



# Case Study: The Role of SAI Egypt in Auditing the Egyptian Government efforts to protect the Marine Environment

ASA  
SAI - EGYPT



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## Overview

The marine environment is an essential part of the global ecosystem, seas and oceans cover more than 70% of the Earth's surface. They play a vital role in regulating the climate, supporting biodiversity, and providing food and economic resources for humans. However, this environment faces serious challenges due to marine pollution, which has become a direct threat to marine life, human health, and the sustainability of natural resources.

Goal 14 of the Sustainable Development Goals emphasizes the need to conserve and sustainably use the world's oceans and marine resources and sets targets for reducing marine pollution, restoring depleted fish stocks, establishing marine protected areas, and the need to transition from resource extraction and depletion to a circular and inclusive economic model as a global strategic alternative for a better life for us and for future generations, and to launch practical solutions for the sustainable framework of the blue economy



## Introduction

Driven by this awareness, the Egyptian state is making continuous efforts to protect its marine environment through the enactment of laws, the establishment of natural reserves, and cooperation with international organizations, in addition to awareness campaigns and community engagement.

In this context, The Egyptian Supreme Audit Institution ( ASA ) conducts its full Auditing role over national projects implemented by the government with applying various forms of audit—financial audit, compliance audit, performance audit—as well as environmental audit, to ensure efficiency and transparency in the implementation of projects aimed at preserving the marine environment.



## First : The Importance of Marine Environment in Egypt

### **The Economic Importance of the Marine Environment:**

It is evident through its significant contribution to various sectors, most notably marine fishing and tourism. Thousands of fishermen rely on the sea as a source of livelihood. Egypt's beaches are also considered global tourist destinations, especially in cities like Sharm El-Sheikh and Hurghada, which are known for their rare coral reefs and rich marine life. These resources attract millions of visitors annually, contributing to national income and creating job opportunities

### **The Environmental Importance of the Marine Environment:**

This includes regulating the climate, improving air quality, and absorbing carbon, in addition to being home to a vast number of marine organisms, some of which are rare or endangered. This biodiversity plays a crucial role in maintaining the balance of the ecosystem.

### **The Strategic Importance:**

This lies in transportation and trade, as Egypt's strategic geographical location includes the Suez Canal, one of the most important waterways in the world. The canal is a vital artery for global trade, with a large proportion of commercial shipping between Europe and Asia passing through it, enhancing Egypt's economic and political standing on the global stage.

## Second: The Legislative Framework Governing Marine Environment Protection in Egypt

### - International and Regional Agreements:

Egypt is a party to a number of international agreements aimed at protecting the marine environment, the most important of which are:

- The Barcelona Convention (1976): for the Protection of the Mediterranean Sea Against Pollution. Its main goal is "to reduce pollution in the Mediterranean Sea, protect and improve the marine environment in the region, and contribute to its sustainable development."
- The Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment – Jeddah convention (1982)
- Protocol Concerning Specially Protected Areas in the Mediterranean – Barcelona (1982)
- The United Nations Convention on the Law of the Sea (UNCLOS): which regulates rights and responsibilities related to the use of seas and oceans 1982.
- The Cartagena Protocol on Biosafety (2003)

### . National Laws Regulating Marine Environment Protection

- Environmental Law No. 4 of 1994, amended by Law No. 9 of 2009.
- Law No. 146 of 2021 concerning the Protection and Development of Lakes and Fish Resources, which aims to set regulations for protecting water resources and marine life.
- Law No. 102 on the Protection of Natural Reserves and Ecological Systems

### The Egyptian Constitution of 2014 in

#### Article (46) states: -

“Every person has the right to a sound and healthy environment; protecting it is a national duty. The state shall take the necessary measures to preserve it, avoid harming it, and ensure the rational use of natural resources to achieve sustainable development and safeguard the rights of future generations



### Third: The Strategy for the Development and Management of Water Resources until 2050 and the Main Features of the National Action Plan for the Protection of the Marine Environment and the Reduction of Marine Pollution.

