and support governance reforms to improve delivery of marine and coastal ecosystem services by accelerating efforts towards achieving SDG14 through transformation to Sustainable Blue Economy.

(65) The ICZM in Egypt Scoping Study was developed under the Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management Project (ACCNDP). ACCNDP is funded by the Egyptian Ministry of Irrigation and Water Resources, the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP).

(66) UNDP supports the incremental costs to develop and strengthen a policy and legal framework for sustainable coastal zone management and promote integration with the City Development Strategy (CDS) for Alexandria. Project development objective is supporting the Government of Egypt's efforts to develop a National Coastal Zone Management Plan by building institutional and technical capacity at national level as well as strengthening local initiatives for coastal development and environmental improvement.

IV. ROADMAP VISION AND STRATEGIC INTERVENTIONS



A VISION FOR COASTAL AND MARINE ECO-TOURISM

"The Ministry of Environment envisions coastal and marine eco-tourism in Egypt as a harmonious blend of economic growth, environmental preservation, and cultural enrichment. Our vision is one where this sector thrives on sustainable practices, safeguarding the pristine beauty of our coastal and marine environments for the benefit of current and future generations. In our vision, coastal and marine tourism will be a key driver of Egypt's blue and circular economy, providing visitors with unique experiences that celebrate our marine biodiversity while fostering community involvement."

Our approach aligns with the county's 2030 vision for sustainable development and with the United Nations Sustainable Development Goals, particularly Goal 14 and Goal 12, emphasizing the conservation and sustainable use of our oceans and marine resources and driving more responsible behavior and consumption by tourists. By promoting blue economy sectors, we are taking solid steps towards achieving a green and circular transition for the national economy at large.

It also aligns with the Ministry of Environment's strategic objectives of environmental action until 2030, reflected in the following four main axes (State of the Environment 2020):

1. Rational and sustainable management of natural resource assets to support the economy, increase competitiveness and create new job opportunities,
2. Reducing pollution and integrated waste management,
3. Maintaining the balance of the ecosystem and biodiversity and their rational and sustainable management,
4. Egypt's implementation of its international and regional commitments under environmental agreements and adoption of the necessary related mechanisms, while ensuring their compatibility with national and local policies.

ROADMAP STRATEGIC INTERVENTIONS

The suggested strategic interventions, crafted through extensive consultation, international alignment, and a commitment to environmental action, are the cornerstone of our vision for coastal and marine eco-tourism, where sustainability, conservation, and the welfare of local communities are paramount. **These are considered the drivers of resilient coastal and marine eco-tourism towards the Ministry's vision for the sector and are based in alignment with the concept of sustainable consumption and production.**

In selecting these strategic interventions, we conducted rigorous dialogues with experts and stakeholders who provided invaluable insights into the unique challenges and opportunities in Egypt's coastal and marine eco-tourism sector. Suggested interventions also find their roots in the Ministry of Environment's strategic objectives, which were developed through careful analysis and anticipation of the nation's environmental needs until 2030. **These priority interventions are:**

1. **Aligning eco-tourism practices with marine conservation and biodiversity protection** to ensure that tourism activities do not compromise the ecological integrity of marine and coastal ecosystems, but instead contribute to their conservation.
2. **Diversifying eco-tourism practices and enhancing existing infrastructure** by introducing innovative and environmentally responsible tourism experiences that not only reduce the impact on natural diving and snorkeling sites but also diversify the eco-tourism offerings. And ensuring that tourism infrastructure and operations are developed and managed in a sustainable manner that aligns with the local environment and community needs.

3. **Activating eco-tourism for climate resilience** to ensure that eco-tourism is resilient to climate change and contributes to climate change mitigation and adaptation.
4. **Utilizing eco-tourism for community empowerment and heritage preservation** with the aim of empowering local communities to benefit from eco-tourism and to preserve their cultural heritage and traditional knowledge.

KEY SUCCESS ENABLERS⁶⁷

This section delves into the critical factors that play a pivotal role in ensuring the successful implementation of the roadmap and its associated four interventions. By exploring these key enablers, the aim is to provide a comprehensive understanding of the essential elements that contribute to the effectiveness of the proposed interventions. These enablers are:

- Ensuring continuous ongoing alignment with the country's efforts under the context of blue economy and considering the integration of this roadmap into the overall blue economy strategy of Egypt under the relevant sector.
- Ensuring synergy and alignment with ongoing Sustainable Consumption and Production (SCP) initiatives. This involves coordinating efforts to minimize environmental impact throughout the entire life cycle of products, initiatives and services related to coastal and marine eco-tourism.
- Adding a specific time frame and KPIs for the implementation of suggested actions under each of the presented four interventions.
- Assigning a certain institution or creating a cross-cutting institutional set-up such as a permanent committee led by the Ministry of Environment and including representatives of all relevant stakeholders mentioned in the roadmap to oversee the implementation of the roadmap.
- Developing a project catalogue by expanding on suggested initiatives and actions under each roadmap intervention.
- Forming a finance taskforce to outreach potential aid programs, existing international funds, facilities, and donors to finance actions and projects under the four interventions. This can include taking into consideration new international sustainable finance tools such as blue bonds, grants, and loans.
- Establishing a robust monitoring and evaluation framework to track progress, assess the impact of interventions, and identify areas for improvement of the roadmap.
- Encouraging collaboration with national and international organizations, private sector entities, NGOs, and academia to pool resources, share expertise, and foster a collaborative approach to achieving common goals of the roadmap.
- Effective engagement with local NGOs, volunteer initiatives, and community-based organizations is crucial for the success of the Blue Economy Roadmap. By actively involving these grassroots stakeholders, diverse perspectives and hyper-local expertise are integrated into the development and implementation of sustainable initiatives.

STRATEGIC CROSSCUTTING ECONOMIC, SOCIAL AND ENVIRONMENTAL DRIVERS⁶⁸

Pursuant to the above selected roadmap interventions, the below tables present compiled interview data that highlight possible crosscutting economic, social, and environmental drivers that have helped identify roadmap interventions.

(67) Suggested enablers are based on stakeholder discussions that took place during the third and final consultation meeting for this study.

(68) The suggested drivers were aggregated based on interviews, expert feedback, conducted consultations, and documents submitted by relevant stakeholders.

STRATEGIC ECONOMIC DRIVERS	
A. Sustainable Development of the Tourism Sector	
Addressing Economic Costs of Identified Stressors	<ul style="list-style-type: none"> • Mitigation of Over-Tourism: Diversifying eco-tourism activities is needed in order to spread visitor impact across multiple sites, reducing the stress on specific high-demand locations, such as coral reefs, and preventing ecosystem damage due to overuse. • Possible Decline in Tourism Activities Due to Climate Change: Changes in temperature patterns can affect the biodiversity of marine and coastal ecosystems, leading to a decline in tourism activities like snorkeling, diving, and wildlife viewing. • Meet Increased Economic Costs of Climate Change: The cost of adapting to climate change in the tourism sector, such as investing in infrastructure to protect against rising sea levels, can lead to increased costs for tourism services, potentially making eco-tourism less affordable for the public. • Increased Stress on Infrastructure: Climate change and lack of maintenance in general can put increased stress on tourism infrastructure, such as ports, hotels, and transportation systems, leading to potential service disruption and maintenance costs. • Coastal Development Including Tourism Projects: can lead to habitat loss including land reclamation and the destruction of mangrove forests and seagrass beds can reduce the available habitat for marine species.
Addressing Growth and Business Development Needs	<ul style="list-style-type: none"> • Ensure Long-Term Sustainability: A varied portfolio of eco-tourism activities enhances the long-term sustainability of the industry, as it reduces the risks associated with overreliance on a single attraction. • Reputation and Branding: Establishing a reputation for sustainable and climate-resilient eco-tourism destinations in Egypt, which can attract environmentally conscious travelers. • Global Eco-Tourism Trends: Coastal and marine destinations benefit from global trends that prioritize sustainable and nature-based travel experiences. • Tourist Attraction and Diversification: Protected marine areas act as natural tourist attractions, drawing eco-conscious travelers who are willing to pay a premium for exclusive experiences within these pristine environments. Diversification caters to a broader range of interests, attracting tourists with varying passions such as water sports, wildlife viewing, and cultural experiences. Tourists often seek diverse experiences and activities, driving the demand for a variety of eco-tourism options. • Differentiation: Marine biodiversity preservation and responsible resource management can differentiate Egypt's coastal and marine eco-tourism from other destinations, setting it apart as a leader in sustainable tourism. • Tourist Satisfaction and Return Visits: High-quality marine and coastal environments ensure that tourists are satisfied with their experiences, increasing the likelihood of return visits and positive word-of-mouth recommendations. • Unique Eco-Tourism Offerings: Well-preserved marine ecosystems provide distinct and exclusive eco-tourism offerings, such as wildlife encounters, snorkeling, and birdwatching, enhancing the appeal of protected areas. • Tourist Safety and Experience: Maintaining a safe and enjoyable experience for tourists by protecting them from climate-related hazards and disruptions.
B. Increasing Returns and Investments	
<ul style="list-style-type: none"> • Job Creation: The preservation of natural habitats generates employment opportunities, from rangers and tour guides to hospitality and eco-tourism entrepreneurs, fostering economic growth in the region. • Sustainable Revenue Streams: Protected coastal and marine areas attract eco-tourists willing to pay premium prices, creating sustainable revenue streams for local businesses and communities. • Higher Revenue Streams: Tourism revenue generated in protected areas tends to be higher due to the unique and well-preserved natural features, offering a substantial economic return on investment. • Revenue Utilization: Utilize revenues to support eco-tourism infrastructure investment in eco-tourism infrastructure, such as visitor centers and eco-friendly accommodations, stimulates local economies and provides construction jobs. • Diversification of Local Economies: Eco-tourism can reduce communities' dependence on a single industry and provide a diversified source of income. Egypt also needs to diversify revenue streams of the tourism sector and attract foreign direct investment in foreign currency to invest in existing tourism project plans. • Local Sustainable Product Promotion: Eco-tourism activities can promote and support the use of locally sourced, sustainable products, creating economic incentives for responsible environmental practices. • Market Stability in Coastal Cities: Promoting market stability and avoiding disruptions caused by extreme weather events, which can lead to economic losses. • Investment Attraction: Attracting investment for climate-resilient initiatives, including clean energy projects, coastal protection, and infrastructure development. 	

