



**Part I: Project Information**

**GEF ID**

10905

**Project Type**

MSP

**Type of Trust Fund**

GET

**CBIT/NGI**

CBIT No

NGI No

**Project Title**

Supporting the Operation and Effective Performance Management of the Aqaba Marine Reserve, Jordan

**Countries**

Jordan

**Agency(ies)**

IUCN

**Other Executing Partner(s)**

The Royal Marine Conservation Society of Jordan JREDS

**Executing Partner Type**

CSO

**GEF Focal Area**

Biodiversity

**Sector**

**Taxonomy**

United Nations Framework Convention on Climate Change, Climate Change, Mainstreaming, Species, Focal Areas, Biodiversity, Threatened Species, Biomes, Coral Reefs, Sea Grasses, Tourism, Fisheries, Protected

Areas and Landscapes, Coastal and Marine Protected Areas, Productive Seascapes, International Waters, Seagrasses, Marine Protected Area, Chemicals and Waste, Eco-Efficiency, Climate Change Mitigation, Energy Efficiency, Renewable Energy, Enabling Activities, Climate Change Adaptation, Ecosystem-based Adaptation, Private sector, Climate resilience, Mainstreaming adaptation, Sea-level rise, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Convene multi-stakeholder alliances, Stakeholders, Local Communities, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Type of Engagement, Consultation, Partnership, Participation, Information Dissemination, Communications, Public Campaigns, Education, Awareness Raising, Private Sector, Individuals/Entrepreneurs, SMEs, Beneficiaries, Gender Equality, Gender results areas, Capacity Development, Access to benefits and services, Knowledge Generation and Exchange, Participation and leadership, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Women groups, Integrated Programs, Sustainable Cities, Municipal waste management, Energy efficiency, Urban Resilience, Capacity, Knowledge and Research, Learning, Indicators to measure change, Adaptive management, Knowledge Generation, Knowledge Exchange, Targeted Research, Innovation

**Rio Markers**

**Climate Change Mitigation**

Significant Objective 1

**Climate Change Adaptation**

Significant Objective 1

**Biodiversity**

**Land Degradation**

**Submission Date**

12/17/2021

**Expected Implementation Start**

7/2/2023

**Expected Completion Date**

7/1/2025

**Duration**

24in Months

**Agency Fee(\$)**

59,677.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

<b>Objectives/Programs</b>	<b>Focal Area Outcomes</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
BD-2-7	Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	GET	663,073.00	5,500,000.00
<b>Total Project Cost(\$)</b>			<b>663,073.00</b>	<b>5,500,000.00</b>

## **B. Project description summary**

### **Project Objective**

To enhance and strengthen the management effectiveness, equity and operational capabilities of Aqaba Marine Reserve (AMR) through capacity building and participatory approaches.

<b>Project Component</b>	<b>Financing Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>GEF Project Financing( \$)</b>	<b>Confirmed Co- Financing( \$)</b>
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Strengthen management effectiveness, equity and operational capabilities of Aqaba Marine Reserve (AMR)	Technical Assistance	<p>1.1 A MR delivers ongoing successful conservation of its biodiversity and ecosystem service values through improved governance, capacity for effective operational management for conservation and nature-based tourism, sufficient equipment and sustained financing.</p> <p>1.2. Participatory approaches to equitable governance and effective management have strengthened the management effectiveness</p>	<p>1.1.1 AMR Roadmap prepared to guide direction for the effective and efficient delivery of the AMR Management Plan (2021-2026).</p> <p>1.1.2 A Management Effectiveness System is designed to help AMR staff to comply with agreed Key Performance Indicators (KPIs) and for ASEZA to adhere with 6 monthly reporting procedures and protocols.</p> <p>1.1.3 Production of an Operational and Implementation Manual to support the effective delivery of Activity 1.1.2.</p> <p>1.1.4 Undertake practical and targeted studies to support the adoption of</p>	GET	602,794.00	5,200,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
		s and improved equity of the AMR and reduced unsustainable resource use	international standards that will improve efficiency and effectiveness levels of the AMR.			
			1.1.5 Preparation of a capacity development programme manual that is targeted at the effective implementation of the AMR Management Plan (2021-2026)			
			1.1.6 Establish and implement a Monitoring Programme to support the AMR Management Plan (2021-2026) values.			
			1.1.7 Purchasing and installing equipment needs for AMR ranger boats			
			1.1.8 Deliver a Training Programme (implementing Output 1.1.5)			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
			1.2.1 Design of a participatory marine habitat rehabilitation programme that embraces Nature based Solution (NbS) intervention measures.			
			1.2.2 Review, update or develop, in a participatory manner, a series of Terms of Reference (ToR) for core activities to be funded to support AMR Management Plan implementation.			
			1.2.3 Develop a Collaborative Learning Strategy with a relevant internationally nominated marine reserve (e.g.: Ras Mohammed, Egypt) to help			



Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
			<p>adopt key lessons learned to better improve regional knowledge exchange on important approaches, systems, tools, and standards</p>			
			<p>1.2.4. Create a participatory communication, outreach and awareness programme for improving livelihoods of the communities associated with the AMR plus to support AMR staff to better engage with local communities, visitors, the private sector and decision makers on matters relating to sustainable land and sea use practices taking place within the AMR</p>			
<b>Sub Total (\$)</b>					<b>602,794.00</b>	<b>5,200,000.00</b>

**Project Management Cost (PMC)**

GET	60,279.00	300,000.00
<b>Sub Total(\$)</b>	<b>60,279.00</b>	<b>300,000.00</b>
<b>Total Project Cost(\$)</b>	<b>663,073.00</b>	<b>5,500,000.00</b>

**Please provide justification**

**C. Sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	Government of Jordan	In-kind	Recurrent expenditures	5,500,000.00
<b>Total Co-Financing(\$)</b>				<b>5,500,000.00</b>

**Describe how any "Investment Mobilized" was identified**

THE MEDITERRANEAN FORUM FOR APPLIED ECOSYSTEM-BASED MANAGEMENT MED4EBM IS AN IMPORTANT PROJECT THAT IS CURRENTLY IMPLEMENTED IN AQABA TO TACKLE THE ISSUE OF INTEGRATED COASTAL ZONE MANAGEMENT. THE PROJECT CONTRIBUTES BY ASSISTING ICZM ACTORS IN FOUR COASTAL AREAS OF JORDAN, ITALY, LEBANON AND TUNISIA TO JOINTLY DEVELOP AND APPLY A COMMON METHODOLOGY TO MAKE ECOSYSTEM-BASED ICZM MUCH EASIER TO DESIGN AND IMPLEMENT BY APPLYING INNOVATIVE TECHNIQUES AND METHODS. A SOFTWARE TOOL IS DEVELOPED TO HELP INSTITUTIONAL ACTORS TO BETTER HANDLE THE COMPLEX MULTI-STAKEHOLDERS ANALYTICAL PROCESSES THAT CHARACTERIZE EBM APPLICATIONS AND ASSESS THE RELATIONSHIPS BETWEEN ECOSYSTEM COMPONENTS, FUNCTIONS AND SERVICES, AS WELL AS THE ASSOCIATED HUMAN ACTIVITIES. MOREOVER, THE PROJECT WILL PROVIDE GOVERNMENT OFFICIALS AND MANAGERS WITH THE NECESSARY TOOLS, SKILLS AND COMPETENCES TO DEVELOP AND IMPLEMENT ECOSYSTEM APPROACHES TO THE MANAGEMENT OF ACTIVITIES IN THE MARINE AND COASTAL ENVIRONMENTS, ESPECIALLY THROUGH EFFECTIVE AREA-BASED CONSERVATION

**D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
IUCN	GET	Jordan	Biodiversity	BD STAR Allocation	663,073	59,677	722,750.00
<b>Total Grant Resources(\$)</b>					<b>663,073.00</b>	<b>59,677.00</b>	<b>722,750.00</b>

**E. Non Grant Instrument**

NON-GRANT INSTRUMENT at CEO Endorsement

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

**F. Project Preparation Grant (PPG)**

PPG Required **true**

**PPG Amount (\$)**

25,000

**PPG Agency Fee (\$)**

2,250

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
IUCN	GET	Jordan	Biodiversity	BD STAR Allocation	25,000	2,250	<b>27,250.00</b>
<b>Total Project Costs(\$)</b>					<b>25,000.00</b>	<b>2,250.00</b>	<b>27,250.00</b>