Egypt has adopted a serious policy to protect the marine environment and reduce pollution, as reflected in Egypt's Strategy for the Development and Management of Water Resources until 2050, as follows:



#### Pollution Reduction Policies

These policies rely on the collaboration of several ministries—such as Agriculture, Industry, Environment, and Health among others, in addition to citizen behavior. Effective implementation requires full coordination between the relevant ministries, all related entities to eliminate the main sources of pollution, most notably : industrial discharge, domestic sewage, agricultural runoff, and solid waste.

## **Some of the Key Features of the National Action Plan for the Protection of the Marine Environment and the Reduction of Marine Pollution are as follows:**

- **Implementing integrated management systems for marine environment protection.**
- **Increasing the number of waste reception facilities for tourist vessels, along with enhancing oversight and monitoring of these vessels.**
- **Developing an immediate response system for emergency incidents in navigational waterways across all locations, tailored to different types of pollutants.**
- **Enforcing the “Polluter Pays Principle,” requiring polluters to bear the cost of pollution.**
- **Strengthening penalties for factories that discharge liquid or solid waste into waterways, ensuring the penalties are proportionate to the severity and environmental impact of the pollution.**
- **Utilizing modern technology for the safe treatment and recycling of waste to reduce pollution from industrial discharges.**
- **Relocating industries away from cities near water bodies to newly developed urban areas.**
- **Enhancing the efficiency of continuous monitoring systems and improving methods for effective and permanent environmental monitoring of industrial facilities.**
- **Ensuring the safe treatment and disposal of industrial wastewater.**
- **Developing human resources through the provision of technical expertise and capacity building.**
- **Establishing an effective national program to raise environmental awareness and educate the public on the risks of pollution to public health and the environment.**

### **A mechanism for monitoring and evaluating water-related policies, strategies, and plans.**

- **Developing measurable, time-bound general performance indicators linked to inputs, outputs, and objectives.**
- **Conducting periodic reviews to assess progress and identify opportunities for improvement.**
- **Sharing success stories, best practices, and lessons learned from various case studies.**
- **Encouraging community participation in the monitoring and oversight of the implementation of relevant plans.**

## **Forth :The Egyptian Governmental Efforts to Reduce Marine Pollution and Protect the Marine Environment**



**The Egyptian government is implementing several projects and taking measures aimed at reducing marine pollution and protecting the marine environment, as follows:**

### **Pollution Control and Prevention**

- Establishing coastal water quality monitoring stations and implementing a monitoring program through the Egyptian Ministry of Environment.
- Periodic inspection campaigns of coastal tourism and industrial facilities to ensure their compliance with environmental standards.

### **Confronting the effects of climate change.**

- Long-term monitoring of marine environmental changes and activating early warning systems to address extreme weather events.
- Confronting erosion and mitigating the effects of sea level rise on shorelines.

### **Marine Nature Reserves**

- Establishing several marine reserves, such as Ras Mohammed Reserve and the Northern Red Sea Islands, to protect coral reefs.

### **Sustainable Development Projects:**

- Expanding eco-tourism projects that take into account the preservation of the marine environment.
- Supporting coral reef rehabilitation projects affected by climate change or human activities.

### **Environmental Awareness and Education:**

- Organizing awareness campaigns for citizens and tourists on the importance of preserving the marine environment.
- Integrating environmental protection concepts into school curricula and media programs.

- **International Community Engagement:**

- **Cooperation with international organizations such as the United Nations Environment Program (UNEP) and the Global Environment Facility (GEF).**
- **Implementing internationally funded projects to protect coastal areas and address climate change and sea-level rise.**
- **Egypt's participation in the Medium-Term Strategy of the Mediterranean Fisheries Agency to support small-scale fisheries.**
- **Egypt's readiness to host the 24th Conference of the Parties to the Barcelona Convention for the Protection of the Mediterranean Sea from Pollution, scheduled for December 2025 at Egypt.**

- **Updating and developing marine environment legislation in accordance with environmental developments**

- **Amending legislation related to illegal fishing and issuing Law No. 146 of 2021 for the Protection and Development of Lakes and Fisheries**
- **Protecting the rights of small-scale fisheries**
- **Ministerial Decree No. 447 of 2012 prohibits trawlers from fishing within three miles of the shore.**
- **The Prime Minister's announcement in October 2024 that the Great Barrier Reef in Egypt will be declared a natural reserve, representing a coral reef area in the Red Sea.**