- **Access to Climate Financing:** Accessing climate financing mechanisms and grants for adaptation and resilience projects.
- **Mitigating and Addressing Seasonal Employment:** Seasonal tourism patterns may result in irregular and temporary job opportunities, making it difficult for community members to maintain stable livelihoods, hence the need for diversification of eco-tourism practices.
- **Increased Revenue for Local Businesses:** Restaurants, hotels, and local vendors benefit from increased tourist spending, especially in areas with eco-friendly accommodations and services.
- **Partnerships and Funding:** Partnering with international organizations, NGOs, and governments to secure funding for climate adaptation initiatives.
- **Climate Risk Mitigation and Adaptation Strategies:** Lowering financial risk by proactively implementing climate risk mitigation and adaptation strategies that protect against revenue loss.

STRATEGIC ENVIRONMENTAL DRIVERS	
A. Preserving Biodiversity and Marine Ecosystems	
Addressing Identified Stressors	<ul style="list-style-type: none"> • Continuation of Sustainable Practices: Preserved marine ecosystems exhibit resilience against external stressors, such as climate change and pollution, providing a stable environment for eco-tourism activities. • Need for Increased Resilience: A healthy ecosystem can recover from natural disturbances more quickly, ensuring that tourist experiences remain largely unaffected. • Need for Tourism Diversification: Diversifying activities can help identify and manage the carrying capacity of each ecosystem, ensuring that tourism activities do not exceed the ecological limits of these areas. • Need for Habitat Rehabilitation: The introduction of diverse eco-tourism activities can lead to a greater focus on the rehabilitation of degraded coastal and marine habitats, including efforts to restore seagrass beds, mangrove forests, and salt marshes. • Need for Species Migration and Conservation: Diversified activities can promote the conservation of species that migrate between different marine environments, such as sea turtles, shorebirds, and fish species. This conservation approach can help protect vital breeding and feeding grounds. • Marine Species Protection: By diversifying eco-tourism, there is a better opportunity to protect a wider range of marine species, including sea turtles, marine birds, and coastal mammals, from the potential negative impacts of tourism. • Marine Pollution Mitigation: Diversification allows for the promotion of eco-tourism activities centered around marine pollution cleanup and awareness campaigns, addressing the pressing issue of plastic waste and pollution. • Introduction of Invasive Species: often due to shipping and human activities, can threaten native marine biodiversity and ecosystems.
Addressing Unsustainable Human Practices	<ul style="list-style-type: none"> • Taking the Pressure of Over Used and Exposed Biodiversity Hotspots: Egypt's diverse marine biodiversity, including unique species and habitats especially diving and snorkeling sites. For instance, the rate of diving activities on certain coral reefs in Hurghada has surpassed 200,000 dives per site per year, far exceeding the estimated carrying capacity of 22,000 dives per site per year. • Harmful Tourism Practices: can cause serious damage to marine creatures and life. Such as Snorkeling with dolphins offered by safari boats, online tour operators and random individuals and offering unsustainable fishing excursions that are against the banning of fishing in certain areas and seasons. Another harmful practice is throwing plastic waste into the sea which leads to accelerating the deterioration of water quality and marine life and coral bleaching. • For example, the irresponsible behavior of divers and snorkelers remains one of the foremost threats to coral reefs. The Potential Damage Incidents (PDI) per diver per dive is estimated to be 7.74 times. Given the rough estimate of 6 million dives carried out in 2009 within the Red Sea Governorate's diving sites, it is evident that divers inadvertently inflicted potential damage more than 46 million times. While much of the minor damage can be recovered in a matter of weeks to months, some of the more significant damage may prove irreversible over time. • Unsustainable Fishing and Resource Management: Inadequate regulatory enforcement can result in overfishing and destructive fishing practices, further damaging coral reefs. For example, coral reef covered areas in the Red Sea contribute towards the fishing of 21,600 to 29,400 tons annually while sustainable catch fishing especially along the length of the coral reef should annually be around 3.750 tons only. This clearly underscores that the current level of fishing in the Egyptian Red Sea is significantly unsustainable.

<p>Addressing Unsustainable Human Practices</p>	<ul style="list-style-type: none"> • In recent years, shark fishing and the collection of sea cucumbers have emerged as major threats to Egyptian reefs. The demand for shark fins in international markets has led to a significant increase in shark fishing along the Egyptian Red Sea coast. Sharks hold considerable commercial value for tourism, with sites like Brother Island generating over \$200,000 annually from shark-related attractions. In response to these threats, the Egyptian government issued a ban on shark fishing in 2004, with ongoing efforts to enforce and monitor shark populations. • Harmful Ship and Boat Practices: Accidental ship groundings and anchor damage can physically harm coral reefs, breaking or crushing coral colonies. This increases with overcapacity and use; for example, in 2019 there were more than 2000 excursion safari boats in the Red Sea alone. • Land Based Pollution: Due to hotel landscaping, sewage discharges, and industrial activities introduce excess nutrients, sediment, and toxins into coastal waters, adversely affecting coral reefs, water nutrients. In addition, land expansions and buildings lead to dredging. Plant water irrigation due to hotel landscaping disturbs coral reef ecosystems. The increase of fresh water leaching from the coastline, with fertilizers and pesticides increases algae in the sea. For example, due to the unregulated development on the shoreline before the implementation of Law no. 4/1994, great changes in the shoreline occur as a result of coral reefs landfilling and dredging. The landfilled reef area is estimated to be 2.15 million m². In another study, shoreline change detection from 1972 to 2011 revealed landfilling of some 7.56Km² and dredging of 2.67km², with loss of 5.34km² of the reef tracts. • Oil and Gas Related Activities: Expansion of offshore oil and gas drilling and mining could also lead to accelerated degradation of marine ecosystems in addition to marine transport that leads to waste discharges in water and oil spilling leakages and pollution.
<p>B. Addressing Climate Change</p>	
<ul style="list-style-type: none"> • Ensuring Climate Resilience: by preserving coastal ecosystems, such as mangroves and seagrasses, helps enhance climate resilience by acting as natural barriers against storm surges and coastal erosion, safeguarding both the environment and coastal communities. • Introducing Climate-Resilient (Adaptation) Tourism Infrastructure: to fortify the sector's ability to weather the effects of climate change, offering tourists a reliable and safe experience. • Sea-Level Rise: Rising sea levels due to climate change can lead to the loss of coastal land and infrastructure, affecting the availability of suitable sites for eco-tourism activities. • Coastal Erosion: Increasing coastal erosion caused by more frequent and severe storms can undermine the stability of beaches, affecting beach-based eco-tourism activities. • Coral Bleaching: Warming sea temperatures can trigger coral bleaching events, damaging coral reefs and impacting the quality of diving and snorkeling experiences. In the years 2012, 2020, and 2023, instances of coral bleaching were observed in the Egyptian Red Sea. However, these incidents were confined to the southern region and affected only a handful of coral species. Remarkably, the northern reefs displayed no signs of coral bleaching during these periods. This is largely attributed to their unique hydrodynamic pattern, which renders them more resilient to the impacts of climate change. This distinctive characteristic prevalent in the northern part of the Egyptian Red Sea underscores its potential as a stronghold for coral survival amidst escalating global warming. • Extreme Weather Events: More intense and frequent extreme weather events, such as hurricanes and typhoons, can disrupt eco-tourism operations and endanger the safety of tourists. • Heat Stress: Increased temperatures can lead to heat stress for tourists engaged in outdoor activities, affecting their comfort and well-being. • Water Scarcity: Changing precipitation patterns and prolonged droughts may lead to water scarcity, impacting the availability of freshwater resources for eco-tourism facilities. 	