## Core Indicators

### Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
280.00	280.00	0.00	0.00

#### Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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#### Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
280.00	280.00	0.00	0.00

Name of the Protected Area	WDP ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Aqaba Marine Protected Area		Protected Landscape/ Seascape	280.00	280.00			103.00		

**Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1000.00	5000.00	0.00	0.00

**Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,000.00	5,000.00		

**Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

**Indicator 4.4 Area of High Conservation Value or other forest loss avoided**



Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

**Indicator 4.5 Terrestrial OECMs supported**

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

**Documents (Please upload document(s) that justifies the HCVF)**

Title	Submitted

**Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5,000.00			

**Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations**

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Type/name of the third-party certification			

**Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia**

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

**Indicator 5.3 Marine OECMs supported**

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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**Indicator 11 People benefiting from GEF-financed investments**

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Female</b>	73,480	73,480		
<b>Male</b>	99,660	99,660		
<b>Total</b>	173140	173140	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The project will directly contribute to AICHI target 11, as it will contribute to enhancing the management equity and effectiveness of Jordan's recently established and only marine reserve. Mainstreaming global IUCN standards within the management planning cycle of the marine reserve will also align the project with the post 2020 Global Biodiversity Framework, which will continue to promote the IUCN Green List Standards as a voluntary measure of management quality for protected areas (as per CBD Decision 13/12). The project will also contribute to 'SDG 14. Life below water' which focuses on the sustainable use of seas and oceans and promoting the sustainable use of resources while conserving natural assets of the limited available sea area in Jordan through management tools such as zoning and buffer zones that are advocated within the Aqaba Sea Use Master Plan (2015) which was developed by the government with UNDP support. Please note that there currently exists no METT score for the Aqaba MPA, however, an equivalent score to the METT has been added to the indicator 2. This score was generated by staff who complete a separate World Bank annual MPA performance 'scorecard' tool on an annual basis. This Score Card is designed to 'Assess Progress in Achieving Management Effectiveness Goals for Marine Protected Areas' (2004). The score of 103 is an aggregated total of the following management effectiveness scoring (from 2022): 1. Part II (A: Context) = 24 2. Part II (B: Planning) = 11 3. Part II (C: Inputs) = 7 4. Part II (D: Process) = 20 5. Part II (E: Outputs) = 23 6. Part II (F: Outcomes) = 18

## Part II. Project Justification

### 1a. Project Description

#### Overview to the Location

The Jordanian shoreline falls within the Gulf of Aqaba (GoA) and extends to a maximum of 27km in length. This provides Jordan with the only access to the sea for activities such as ship transport, fishing (secondary importance), and industrial development.

Since Jordanian independence in 1948, tourism in Aqaba was small scale and limited to the Amman elites and the foreign visitors to the neighbouring attractions of Petra and Wadi Rum. Since then, the city has been transformed beyond recognition with over half of the buildings being post-1990. What was, for centuries, essentially a sleepy fishing village has undergone enormous transformations since the establishment of the low-tax, duty-free Special Economic Zone in 2001, attracting, mostly Arab nation investments of over 20 billion USD. The population growth rate of Aqaba 1994-2018 was 4.62% (i.e. doubling every 15 years) whereas, over the same time period, it declined in Jordan from around 4% to currently 1%. Now standing at around 200,000 inhabitants, Aqaba's population is expected to rapidly increase, possibly to over 300,000 by 2030.

Tourist numbers have been rapidly increasing e.g. from around 300,000 during the first half of 2017 to nearly 480,000 in the same time period of 2018. The tourism industry that is served by a number of hotels, an airport and ferry services to adjacent localities, which include the towns/resorts of Taba and Nuweiba. Along this coastal stretch includes the presence of 13 km of a discontinuous series of fringing reefs, which contains unique marine and coastal ecosystems, habitats and rich biodiversity composition. It is important to note that just over half of the tourists are foreigners, primarily European and that on average they spend almost 4 (3.7) nights in Aqaba (Benghadbane & Khries 2020).