## Fifth :The Challenges Facing the Egyptian Government

- **Climate Change**
- **Marine and coastal pollution**
- **Urban encroachment on the coastal environment**
- **Overfishing and Biodiversity degradation**
- **Lack of funds and technical resources**



- **Climate Change**
- **Sea Level Rise threatens Low-lying Areas Like the Nile Delta with Submergence and the Loss of Agricultural and Residential Land**
- **Increasing Storm Severity, Leading to Coastal Erosion and Damage to Coastal Infrastructure**
- **Marine and Coastal Pollution**
- **Discharge of Industrial Waste and Sewage into the Sea without adequate treatment**
- **Plastic waste from tourism and maritime activities.**
- **Oil spills from ships, which affect marine life and coral reefs.**
- **Urban Encroachment on the Coastal Environment**
- **Unplanned urban expansion along beaches leads to the destruction of coastal ecosystems.**
- **Overfishing and Biodiversity Degradation**
- **Unsustainable fishing practices are depleting fish stocks and destroying marine habitats such as coral reefs and seagrass beds.**

## **Sixth: A Case Study on the role of the SAI Egypt in auditing the Egyptian government's measures to reduce marine pollution and protect the marine environment**



The Audit process, conducted by SAI team members, aims to assess the integration of sustainable development goals, utilizing the evaluation results in the state's future plans. It encourages and guides the government to find appropriate solutions to ensure the optimal implementation of the 2030 Agenda by performing financial, performance, and compliance audits. Additionally, it provides information to governments and stakeholders for their benefit and to support effective implementation.

An underwater scene featuring a vibrant blue background. In the foreground, there are various types of coral, including branching and staghorn corals. Several fish are visible, including a prominent striped fish in the center and smaller fish in the background. The lighting is bright, creating a clear view of the marine life.

**We will now review one of the case studies of the monitoring of the measures and actions taken by the Egyptian government to reduce marine pollution and protect the marine environment for the fiscal year 2022/2023.**

## **Audit methodology**

**An audit process model has been designed in accordance with INTOSAI audit standards and ISAM standards so that this model achieves the objective of the audit process.**

## Audit objectives

The audit process aims to achieve a set of objectives, the most important of which are:

- Verifying compliance with the laws and regulations governing this matter and adhering to the timetable.
- Monitoring all procedures within the entities subject to audit and ensuring their compliance with environmental standards in accordance with applicable laws and legislation.
- Ensuring compliance with spending on necessary measures to mitigate negative environmental impacts, auditing the integrity and safety of actions, and studying and analyzing potential cost overruns.
- Determining the efficiency of performance and the ability of the auditees to implement plans and programs designed to address pollution problems and various challenges facing the marine environment.
- Monitoring environmental legislation and its amendments and adhering to their implementation.
- Contributing to achieving effective audit on activities undertaken in this regard and evaluating performance by providing information to beneficiaries.
- Evaluating the policies, programs, practices, and systems established by the auditee to preserve the environment.

## **Audit Plan**

The audit process conducted by the ASA's working group to implement the audit mission included several specific elements, as follows:

1. Identifying information and documents related to standards, objectives, international agreements, and audit objectives.
2. Identifying the selected audit criteria and indicators.
3. Determining the time-frame and working group for implementing the audit mission.
4. Determining the methods and procedures used by the working group to collect and analyze the specified data and information.
5. Identifying projects and companies with environmental impact on the marine environment.



## Audit Results

### Observations related to the environmental impact include:

#### First: Marine pollution resulting from industrial wastewater from some petroleum companies:

- Pollution of the Gulf of Suez water resulting from industrial wastewater from some petroleum companies. These wastewater contain phenol and chemically consumed oxygen, which violate the standards set forth in Environmental Law No. 4 of 1994, as amended by Law No. 9 of 2009, and negatively impact the marine environment.
- The presence of pollutants of unknown origin from some petroleum companies has led to lawsuits being filed against these companies by the Environmental Affairs Agency due to their failure to comply with environmental standards. This has led to increased marine pollution rates at some ports, exceeding permissible levels.