STRATEGIC SOCIAL DRIVERS	
A. Cultural Heritage Preservation and Local Community Engagement	
Mapped Institutional Challenges	<ul style="list-style-type: none"> • Supporting Tourism: Cultural preservation can enhance the attractiveness of coastal and marine destinations, appealing to travelers interested in immersive cultural encounters. • Community Empowerment: Local communities living near protected areas often benefit from eco-tourism activities through employment, capacity building, and business opportunities. • Women's Economic Empowerment: Including activities that empower women, such as craft markets or guided tours, can contribute to gender equity and financial independence. • Community Pride and Involvement: Diversification encourages local pride and participation in environmental protection and conservation efforts. • Entrepreneurship Opportunities: Individuals can start small businesses offering unique eco-tourism activities, fostering entrepreneurship and innovation. • Fostering Cultural Exchange: Tourists who participate in diverse activities are more likely to engage with local communities, leading to cultural exchange and mutual understanding. • Cultural Understanding: Participation in diverse eco-tourism activities fosters cultural understanding, tolerance, and appreciation. • Social Inclusion and Equity: Diversification promotes social inclusion by providing options that cater to a wide spectrum of tourists, regardless of age, ability, or background. • Preservation of Local Traditions: Eco-tourism activities promoting local customs and traditions can help preserve cultural heritage and traditional knowledge.

Mapped Institutional Challenges and Suggested Actions⁶⁹

After presenting cross-cutting economic, environmental, and social drivers, this section details the mapped institutional challenges and suggested actions under each of the identified four roadmap interventions.

Intervention One: Aligning eco-tourism practices with marine conservation and biodiversity protection.

Mapped Institutional Challenges	A. Preserving Biodiversity and Marine Ecosystems
	<ul style="list-style-type: none"> • Adopting a tourist mass model approach as a goal rather than quality of visiting tourist by policy and decision makers within the sector lead to the overuse and the exceeding of the carrying capacity of diving marine sites, even within marine protected areas. • Limited coordinated planning of tourist development projects which leads to the overuse of natural resources or the implementation of policies and tourism development plans that can seriously have environmental impacts. • Need for more integrated coordination between the Ministry of Environment and the Ministry of Tourism to align the Ministry of Environment plans and vision of protected areas with the overall eco-tourism context envisioned by the Ministry of Tourism. • Need for integrating environmental considerations including biodiversity and preservation within tourism related policies and public institutions that oversee the governance of the sector which leads to over ambitious plans with regards to the quantity of tourists which leads to overuse of touristic marine sites including diving and snorkeling sites. • Need to support and upgrade the institutional capacity of the created environmental investment unit and the capacity of the Ministry to negotiate with potential investors, study incoming investment proposals. The development of investment plans for marine protected and other relevant areas. • Need for full management plan for some declared Red Sea Protectorates (RSPs) and lack of full authority of the RSPs on the human activities within the protected areas including the mismanagement of solid waste & dumping sites. • High confliction rate on marine living resources due to lack of coordination between different stakeholders and between authorities. Therefore, consumption (fishing oil exploration) and non-consumption (diving, snorkeling) exist in the same area and living resources while ICZM plans are not adequately activated.

(69) Mapped challenged and suggested actions under each intervention have been the result of aggregated data based on interviews, expert feed back, conducted consultations, and documents submitted by relevant stakeholders. All mentioned suggested initiatives have also been suggested and discussed by the stakeholders.

Regulations and Enforcement	
	<ul style="list-style-type: none"> • Existing regulatory enforcement challenges due to limited resources and enforcement capabilities can make it difficult to combat illegal activities, behaviors, or the ability to enforce rules of coastal marine protected areas and other relevant sites. • Inadequate monitoring and surveillance capabilities make it challenging to track and respond to illegal and harmful activities within protected marine areas. For example, in the Red Sea, there is an increase in snorkeling activities without approval by tourist operators, especially online operators where guides pose environmental harm on coral reefs as they operate without environmental certifications. This was observed by the chamber of diving and watersports. • Limited enforcement and implementation of environmental safety measures to protect marine life and coral reefs during diving and snorkeling activities in the Red Sea which causes substantial harm over time. Especially Snorkelers on the surface, they have more contact with the shallow reefs. • Limited authorization of the RSPs on monitoring and licensing the fisheries activities, even within the MPAs and existence of non-regulated sport fishing within marine protected areas and outside MPAs. • Inadequate awareness and regulation of such behaviors among tourists pose a significant challenge in safeguarding the integrity of these underwater wonders within protected areas. • In the domain of yachting tourism, several challenges are evident. First, there is a lack of implemented and consistently enforced operational, waste disposal, and maintenance environmental standards, which are not penalized when violated. Additionally, there is a widespread issue of waste and garbage being irresponsibly disposed of, with these materials often discharged directly into the water, causing environmental harm. Furthermore, there is limited awareness among yachting tourists and operators about the importance of upholding sustainability practices to protect water and marine ecosystems.
Capacity, Resources and Funding	
	<ul style="list-style-type: none"> • Limited availability of funding resources that impacts the efficacy of integrated management plans of protected areas and ability to enforce regulations and implement proper site management plans and other relevant policies. • Limited private sector investments and concessional agreement and a need to create an enabling environment for investments inside marine protected areas plans for carrying capacity and activity related zoning, • Incomplete or outdated data on marine ecosystems and biodiversity can impede evidence-based decision-making and conservation planning. • Insufficient staff and enforcement personnel within protected areas result in challenges related to patrolling and ensuring compliance with conservation regulations. • Limitation of the mooring capacity in terms of the mooring installation numbers and installation strength needed to meet the increasing sizes of the pleasure/diving boats, within marine protected areas and outside it. A major consideration in the original design and current update of the mooring system is the length of vessels for which the moorings are designed is also needed. • Originally, the moorings were expected to accommodate 1-3 vessels of about 16m in length (representing the typical dive boats in the Red Sea in the early 1990's). During the following two decades, the number and the sizes of leisure and safari boats continued to increase and exceeded the carrying capacity of the installed mooring system. Over time, the moorings have become increasingly stressed and threaten at several diving sites, especially the offshore far reefs because (1) many more boats are tying up to the moorings (6 to 10 are not unusual now), and (2) the average length of vessels has increased sharply, between 40 and more than 50 m for the increasing number of safari boats.⁷⁰ • Most of the safari boats operation-based reefs are suffering from the pressure resulting from the over-use of large size safari boats mainly due to lack of proper mooring system for safe and more sustainable mooring for the highly sensitive and value of the biodiversity on these reefs. In addition, the maintenance of the current mooring installations is needed more intensively over effort and cost. • Insufficient financial support to the RSPs, and inadequate entrance fees plan of the RSPs, in addition to lack of RSPs marketing plans and inadequate capabilities for monitoring the living resources in and out the declared RSPs.

(70) Dr Mahmoud Hanafy (2022), Red Sea Living Resources: Opportunities and Challenges for Sustainable Uses, HEPCA.