#### Overview to the Biodiversity Value of the Location (see Annex D for additional information)

From a regional biodiversity perspective, the GoA is part of a separate biogeographic zone within the wider Red Sea, and is of global significance in having the northern-most latitude reefs in the Western Indo-Pacific. Aqaba reefs also lie within this Red Sea biogeographic zone which is designated as a World Wide Fund for Nature (WWF) 'Global 200 Eco-Region' on account of its unique marine biodiversity. Aqaba Marine Reserve (AMR) is the first marine protected area in Jordan with a total area of 2.8 Km<sup>2</sup>. The GoA is home to the most northerly hard corals of the Western Indo-Pacific biogeographic region to which it belongs. The Red Sea (the Bab-al-Mandab threshold at its southern limit has a depth of only 137 m), is relatively isolated from the Indian Ocean leading to high levels of endemism. With 16,000 km<sup>2</sup> of coral cover, the Red Sea is extremely important for this high biodiversity habitat. Within the Red Sea, the GoA, marked by a second threshold in the Strait of Tiran (-252m), is the area most isolated and the most divergent in its biota. Red Sea endemism is particularly significant for Echinoderms (17%), Crustaceans (15%), Fish (14.7%) and Scleractinian corals (10%).

The area is also critically important for the wider region as it is believed to serve as an important larvae export area and host important spawning sites for key fishery species. The Red Sea has some 1166 fish species (Bogorodsky & Randall 2019) of which the vast majority (1120) are shallow water species occurring at less than 200 m depth, and has the third highest rate of endemism globally (165 species, i.e. 14.7%) after Hawaii and Easter Island. A total of 507 species were recorded in Jordanian waters (Khazaf 2014), over 40% of the Red Sea total and most of the endemic species (22) restricted to the Gulf of Aqaba are closely associated with the coral reef habitat. Of note, fish assemblages in the GoA, where coral reefs are dominant, differ substantially from those in the neighbouring Gulf of Suez (shallower and sandier) and the rest of the Red Sea, which is characterized by higher turbidity because of less steep drop-offs. Indeed, the GoA, because of its rifting geology has mountains of around 1000 m around its edges and drops off to around 900 m depth (reaching around 1800 m in some places) over a very short distance, the maximum width of the GoA being 24 km. So even during lowered Sea Levels in the Pleistocene (-135m), there was no possibility for the development of coral reef assemblies offshore.

There is no continental shelf and thus the coral reefs are restricted to a very thin band, generally less than 300 m wide, along the predominantly rocky shorelines, a unique situation in comparison to other coral reef habitats globally that are often characterized by gentle slopes and reef flats of different ages related to changing sea levels. Thus the coral reefs of the GoA are, in general, easily accessible from the coast and not protected from shore-based activities such as beach tourism. Over 176 species of coral have been recorded in the Jordanian waters of the Gulf of Aqaba (Al-Tawaha et al 2019). The coral reefs of the GoA are thought to be sensitive to climate change as they occur in a semi-enclosed basin fed by surface water from the Red Sea resulting in a nutrient-poor, hyper-saline sea (> 40 ppt, Ocean average 35 ppt) with little or no stratification, high transparency and low primary production in the water column. So far, the reefs of the GoA have resisted well to the increase in Sea Surface Temperature (SST) but data from elsewhere (Great Barrier Reef, Maldives, Galapagos, etc.) have shown a very strong correlation between coral bleaching, i.e. the loss of its primary producing algae, and SST. The importance of conserving these unique reefs, representing only around 0.01% of Red Sea coral cover but with exceptional levels of endemism, especially in its fish, which constitute the main attraction for the underwater tourism industry, can hardly be overemphasized. The AMR boundary also encompasses an internationally-recognized as an Important Bird Area (IBA) for both resident and migratory birds.

Another important and sensitive, but rather less well documented habitat are the seagrass beds that are known to be vitally important nursery areas for many fish species. Fish assemblages in the Gulf of Aqaba, where coral reefs are dominant, differ substantially from those in the neighbouring Gulf of Suez (shallower and sandier) and the rest of the Red Sea. The GoA harbors more than 510 marine fish species. The rate of endemism is considered high and represents 13.7% of the total fish species recorded, with seven fish species recognized as endemic to the Gulf of Aqaba, including the endangered Indo-Pacific Humphead Wrasse (*Cheilinus undulates*) and the globally threatened Whale Shark (*Rhincodon typus*). (Jordan NBSAP).