#### Second: Marine pollution resulting from industrial wastewater from some textile companies:

- Water pollution resulting from industrial wastewater from some companies' dyeing units and the lack of sewage treatment plants.
- Water pollution and blockage of some canals and drains due to the dumping of construction waste.
- Water pollution resulting from industrial wastewater containing nitrates and ammonia from some fertilizer and chemical companies.
- Water pollution is caused by the effluents of production waste and the leakage of chemicals from operating processes into sewage networks, leading to their deterioration. This is common in some pharmaceutical and chemical companies.
- The lack of a safe system for disposing of chemical waste from experiments conducted at some universities is often directly discharged into public sewage networks without treatment, posing a risk to sewage networks and public health.



## Audit Results

### Observations related to environmental management:

The auditees failed to adhere to established environmental management systems. This audit examined the applicable environmental policies and their environmental regulations, in accordance with international laws, obligations, and environmental indicators, as follows:

#### First, increased rates of marine pollution due to failure to comply with necessary environmental requirements.

- Some ports were not equipped with the necessary equipment, such as floating units and launches, to combat solid waste, oily sediments, and oily mixtures from ships docked at the port. This contravenes the standards and requirements stipulated in the Egyptian Environmental Law, which requires all ports to be equipped with the necessary and sufficient containers and vessels to contain waste, with the aim of preserving the environment. This has led to increased rates of marine pollution.
- Water pollution continues due to the failure of some textile companies to comply with environmental law requirements regarding the discharge of factory waste from dyeing and finishing operations.

#### Second, encroachments on the Mediterranean coast without obtaining the necessary licenses:

- Several violations were reported on the Mediterranean beaches, including the establishment of restaurants, swimming pools, artificial lakes, and changing rooms without obtaining approval from the Supreme Licensing Committee. A report was prepared to establish the situation, and removal orders were issued.

## ASA's Recommendation

- The government, represented by the Ministry of Environment, should support companies in implementing their environmental projects through technical and financial support and organize training courses for their employees.
- Adhere to approved implementation programs for ongoing environmental projects and overcome obstacles facing these projects.
- Collect fines and compensation imposed on facilities that violate the Environmental Law and enforce the penalties stipulated therein.
- Provide the necessary protection and occupational health and safety requirements for workers and visitors to facilities.
- Adhere to environmental requirements and standards prior to construction, expansion, or renovation.
- Support coastal ports on the Mediterranean and Red Seas with pollution control and monitoring units, while ensuring the replacement and renewal of laboratories and the activation of the oversight role of those responsible for the management of aquatic environment protection within coastal ports to reduce coastal pollution.
- Provide technical and financial support and capacity building to move towards green financing and address the problem of plastic waste on Egyptian beaches.
- Preserve biodiversity and environmental balance in light of population expansion and human activities.



## **Feedback and follow-up**

- **Most of the ASA's recommendations have been met, particularly in the areas of monitoring the elimination of violations or encroachments, collecting fines, and monitoring project implementation according to established timelines.**
- **Some factories have been monitored for conducting environmental impact assessments for new activities, and the availability of the necessary financial allocations for implementation.**
- **Factories that delayed implementation were warned to withdraw their work, and legal action was taken against companies that failed to meet the established implementation schedule.**



## References

- **Ministry of Environment Website**
- **Environmental Affairs Agency Website**
- **Cabinet of the Council of Ministers - Lakes and Fish Resources Protection and Development Agency 2022**
- **Water Resources Development and Management Strategy until 2050**
- **National Statistical Report on Monitoring Indicators of the 2030 Sustainable Development Goals in Egypt - Central Agency for Public Mobilization and Statistics - 2023 Edition**
- **Accountability State Authority Annual Report on the Results of Financial Audit and Evaluation of Environmental Activities Performance for the Fiscal Year 2022/2023**

An underwater scene featuring a vibrant coral reef. The background is a deep blue gradient. In the foreground, there are various types of coral, including branching and staghorn corals, rendered in shades of light blue and cyan. Several small, striped fish are visible swimming in the water. The overall atmosphere is serene and natural.

# THANK YOU