Suggested Actions	Planning, Coordination, and Integration
	<ul style="list-style-type: none"> • Ensure that the upcoming blue economy strategies prioritize the conservation and protection of natural marine hotspots and support integration of marine protection in policy development of other relevant stakeholders within the tourism sector. • Implement a comprehensive and participatory marine spatial planning process to balance conservation and development interests. And identify and protect critical marine habitats and migration routes. • Consider the introduction of co-management approaches that involve the private sector to reduce the cost of law enforcement, encourage investments, sustainable management approaches and efficient oversight. • Establish a more effective and efficient fee system for protected areas. This adjustment aims to boost revenue and ensure that a minimum of 50% of the generated funds is reinvested to adequately cover the expenses associated with the conservation process. • Review existing management and development plans for marine protected areas and ensure it includes the reduction of potential of fishing effort by at least 50%, through full fisheries management. Establish and implement a marketing plan as part of management plans. • Implement and activate existing integrated coastal zone management planning and integrate it within different authorities and stakeholders within the tourism sector. The Ministry of Environment in collaboration with the Chamber of Diving and Water Sports has already created a management and zoning plan for marine activities in Sharm El Sheikh. Management and zoning plans are needed for remaining destinations. • Establish and implement a reef carrying capacity plan within marine protected areas and other rich marine ecosystem sites as well. This can plan for future mooring installation capacity and the limits of the diving boats and increase the number of mooring installations by at least 50%. • Develop and disseminate guidelines for responsible tourist behavior to minimize negative impacts on ecosystems and local cultures. • The fishing zones in the Red Sea governorate should be assessed. Create and implement fishing related marine zoning plan for uses of the marine areas to address the areas and different uses as well as no take zones (spawning aggregation, critical habitats, etc.). • Consider the development of a plan to support the civil society sector in launching and managing initiatives and programs, in addition to the creation of new NGOs dedicated to marine ecosystem and biodiversity protection.
	Infrastructure
	<ul style="list-style-type: none"> • Establish a transparent mooring installation and maintenance system for the entire Red Sea. Two visible colors of mooring buoys are needed to differentiate between the moorings suitable for the weight of daily boats and the moorings suitable for the weights of larger liveaboard vessels. • Expansion of existing mooring buoys installation and support operational maintenance to reduce physical damage to coral reefs caused by anchoring. This could be achieved through private funding, donations, and collaborations with organizations like the EEA and can further reduce physical damage to coral reefs caused by anchoring. Meet the need to install additional mooring buoys suitable for liveaboard boats that weigh between 200 to 450 tons. • Identify and introduce different mooring installation technology at certain diving sites to meet the recent increase in the size of the diving boats. • Promote and subsidize the adoption of eco-friendly anchoring technology, such as mooring buoys or anchoring systems that minimize damage to the seabed and coral reefs. Enforce regulations that require vessels to use such technology in sensitive areas. • Install coral demarcation buoy lines around coral reefs to prevent swimmers and snorkelers from walking on the reef. • Consider the establishment and activation of coral bleaching monitoring & alerting system within marine protected areas.

Regulations and Enforcement	
	<ul style="list-style-type: none"> • Enforce laws and regulations to control land-based pollution, including agricultural runoff and sewage discharge. And promote best practices for waste management and reduce plastic pollution through waste reduction and recycling initiatives. • Consider the issuance of regulations to strengthen the role of the RSPs authority outside the declared areas, due to high connectivity and open ecosystems. • Consider the issuance of new regulations to increase the number of marine protected areas or to widen the geographic scope of already existing ones to ensure that marine ecosystems outside current MPA jurisdictions are also protected. • Consider the activation or the development of mandatory zoning and regulation by implementing clear and comprehensive zoning plans within MPAs to designate areas for specific uses, such as no-take zones, recreational zones, and sustainable fishing zones. Enforce regulations and restrictions to ensure that activities within each zone align with conservation goals. • Develop buffer zones around MPAs to protect adjacent areas and maintain ecosystem connectivity. And promote the creation of ecological corridors that facilitate the movement of marine species. • Implement strict regulations to assess environmentally tourism projects and request more expansive, detailed assessments that integrate biodiversity. • Establish and or impose guidelines and permits for tourism and recreational activities within MPAs. And consider implementing an entrance fees system to address over capacity of reef diving sites through monitoring visiting rate limitation. • Activate and enforce guidelines for sustainable coastal development, including setbacks and restrictions on construction near sensitive marine areas. And preserve and restore natural buffers like mangrove forests and seagrass beds. • Impose beach management standards for all hotels and private beaches that include trained staff to clean beaches, signs, educational materials, bins with lids and closed ashtrays. And impose regulatory sustainable measures on hotels such as abiding by green star labels, reduce electricity usage, reduce water usage, compost waste, when possible, reduce food and waste. In addition to addressing hotel gardening and landscaping side effects by imposing certain requirements such as reduce / ban grass and tree surfaces 1km from the beach. Save water using drip irrigation and timers. Use native desert plants to decorate the landscape. • Establish and implement a solid waste management plan, with emphasis on plastic waste in coastal cities and introduce taxes on pollutants and plastics to incentivize businesses and individuals to reduce their waste and pollution. Allocate the tax revenue to support marine cleanup efforts, such as removing marine litter and derelict fishing gear. • Encourage compliance with the existing single-use plastic ban by ensuring businesses adhere to the single-use plastic ban in the Red Sea Governorate is crucial. This can be done by enforcing penalties for noncompliance and providing certifications to businesses that are successfully eliminating single-use plastic products. And incentivize touristic businesses to switch to biodegradable alternatives. • Enforce stringent regulations for offshore oil and gas exploration and extraction to prevent spills and habitat disruption. Require oil and gas companies to have comprehensive spill response plans in place. And ensure that all offshore related projects have detailed environmental assessments that include climate change and marine ecosystem preservation considerations and water quality preservation assessments. • Enforce fines on boats that throw waste into the sea to be applied by Coast Guard and Marine Police to ensure that boat's waste is returned to the jetty and properly disposed of. • Consider banning any new fishing licensing in the Red Sea area and establish & implement a plan to re-adapt the fishermen to work in non-consumption industry, mainly tourism due to current overfishing practices. And consider the closure fishing season for all types of fishing during the spawning season of commercial species, in addition to considering the stricter regulation of sport fishing.
Capacity Building and Finance	
	<ul style="list-style-type: none"> • Design and implement new and continuous public awareness campaigns that emphasize the importance of coral reefs and the role of individuals in their protection. And use multimedia channels, including social media, documentaries, and school programs, to reach a broad audience. • Create a fund for biodiversity and marine conservation to service marine protected areas to support regulatory enforcement through staffing and activating monitoring and evaluation systems. • Establish dedicated funds to support coral reef restoration efforts. These funds can be sourced from government budgets, private sector contributions, and international grants. Allocate funding for research and implementation of innovative coral restoration techniques, such as coral nurseries and out planting programs. • Establish and implement a full business plan for marine protected areas, including revenue generation system. Re-invest part of the revenue generated money to improve the RSPs performance. • Create investment catalogues for investment opportunities in eco tourist areas, centers within protected areas.