Dense seagrass beds exist in the Tala Bay area and generally occur in between sections of coral reef. They are sensitive to bottom disturbance such as anchoring of boats. The occurrence of seagrass beds and sand beaches has regulated nutrient and sediment input into these reef complexes. Such habitats contain a high percentage of endemic species and diverse habitats that host significant populations of

globally-important and endangered species, including sharks, dolphins, napoleon wrasse, groupers and marine turtles. A total of four threatened species of marine turtles have been recorded: Green (Chelonia mydas), Loggerhead (Caretta caretta), Leatherback (Dermochelys coriacea) and Hawksbill (Eretmochelys imbricate) all of which are of global significance. Marine mammals include dugongs (Dugong dugon), observed in small numbers, as well as the Pantropical spotted dolphin (Stenella attenuate) and the Indo-Pacific bottlenose dolphin (Tursiops aduncus). More than 20% of molluscs and echinodermata as well as several species of algae may be endemic (Jordan NBSAP) Fifteen percent of amphipod species have only been recorded in the GoA and adjacent neighbouring Red Sea areas.

#### The Aqaba Marine Park (and now Reserve)

To this end, and by Royal Decree by H.M King Abdullah II bin Al Hussein on 8th December 2020, the existing Aqaba Marine Park (see Annex E for location maps) was included in the new Jordan National Protected Areas Network as a Marine Reserve designation, consolidating protection and management. The young institution and its partners developed the 5-year Aqaba Marine Reserve Management Plan, to be implemented over the time period 2022-2026 (AMRMP). In the light of the rapid developments in the area and the substantial direct pressures within its borders, the institution faces considerable challenges. This recently produced AMRMP (2021-2026) updates all previous plans produced for the AMP over the past decade or so. It differs from previous Management Plans produced because it rejects the paradigm of constant conflict between conservation and development and accepts that development in Aqaba is not possible without conservation and that effective conservation depends upon the development model being adopted by The Aqaba Special Economic Zone Authority (ASEZA). It is based on a shared vision:

*?Aqaba Marine Reserve is a model of effective planning and management that ensures that the unique ecological values and associated social and economic benefits are used sustainably for future generations through active stakeholder stewardship?.*

The achievement of this shared vision is based on general principles, which guide, orient, and prioritize decision-making by natural resource managers as well as all other actors involved in the management of the AMR.

Development of the AMRMP (2021-2026) began with the formation of a core work group composed of regional and national authorities, who provided significant contributions to the creation of a shared vision for the plan. It aims to optimize the management actions of ASEZA and to meet the current needs of the broader society, as well as respond to the environmental challenges of the AMR. It is needed to help protect the outstanding marine biodiversity on offer within the proposed boundary limits. In fact, the exceptional environmental conditions of the AMR provide for coral growth and reef development in the Gulf of Aqaba with numbers of coral species higher than many other locations nearby in the northern or the southern Red Sea.

This GEF-7 IUCN project therefore is designed to provide support to existing (and ongoing) projects to help improve the operational management effectiveness and equity of the AMR in addition to strengthening the capacity of the institution to face these challenges. The project shall also seek to enhance the awareness of marine biodiversity matters for local stakeholders (through targeted training)

in tandem with supporting current and future governance and management decision making processes. It shall address a range of parallel outcomes, namely:

- ? operationalizing key aspects of the AMRMP (2021-2026) through targeted capacity building and training programmes;
- ? supporting the implementation of a Management Effectiveness Assessment process for ongoing and future institutional monitoring, performance evaluation and surveillance systems;
- ? preparing and adhering to a bespoke AMR Operations and Procedures Manual for future implementation;
- ? initiating a ?Collaborative Learning Strategy? with an internationally established Marine Reserve to improve operational system and capacity support needs, that are based on lessons learned from established reserves in the region.