	<ul style="list-style-type: none"> • Consider the development of public-private partnerships and concessions through fostering partnerships between government entities, private sector companies, and non-governmental organizations to jointly invest in and implement coral reef conservation and sustainable management programs. • Develop content and integrate marine literacy in schools, technical school and university Curricula, teaching students about marine conservation, ecology, and the value of coral reefs. Support field trips to marine ecosystems to provide hands-on learning experiences. • Educate the oil and gas sector, including all relevant stakeholders, on the importance of implementing stringent environmental standards to protect against degradation and oil leakage. • Expand recruitment and hiring for marine protected areas and provide newly hired staff including rangers training on monitoring and provide them with necessary equipment. • Develop a capacity building plan for Ministry staff, especially teams dedicated to working in marine protected areas and those dedicated for marine preservation and biodiversity at large to train on the importance of the economic evaluation of natural resources, biodiversity and marine biodiversity rich environments and systems.
	<p style="text-align: center;">Specific Initiatives</p> <ul style="list-style-type: none"> • Officially announce the great coral reef fringe as a protected area to ensure that coral reef is within protected areas. The declaration of the Great Fringing Reef of Egypt can unify regulations and conservation measures to cover all reefs in Egypt. • Encourage the creation of a foundation and an NGO dedicated to environmental activism and the implementation of environmental initiatives and projects such as the preservation of marine life specifically dedicated and operating in Sharm El Sheikh. It can be based on the model of HEPCA. • Develop periodical and ongoing awareness campaigns targeting the public to inform them of the importance of the economic value and importance of marine life and natural resources. It is essential to highlight the economic loss that can result from losing biodiversity and how this can have a negative impact on the public and the economy. • Design and create comprehensive content and educational curricula focused on marine life and biodiversity tailored for schools and universities. This aims to develop engaging and informative materials that cater to diverse educational levels, fostering a deeper understanding of the intricacies and importance of marine ecosystems. • Support research and innovation in technologies and techniques that can help monitor and protect coral reefs, such as advanced coral restoration methods, underwater monitoring systems, and early warning systems for environmental threats. • Establish an association between oil exploration and transportation companies to combat and monitor oil spills, as well as covering the cost of combating under governmental supervision. • Consider declaring the southern Red Sea (south of Marsa Alam) as an eco-touristic destination. Based on this declaration, all types of development and expansions should be governed by clear and unified guidelines for eco-tourism • Promoting the use of reusable or biodegradable alternatives to single-use plastics can help reduce plastic waste in the long run. • Require mandatory hotel training courses on sustainable garden management and support the development of eco awareness campaigns similar to Eco Egypt marine campaigns in airports, busses and other gathering venues for tourists, online campaigns and tv documentaries. • Consider the establishment of a donation box to fund Red Sea cleanup efforts, coral restoration, and protection initiatives by tourists in governorate touristic areas. • Develop tourist/citizen science programs for divers, guides, instructors, and tourists to participate in coral reef and marine life documentation and photography. Contribute to international databases for marine life research in the Red Sea, coral reef restoration programs and mangrove planting. • Scale existing or develop new Eco-Tourism Certification that recognizes businesses and tour operators adhering to sustainable and responsible practices in eco-tourism such as green stars ecolabel. • Consider marine spatial planning into the development of offshore renewable energy projects (e.g., wind and wave energy) to minimize their impact on coral reefs and marine ecosystems. Designate areas for renewable energy development that are less ecologically sensitive. • Establish scientific and environmental education centers near coral reef areas to engage visitors, tourists, and local communities in understanding marine ecosystems. Offer interactive exhibits, guided tours, and educational programs for all ages. • Consider a possible collaboration between the Ministry of Environment, Ministry of Transportation, Governorates, the Chamber of Diving and Water Sports and HEPCA to establish a responsible engine oil collection point and recycling system to prevent the used engine oil from being dumped into the sea. Used engine oil disposing stations could be set up at every marina and jetty, where boats pour the used oil into a closed container which is then collected and sold to a certified oil recycling company.

Intervention Two: Diversifying Eco-Tourism Practices and Enhancing Existing Infrastructure

Mapped Institutional Challenges	Policy Activation, Coordination, and Integration
	<ul style="list-style-type: none"> • The current marine eco-tourism landscape is primarily centered on a narrow range of activities, notably diving, snorkeling, dolphin watching, and sports fishing. To ensure a more robust and sustainable eco-tourism sector, there is a pressing requirement to expand the array of offerings and experiences available to visitors. • Many coastal areas are subject to zoning and land-use planning regulations, which can dictate the types of activities allowed in specific zones. Introducing new eco-tourism activities may require review, assessment, and certain amendments to zoning regulations or approval from local planning authorities. • Limited stakeholder engagement including local communities, is crucial for understanding and navigating complex regulations. Diversification efforts may require extensive consultation and negotiation.
	Unsustainable Operation and Infrastructure
	<ul style="list-style-type: none"> • Limited support is extended to diving centers that have difficulties in expanding their business services and market their services to tourists. They often rent the premises of their centers in hotels as required by law and they often compete with hotels that they rent in and compete with tour operators on the type of activities that tourists can undertake during their stays. Diving centers depend largely on international and foreign tourist operators for potential clients. Thus, diving centers require training in business development, sales and marketing skills and functioning. Booking systems and technological tools are also needed for better management of diving centers. • Limited integration of sustainability practices in the management and operation of local tour operators and tourism companies is increasingly becoming a requirement by foreign based tour operators for cooperation and business partnerships. • Certain eco-tourism activities, especially those involving adventure sports or watercraft, are subject to safety and equipment standards. These standards aim to protect the safety of tourists but may add complexity in terms of acquiring suitable equipment and ensuring operator compliance. • Weak outreach and marketing strategies for diving centers and accessibility to arrange for client travels and international networking to attract related tourists. • Need for awareness of the impact of marine leisure and marine sports activities on the environment and marine ecosystems by relevant stakeholders. • Need for expertise in understanding and limited ability to adopt sustainability and eco practices among hotel staff even when they graduate from related hospitality schools and specializations. • The current yacht docking ports do not sufficiently incorporate sustainability practices into their primary infrastructure. This necessitates the creation of guidelines and the implementation of environmentally friendly regulations for the functioning of these ports and yacht operations. • Need for specialized training related to yacht docking marina management that will facilitate the implementation of sustainable practices. • Difficulty in finding and retaining skilled labor and guides for specialized eco-tourism activities, especially in remote coastal areas. • Discharging brine waters generated by desalination plants into the marine environment necessitates a re-evaluation. It is imperative to explore and implement technologies that can eliminate or minimize such discharges. Specifically, the Red Sea should be regarded as a "ZERO discharge" sea, prompting a shift towards sustainable practices to mitigate environmental impacts.
	Regulations and Enforcement
	<ul style="list-style-type: none"> • The complexity of eco-tourism regulations is exacerbated by the need for interagency coordination. Different government departments or agencies may have jurisdiction over different aspects of eco-tourism, creating challenges in aligning regulations and permitting processes. • Limited consistency and clarity in regulations can lead to confusion among eco-tourism operators. Operators may struggle to understand their obligations and ensure compliance due to vague or contradictory regulatory requirements. • Meeting regulatory requirements often involves additional costs, including permit fees, inspection expenses, and investments in safety measures or environmental protection efforts. These costs can be burdensome for eco-tourism operators, particularly small businesses. • Different eco-tourism activities may require specific licenses or permits, such as those related to boating, wildlife observation, water sports, or cultural heritage sites. Operators may need to apply for multiple permits from different authorities, each with its own set of criteria and fees.

	<ul style="list-style-type: none"> • Limited existing regulations that enforce training, attainment of ecolabels and certifications related to different marine eco-tourism activities. There is a need to implement regulatory measures that obligate hotels and other tourism establishments to conduct sustainability management relevant training. This could be enforced by either withholding promotions or imposing a financial quota, percentage, or a fee on these establishments to ensure the provision of these types of training. Additionally, linking the provision of permits for hotels to the completion of these training courses could be considered as a pre-condition. To encourage this practice, refunds, subsidies, and facilitations should be provided for hotels and establishments that conduct and provide these relevant types of training. • Limited enforcement of established laws and regulations, coupled with a limited presence of coastal guards needed to oversee potential breaches of environmental operations of yachts and leisure safari boats. • Limited regulation and monitoring of small ports and marinas of coastal hotels where unsustainable practices are often found related to waste management, discharges, docking and maintenance have been observed. • The need for promotional incentives specifically designed to encourage hotels to transition to more environmentally friendly practices, such as adopting clean energy solutions, is a notable issue. The existing eco-green stars label and other international certifications can, in fact, pose a financial burden for hotels and tourism establishments.
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Suggested Actions	Eco-Tourism Diversification Policies
	<ul style="list-style-type: none"> • Diversify eco-tourism, assess the feasibility of introducing new streams of eco-tourism that can attract new tourists and take off pressure from current eco-touristic marine sites for diving and snorkeling. These can include marine sports such as free diving, surfing, kiteboarding, recreational yachting, parasailing, marine spa and wellness cruises, underwater archaeological sites, thematic diving, marine yoga and wellness retreats, marine habitat restoration activities, scientific eco-tourism, marine and coastal hiking, marine geology tours: marine educational tours, seaside camping, and marine birdwatching. • Identify similar to yachting tourism the most relevant and suitable new streams of coastal and marine eco-tourism that can be adopted by the government. • Develop after identification of new eco-tourism streams strategies, relevant action plans, feasibility studies and assessments to launch and activate these streams. • Streamline permitting processes for new eco-tourism ventures, ensuring timely approval and issuance of necessary licenses. • Develop an action plan that specifically addresses cruising and yachting in Egypt to introduce new relevant activities such as destination events, weddings, educational tours, star gazing, wellness retreats, waterside/ beach dining and sailing activities. • Integrate eco-tourism diversification consideration within the work mandate of all stakeholders working in tandem within the tourism sector, especially authorities that are responsible for tourism development projects, land allocations, outreach, and marketing. • Support the operational development of these new streams by supporting the development of capacity building for environmental protection and tourist health and safety measures with the chamber of diving and watersports. • Diversify the range of activities provided by eco centers within marine protected areas and implement programs to educate tourists about responsible and sustainable eco-tourism practices. • Consider introducing eco-friendly transportation options in coastal and marine areas such as electric boat tours or electric bike rentals, aligning with sustainable tourism trends. • Consider eco-tourism investment incentives for eco-tourism operators who invest in new diversified activities that align with sustainable practices. • Support and promote eco-certification programs that recognize and reward operators for sustainable and diversified eco-tourism practices. • Establish funds or grants specifically for eco-tourism diversification projects to reduce financial barriers for operators. • Offer incentives for eco-tourism operators that adopt and promote sustainable practices, such as reducing waste and minimizing energy consumption. • Facilitate regular dialogues and collaboration among eco-tourism stakeholders, including operators, local communities, conservation organizations, and government agencies. • Implement incentive programs that offer cashbacks through reduced licensing fees or alternative forms of support following sustainability certification and staff training at hotels or provide subsidized funding for these initiatives. • Assess the environmental impact of excursion tours, safari, and daily boats, their emissions, pollution or engines and waste discharge. • Consider the development of marketing, PR and outreach plans to attract different types of investors and attract developers from abroad under an eco-tourism business approach.