Finally, the project is specifically designed to target biodiversity conservation through improved management that can be included in the following GEF focal area (see Annex G for the GEF Project Taxonomy):

*BD-2-7 Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate*

**A1.1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description):**

With such a limited shoreline, all coastal activities in Jordan are concentrated within this stretch. As a result, it is subjected to considerable and conflicting marine resource use pressures. Such competing activities includes tourist (hotels, resorts, and tourism related activities), a variety of port developments, an industrial complex, a marine park and a Marine Science Station. This situation places all coastal habitats (including important coral reefs) under continuous direct and indirect pressures throughout the year because of the consistent monthly water temperatures that the Gulf experiences.

A series of ?problems? that face the AMR have been raised within the AMRMP (2021-2026). Further stakeholder engagement (February 2022) gathered as part of a specific Strengths, Weaknesses, Opportunities and Threats (SWOT) exercise highlighted these are additional threats that are facing the AMR. The following presents an amalgamated summary of these problems, root causes and barriers that need to be addressed.

*Problem 1: Population Growth, and the Associated Recreational and Tourism Growth*

The resident population is growing rapidly in Jordan generally and at Aqaba city specifically, and is associated with an exponential increase in number of visitors to Aqaba where a total of 423,000 locals have visited Aqaba out of 931,000 tourist recorded in 2019. The population increase is associated to a number of factors including (but not limited) to the increasing demands over the limited resources available, increase solid waste creation, increase infrastructure along the limited coastline and the demands for more job creation. In addition, Aqaba is considered the only maritime in Jordan, and a major touristic destination, which resemble intense visitation rates which will overburden the limited resources. Visitors to Aqaba enjoy water sports activities such as diving, which is considered a major industry at

Aqaba with the presence of around 30 diving centers established so far. More than 80% of the diving sites are located within the boundaries of the proposed AMR. Snorkeling/swimming and diving are considered the cause the most damage to marine biodiversity (see Annex A) within the proposed AMR. The North King Abdullah Reef is found to be the site that is most affected by these activities. Therefore, careful considerations to AMR carrying capacity is required.

#### Problem 2: Port Development

The development of new port facilities and the expansion of existing ports are expected to extensively damage coral reef integrity within the vicinity. The estimated area of hard corals affected by direct impact, based on ports relocation to the southern beach of Aqaba near the Saudi border, is 32,509 m<sup>2</sup>. In spite of this extensive damage, coral transplantation efforts have been conducted since 2012 where corals from the southern region of the coast have been transplanted onto damaged reefs in tandem with the introduction of a range of artificial structures) using a range of cement and metal structural units which have been constructed within the proposed AMR area. Regardless, it is expected that the damages anticipated from the port relocation on the AMR area will be minimal due to its proximal distance away from critically important sites as well as the contingency measures being applied by the port.

In spite of the above, two ports are still located close to the proposed AMR boundaries, namely the passenger port which is located at the northern edges of the proposed AMR, and the Aqaba Container Terminal (ACT) is situated northern of it. These collectively may create negative environmental effects especially of the impacts of any wastes created and disposed within GoA receiving waters. Positive indicators do exist including a suite of environmental rewards that ACT have recently been awarded for their environmental and social safeguarding credentials. Also, the proposed AMR management team should be able to build upon the Social Corporate Responsibilities program to help support the AMRs budget to help provide mitigation strategies to negate any potential environmental impacts.

#### Problem 3: Sea Level Rise

The relationship between global mean sea level rise and local sea level rise depends on a combination of factors, including changes in ocean circulation, variations in oceanic levels due to thermal expansion and relative sea-level change associated with land movements. The GoA is an extension of the Levantine or Dead Sea Fault, and part of the Red Sea Rift that are tectonically active leaving the possibility of sea level increase. Therefore, it is expected to witness a sea level rise throughout the GoA, which will have several consequences including infrastructure loss and other serious economic and social losses. The consequences of sea level rise will have serious effects on the limited shorelines that naturally occur plus the impact that unplanned infrastructure development can have on shoreline extent. In 2019, strong tidal currents (and storm surges) led to major infrastructural impacts on the submerged artificial diving sites. For that, the existence of healthy coral reefs will certainly aid to protect diving industry, and the infrastructure within the AMR.