Capacity Building and Infrastructure Development	
	<ul style="list-style-type: none"> • Re-asses existing eco-tourism related infrastructure developed within relevant protected areas to ensure the quality and attractiveness of these attractions. Develop or upgrade infrastructure, such as trails, boat docks, visitor centers, and accommodations, to support new activities. The continuous conducting of carrying capacity assessment and audits to determine the maximum number of visitors an area can sustainably accommodate. • There is a necessity for enhancing and expanding the infrastructure within marine protected areas, which includes improving ranger housing, setting up outpost units, constructing research facilities, providing necessary equipment, developing eco-friendly lodges, and establishing visitor centers. • Provide training and capacity-building programs for eco-tourism operators, guides, and local communities to develop the necessary skills for new activities. • Consider incorporating technology, GPS systems, satellite imaging, and similar tools into protected areas, and integrating them into monitoring plans.
Specific Initiatives	
	<ul style="list-style-type: none"> • Consider the creation of a unified body or a sort of one stop shop for tourism operators and agencies and other stakeholders to receive licensing and finalize all requirements needed for leisure marine activities and boats. The same body can oversee the monitoring and enforcement of existing laws and can have a take to ensure and penalize over usage and harmful marine practices to the environment. • Consider the frequent hosting of eco-tourism conferences and events in coastal and marine areas as it brings in revenue from participants and delegates. • Create virtual tourism experiences and online platforms where community members can interact with international tourists, providing a unique and immersive cultural exchange. • Develop and promote Specialized Eco-Tourism Packages, such as marine expeditions, bird-watching tours, or underwater photography workshops, which can attract niche markets and generate revenue. • Develop promotional campaigns and marketing material to support eco-tourism and new types of eco-tourism activities related to marine and coastal areas. • Promote the development of artificial underwater dive sites through international funding and projects, using eco-friendly materials like stones and statues. This will not only aid in the restoration of the marine ecosystem but also alleviate the stress on vulnerable coral reefs by diverting boat traffic and reducing tourist activity in these sensitive areas. • Consider establishing a Red Sea Museum in the Sharm El Sheikh and Hurghada regions to encourage educational tourism. This museum would serve as an informative hub for tourists and schools, offering insights into the Red Sea ecosystem and raising awareness about its conservation. • Enhance and broaden initiatives like the Turtle Watch Egypt programs, led by organizations such as HEPCA and others. These efforts should be scaled up to boost the development of science and educational tourism. • Create a practical map that outlines the need for capacity building in the context of sustainability practices for various establishments such as hotels, resorts, tour operators, dive centers, restaurants, cafes, bazaars, and shops. This map should identify specific roles and sectors within these businesses that demand sustainability-related training or awareness sessions. • Create a national training institute focused on facilitating eco-tourism training, fostering awareness, and granting certifications. • Establish governmental or public organizations and frameworks focused on promoting high-end, premium eco-tourism experiences, catering to audiences interested in diving, adventure, volunteering, scientific exploration, and agro-tourism. These entities will primarily concentrate on marketing and outreach efforts, emphasizing quality and exclusivity over budget-friendly tourism options. • Develop a fleet of glass-bottom boats to offer tourists an opportunity to explore the underwater world of the Red Sea without disturbing the delicate coral reefs. These tours will be guided by local experts to provide insights into marine life and conservation efforts with the goal to generate income for the local community, enhance tourists' experience, and minimize the impact on coral reefs, allowing them to recover. • Develop a series of responsible marine adventure tours, including snorkeling and scuba diving expeditions that adhere to strict codes of conduct for coral reef protection. This is to provide tourists with engaging experiences while preserving the marine environment and encouraging responsible tourism practices. • The Ministry should consider updating its maps and brochures for marine tourism areas in the South Sinai and Red Sea governorates, aligning them with the most recent coastal zoning and management plans, which include Marine Protected Areas. • The CDWS recommends offering Green Fins members a discount on MPAs permit fees, as they demonstrate an enhanced environmental performance with minimal impacts on the Red Sea. This discount would serve as an incentive for dive centers to engage in the Green Fins program and enhance their environmental practices.

	<ul style="list-style-type: none"> • Develop an atlas dedicated to cataloging discovered or existing submerged archaeological sites, primarily focusing on Greco-Roman heritage along the Mediterranean coast. This atlas will serve as a valuable resource, offering access to information for both interested tourists and researchers, thereby promoting eco-tourism in the region. • There is a necessity to introduce a new form of ecologically sustainable tourism focused on health and well-being (Such as Thalassotherapy). However, this initiative requires feasibility and assessment studies to identify the steps needed to launch and activate this type of tourism. Additionally, it entails the development of strategies and action plans, addressing and mitigating challenges that might hinder its success. Moreover, creating accredited certification programs, educational degrees, and courses, as well as implementing appropriate monitoring standards, facility requirements, licensing procedures, and identifying relevant regulatory stakeholders are essential components of this endeavor. • The development of a health-centered and well-being-focused eco-tourism sub-sector, such as Karlovy Vary which goes beyond conventional hotel-related services and emphasizes the comprehensive wellness of tourists. The model aligns with the growing trend of health tourism and prioritizes the well-being of tourists over conventional tourism experiences. The model could redefine the tourism industry by integrating various aspects of health and wellness into the tourism experience. The integration involves the provision of holistic wellness experiences, which could include activities like yoga retreats, meditation sessions, nature walks, organic food offerings, and therapeutic spa treatments. The idea is to create resorts that not only provide relaxation but also contribute to the physical and mental well-being of the tourists. • Utilizing Egypt's existing submerged archaeological sites to establish underwater museums and artificial diving attractions along the Mediterranean coastline, including Alamein. This initiative also involves the development of marine archaeology and scientific diving activities in Alamein. • Carry out an assessment study and ecological mapping to identify potential diving tourist attractions and sites in the vicinity, especially potential submerged archaeological sites. • Consider the development of an online interactive atlas of these archaeological, artificial, and natural reef diving sites as well. • Assessment of hotel sites and sea fronts to understand corresponding marine ecosystems and accordingly provide unique aquatic and marine services such as underwater museums, marine parks, diving sites, etc.
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Intervention Three: Activating Eco-Tourism for Climate Resilience

Mapped Institutional Challenges	Policy and Regulation Issues
	<ul style="list-style-type: none"> • Need for Climate Change-Specific Regulations and limited policy related climate resilience integration within the tourism sector which hinders the industry's ability to effectively address climate-related risks and opportunities, leaving businesses and local communities without clear guidelines and mandates for climate resilience. • Need for guidelines to integrate climate risks with policy development and enforcement with the eco-tourism sector and its different institutional stakeholders. • Limited guidance for eco-tourism businesses to mitigate greenhouse gas emissions and implement climate adaptation measures. • Weak environmental compliance and enforcement of current existing regulations can exacerbate climate impacts on natural resources including marine protected areas and natural habitats. • Limited support and guidance for eco-tourism businesses to develop climate resilience plans, which are essential for ensuring business continuity in the face of climate-related disruptions. • Absence of incentives for eco-tourism businesses to invest in climate-resilient practices, potentially leading to a competitive disadvantage. And inadequate financial and technical support to help tourism operators transition to climate-resilient operations. • Tourism development master plans often do not include climate adaptation strategies, which can hinder the long-term sustainability of eco-tourism activities. • Limited involvement of eco-tourism operators, local communities, and NGOs in the policy development process, leading to a lack of input and representation.

	Limited Resources and Capacity Building
	<ul style="list-style-type: none"> • Inadequate availability of training programs and educational resources for eco-tourism operators, local communities, and government officials, limiting their capacity to understand and implement climate-resilient practices. • Challenges in scaling up capacity-building efforts to reach a wider audience of eco-tourism stakeholders, including small businesses and remote coastal communities. • Limited financial resources and funding support for capacity-building initiatives, including workshops, seminars, and educational materials that are vital for enhancing climate resilience. • Limited technical expertise, including climate scientists, environmental engineers, and sustainable tourism specialists, to provide guidance and training on climate change adaptation within the context of policy development in the tourism sector. • Challenges in accessing relevant climate data, research, and information that are essential for understanding climate change's impacts and developing effective adaptation strategies. • Insufficient mechanisms for sharing climate data, research findings, and information among relevant agencies and stakeholders hinder informed decision-making and planning. • Need for technical infrastructure and tools necessary for capacity building, such as computer labs, modeling software, and data analysis resources. • Limited availability of educational materials in local languages and low literacy rates in some coastal communities hinder the dissemination of climate knowledge and training.

Suggested Actions	Policies and Regulations
	<ul style="list-style-type: none"> • Align different and interrelated tourism sector policies undertaken by different stakeholder including tourism development plans, eco-tourism centers related plans within marine protected areas, and other related policies to the country's national climate change strategy 2050. • Develop guidance and regulations that integrate climate risks and related assessment with the tourism sector, especially in touristic development plans and different tourism strategies. • Ensure the alignment of all existing integrated coastal zone management strategies with the country's climate change strategy 2050, NDC and other climate risk priorities for the country. • Revisit existing scope of mandatory environmental assessments of lands that will be used for touristic projects to ensure climate change assessments and impact on marine and biodiversity are accounted for. This should include the integration of Climate Risks in Tourism Development Plans by requiring that all tourism development plans include climate risk assessments. • Develop and enforce zoning regulations that consider sea-level rise and storm surge risks. • Develop and implement post-disaster recovery plans to restore tourism infrastructure quickly in the event of climate-related emergencies. • Implement erosion control measures and beach nourishment projects to protect coastal areas from sea-level rise and storm damage and promote the use of natural or nature-based solutions, such as mangrove restoration, to stabilize coastlines. • Encourage sustainable land use practices in coastal areas to reduce vulnerability through appropriate coast and shoreline zoning. • Promote sustainable fishing practices and enforce regulations to combat overfishing especially around marine protected and bio marine rich sites. • Implement robust waste management systems to reduce marine litter and promote recycling and composting and enforce regulations to limit single-use plastics in coastal areas.
	Resources and Capacity Building
	<ul style="list-style-type: none"> • Develop and use innovative financing mechanisms, such as green bonds or climate-resilient investment funds, to attract private sector investment in climate-resilient tourism projects. • Develop educational materials and codes of conduct for tourists to raise awareness about the fragility of marine and coastal ecosystems and the importance of responsible tourism for marine protected areas. • Promote the use of resilient infrastructure in coastal tourism areas, such as elevated buildings, flood barriers, and erosion control measures. • Require the use of renewable energy sources in new tourism projects. • Create a climate adaptation fund to support climate-resilient projects in the tourism sector. • Invest in research and data collection related to climate change's impacts on coastal and marine ecosystems and establish monitoring programs to track changes in sea levels, water quality, and biodiversity. • Provide training to tourism operators, local communities, and government officials on climate-smart practices and disaster preparedness and build capacity to respond effectively to climate-related emergencies.

	Special Initiatives
	<ul style="list-style-type: none"> • Encourage art and cultural tourism activities that promote awareness of climate change impacts and the preservation of cultural heritage in the face of climate risks. • Develop a national marketing campaign promoting Egypt as a climate-resilient eco-tourism destination, highlighting its conservation efforts, sustainable practices, and climate adaptation measures. • Consider the development of Climate-Resilient Tourism Awards and Recognitions for tourism facilities and operators that demonstrate outstanding climate resilience and sustainability practices. • Establish a climate-resilient tourism certification program that rates and certifies tourism facilities and operators based on their climate adaptation and mitigation efforts. This can help tourists make informed choices. • Promote climate-resilient transportation options for tourists, such as electric or hybrid vehicles, public transit, and bicycle-sharing programs. • Develop, scale, and maintain early warning systems for extreme weather events, such as storms and tsunamis, to ensure the safety of tourists and local communities in coastal areas. • Strengthen the research on blue carbon and ecological and socio-economic impact of climate change.

Intervention Four: Utilizing Eco-Tourism for Community Empowerment and Heritage Preservation

Mapped Institutional Challenges	Limited Resources and Funding
	<ul style="list-style-type: none"> • Limited availability of funds and international assistance dedicated to support the cultural and social dimension with the promotion of coastal and marine eco-tourism. • Limited financial resources for community-led initiatives, including those focused on cultural preservation, capacity building, and sustainable livelihoods. • Existing funded initiatives and projects that support the sector are often limited to the environmental and or economic aspects of coastal and marine tourism. • Limited number of initiatives and projects that target community development and heritage preservation within the sector or in relation to marine and biodiversity preservation or through a focus on climate change. • Limited accessibility to markets, limited marketing capabilities, and a lack of linkages to tourism markets may hamper local businesses' ability to thrive in the sector. • The costs associated with regulatory compliance, such as permits, licenses, and inspections, can be burdensome for small-scale eco-tourism enterprises.
	Limited Policy Support and Capacity Building
	<ul style="list-style-type: none"> • Missing entrepreneurial and business skills, such as marketing, financial management, and business development, are crucial for the success of community-led eco-tourism ventures. • Lack of community development strategies and action plans that provide roadmaps of policies, incentives and possible activities that can be undertaken by decision makers and responsible authorities within the sector. • Need for integrating community and cultural considerations in policy development within the sector. • The need for training and capacity-building programs for community members may limit their ability to actively participate in and benefit from eco-tourism ventures. • Limited existing institutional platforms and civil society participation in support and aid local communities to benefit from eco-tourism practices. • Language barriers and communication challenges with tourists can hinder effective engagement and cultural exchange.

Suggested Actions	Policy and Regulations
	<ul style="list-style-type: none"> • Develop and enforce policies for the preservation and protection of cultural heritage sites and practices within eco-tourism areas. • Create policies to help local businesses access wider markets, both domestically and internationally. • Offer incentives and support for the development of small businesses, start-ups, and micro-entrepreneurs within the tourism sector. • Develop policies to promote and market locally made products, including handicrafts, traditional cuisine, and souvenirs. • Develop job creation initiatives for locals engaged in unsustainable practices such as overfishing or overuse of natural marine sites through the creation of other business niches and streams that can support the local communities.
	Support and Capacity Building
	<ul style="list-style-type: none"> • Establish training programs to enhance the skills of local community members in areas such as hospitality, guiding, and sustainable resource management. This can include the creation of special certificates or skills development schemes for local communities. • Support programs that train community members in heritage interpretation and storytelling to enhance the visitor experience. • Promote cultural exchange programs that facilitate interactions between tourists and local communities, fostering mutual understanding and respect. • Establish tourism training centers to provide skills in guiding, hospitality, and language proficiency. • Establish a certification system for local guides, ensuring they meet specific quality and sustainability standards. • Support initiatives for the documentation and digitization of cultural heritage materials, including archives, artifacts, and oral traditions. • Develop co-management programs to educate local communities on marine ecosystems and how to preserve these ecosystems as a source of precious assets and livelihood by coaching them to participate in the process of conservation. • Educate local communities on the hazardousness of single plastic on marine and natural ecosystems and its effect on their livelihoods to accelerate the single use plastic banning in the Red Sea and enforce issued related regulations. • Offer grants to community artists and cultural practitioners for creating and showcasing their work to visitors, strengthening cultural identity and economic opportunities.
	Specialized Initiatives
	<ul style="list-style-type: none"> • Create an initiative that supports the scaling of the production capabilities of local business to ensure the availability of larger quantities of existing handicrafts and other relevant local products to ensure pricing is more accessible to tourists and create a thriving handicrafts market through increased and stable production. • Scale and develop new initiatives and projects based on the existing efforts of the Ministry of Environment to support the training and development of local eco-guides and also other work on developing and training tourist guides to train them in storytelling and understating eco-tourism practices unique to their areas of living and work (based on related work done in Fayoum and Wadi El-Gimal). • Promote and support traditional events, festivals, and ceremonies to celebrate and preserve cultural heritage. • Establish a comprehensive training program to empower local residents as certified eco-guides. These eco-guides will lead guided tours, imparting ecological knowledge and emphasizing conservation practices to visitors. By providing local communities with new employment opportunities and fostering eco-conscious tourism, this project aims to reduce environmental impacts and increase community engagement. • Establish programs where artists, musicians, and craftsmen from the community reside in eco-tourism sites, interacting with tourists and creating art inspired by the surroundings. • Establish a certification system for locally produced goods and crafts, giving consumers confidence in their authenticity and quality. • Consider the development of handicraft outlets and markets within large coastal cities and consider the development of safari excursions for tourists to learn handicrafts. • Create cultural villages or centres that showcase the rich traditions and history of the Red Sea region. These facilities will host cultural workshops, traditional performances, and interactive exhibits. The goal is to diversify the income sources for local communities, minimize reliance on overfished resources, and promote Red Sea's cultural heritage as a key attraction. • Consider scaling existing efforts to support local communities by replicating projects and finding appropriate funds for implementation especially for fishermen and their communities that need to shift focus from overfishing practices for income generation to provide them with new skills and job opportunities away from unsustainable fishing.

	<ul style="list-style-type: none">• Provide financial literacy training and access to microfinance opportunities for community members to support entrepreneurship.• To support sustainable fishing practices and protect the interests of local Bedouin communities in Dahab, Nabq protected area, and Nuweiba, it is strongly advised that designated fishing and no-fishing zones within these regions be clearly delineated. This should include the production of maps with precise GPS coordinates and distinct color-coded zones to ensure proper demarcation.• Promote and facilitate the creation of cooperatives within local communities to pool resources, share responsibilities, and collectively manage eco-tourism initiatives. And offer financial and technical support for the creation and development of cooperative enterprises within eco-tourism, such as cooperatively run eco-lodges, tour services, and artisan collectives.• Encourage the tourism industrial sector (the most beneficiary sector from reducing fishing potential) to be part of a program to employ fishermen in tourism and provide them jobs as alternative income.• Introduce green farming for marine commercial organisms, fishermen community-based farming (such as the clams <i>Tridacna</i> and sea cucumber). Support fishermen to be part of a program on livelihood from the environment.• Consider projects for organic agriculture and growing of certain flowers in the Red Sea area using treated wastewater and urban farming to support local communities and diversify their income streams away from only seasonal tourism.
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Annex

- **Specialized experts to support data collection and analysis:**

They played an integral role in providing valuable insights and offering recommendations to ensure that the document accurately reflected the status of coastal and marine tourism in Egypt. Below is a list of the experts:

- Mr. Ayman Taher, Eco-Tourism Expert.
- Dr. Mahmoud Hanafy, Professor of Marine Ecology, Suez Canal University, the Red Sea Governor's Scientific Advisor & HEPCA's Scientific Advisor.
- Dr. Mostafa Fouda, Minister's Adviser on Biodiversity and the National Focal Point for Convention on Biological Diversity (CBD), Ministry of Environment.

- **Below is a list of all interviews conducted to support the development of the roadmap:**

1. Interview with Dr. Hossam Abdel Karim, Head of Egyptian National Blue Economy Workgroup & Deputy Director of Planning, Research and Studies Department, Suez Canal Authority, 31st of July 2023.
2. Interview with Mr. Amr Sedki, Tourism Expert and Former Head of Tourism Committee in the Egyptian Parliament, 31st of July 2023.
3. Interview with Mr. Ayman Taher, Eco-Tourism Expert, 31st of July 2023.
4. First Consultation Meeting with the Ministry of Environment team on the 1st of August 2023, including:
 - o Dr. Yousria Hamed, Ministry of Environment Nature Conservation Sector and UNDP Project Manager, Environmental Programme for Egyptian Italian Cooperation.
 - o Dr. Heba Sharawy, Head of Loans & Grants Follow-up Unit & SCP/RAC & SwitchMed Focal point, Ministry of Environment.
 - o Shaimaa Abbas, Environmental Researcher, Ministry of Environment.
 - o Dr. Hoda Omar, Minister's Assistant for Eco-Tourism, Ministry of Environment.
 - o Dr. Mohamed Elewa, Sharm El Sheikh Green City Project Manager, Ministry of Environment – UNDP.
5. Interview with Dr. Mostafa Fouda, Senior Biodiversity Expert and Former Head of the Nature Conservation Sector at the Ministry of Environment, 6th of August 2023.
6. Interview with Ms. Hala El Khateeb, Executive Director of the Egyptian Tourism Federation, 9th of August 2023.
7. Second Consultation Meeting with the Egyptian Tourism Authority and Tourism Development Authority on the 10th of August 2023:
 - o Mr. Ayman Taher, Eco-Tourism Expert.
 - o Dr. Heba Sharawy, Head of Loans & Grants Follow-up Unit & SCP/RAC & SwitchMed Focal point, Ministry of Environment.
 - o Dr. Mohamed El Sherbeiny, Director for Nordics & Baltic, Egyptian Tourism Authority.
 - o Eng. Mohamed Abouel Seoud, Environmental Planning Admin Manager, Tourism Development Authority.
 - o Dr. Mohamed Rashad, General Manager, Environment Department, Tourism Development Authority.
8. Interview with the Ministry of Environment, on the 16th of August 2023, including:
 - o Mr. Mohamed Meatemed, Assistant Minister for Planning, Investment & Institutional Support, Ministry of Environment.
 - o Dr. Mohamed Salem, Head of Nature Conservation Sector, Ministry of Environment.

9. Interview with Dr. Ayman Afifi, Former Chief Ranger/Manager, Red Sea Marine Protectorates, Ministry of Environment, Environmental & Marine Expert and Consultant for the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden PERSGA, 7th of September 2023.
10. Interview with Dr. Mahmoud Hanafy, Professor of Marine Ecology, Suez Canal University, the Red Sea Governor's Scientific Advisor & HEPCA's Scientific Advisor, 17th of September 2023.
11. Interview with Ms. Lina Shalita, Sustainable Tourism Expert and Ms. Doaa El Dagher, Training Manager, the Chamber of Diving and Water Sports (CDWS), 18th of September 2023.
12. Interview with Mr. Ahmed Khaled, Manager of the Green Stars Eco Label Project, 19th of September 2023.
13. Third Consultation Meeting with different stakeholders on the 3rd of December 2023, including:
 - o Dr. Nashwa Talaat, Advisor to the Minister of Tourism, Ministry of Tourism.
 - o Dr. Hoda ElShawadfy, Minister's Assistant for Eco-Tourism, Ministry of Environment.
 - o Dr. Heba Sharawy, Head of Loans & Grants Follow-up Unit & SCP/RAC & SwitchMed Focal point, Ministry of Environment.
 - o Dr. Shaimaa Abbas, Environmental Researcher, Ministry of Environment.
 - o Dr. Noha Samy, Nature Conservation Department Manager, Ministry of Environment.
 - o Mr. Ahmed Khaled, Manager of the Green Stars Eco Label Project.
 - o Dr. Mahmoud Hanafy, Professor of Marine Ecology, Suez Canal University, the Red Sea Governor's Scientific Advisor & HEPCA's Scientific Advisor.
 - o Ms. Lina Shalita, Sustainable Tourism Expert.
 - o Mr. Ayman Taher, Eco-Tourism Expert.
 - o Dr. Mohamed El Sherbeiny, Director for Nordics & Baltic, Egyptian Tourism Authority.
 - o Dr. Ayman Afifi, Former Chief Ranger/Manager, Red Sea Marine Protectorates, Ministry of Environment, Environmental & Marine Expert and Consultant for the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden PERSGA.
 - o Eng. Mohamed Abouel Seoud, Environmental Planning Admin Manager, Tourism Development Authority.
 - o Eng. Hanan ElHadary, Senior Environment Specialist, World Bank.