#### Problem 4: Flood Risk

Several wadis flow east west, though water flow remains seasonal, flowing in a seaward direction. Despite low annual average rainfalls, flash flooding is becoming a more frequent problem especially along the more vulnerable northern parts of Aqaba. These areas contain all the town residential expansion area, the Aqaba International Industrial Estate, the King Hussein International Airport, and all the northern light industries and logistics areas. Forty six (46) catchment areas have been identified which input into the Aqaba basin from the Jordanian side. There are seven main catchments draining to the coastline. Within the proposed AMR area, runoff from Wadi 9 (Al-Mamlah) passes through the tourist area of the "Coral Coast" and Tala Bay within the proposed AMR. A significant sediment load is also

carried by runoff from this catchment where a key source of pollutants occurs. Runoff with extreme flooding is caused when rainfall occur in adjacent regions of Aqaba, which will have negative consequences on the marine life at the GoA, where it will change water salinity, turbidity, temperature and also disruption of microbiological activity and life cycles of flora and fauna. AS stated above, the northern parts of Aqaba are the most vulnerable regions for flash flood hazards since they are located downstream from areas of major wadis. In spite of this, latest climate predictions show a decrease of rainfall by 2050 reaching less than 50% of current rainfall in the North of Aqaba. In order to mitigate the negative effects of flash flooding on Aqaba generally and the AMR specifically, ASEZA has established 40 dams at the eastern wadis flowing to Aqaba.

*Problem 5: Extreme Low Tide Events*

A major characteristic of the proposed AMR are the healthy coral reefs, which will be affected by an increased frequency of extreme low tide events. Such events cause corals to be exposed during daylight hours, which subsequently lead to the overheating and drying out of coral tissues. In addition, some irresponsible activities might happen in the event of extreme low tides, where people may be more able to walk onto reefs to collect souvenirs and cause serious damage to individual corals (Al Tawara et al 2019).

*Problem 6: Water Quality Issues*

The GoA is highly vulnerable to pollution, where both water stratification and intense dust storms are the major contributing factors to the observed seawater chemistry. In order to identify water quality deterioration, several parameters should be investigated including pH, total dissolved solids (TDS), total alkalinity (TA), Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, PO<sub>4</sub><sup>3-</sup>, NH<sub>4</sub><sup>+</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, K<sup>+</sup>, Sr, Cd, Co, Cr, Cu, Fe, Mn, Pb, and Zn. Generally, the mean value of pH at Aqaba is 8.26, with no clear trend due to the calcium carbonate buffering capacity of water[1]1. The average value of TA recorded at 146 mg/L, while the TDS average value is 41.95 g/L. The high TDS values are linked to water stratification and poor water circulation during the sampling period, which in consequence created a unique environmental conditions of higher temperature, evaporation, and salinity rates compared to other oceans. In addition, the lack of input of freshwater into the coastal water contributes to high salinity water, and the negligible supply of sediments into the water results in clear water conditions with high transparency. Inorganic nutrients such as nitrate, ammonium, and phosphate are minor constituents of seawater, but are essential for marine ecosystem productivity and growth. Relatively low levels of inorganic nutrients such as NO<sub>3</sub><sup>-</sup>, PO<sub>4</sub><sup>3-</sup>, and NH<sub>4</sub><sup>+</sup> have been observed in surface water layer. The coastal waters of Aqaba are extremely oligotrophic, with very limited nutrients supplied to Gulf's water through terrestrial runoff. Any high NH<sub>4</sub><sup>+</sup> levels could be associated with leaks from sewer systems and/or because of water discharged from fish farms which are enriched with enhanced nitrogen or possibly from fertilizer plume events[2]2

*Problem 7: Oil and Chemical Spills*

Jordan imports oil and liquefied natural gas (LNG) from adjacent countries, which pose threats of oil or liquid spills, which as a consequence, will have detrimental effects on its coastal waters and its associated ecosystems, the impacts of which is exacerbated noting the small width and semi-enclosed nature of the GoA. Several steps have been established by ASEZA such as the zero-discharge policy, cooperation at regional level through the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), and the improvements made by the International Maritime

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Organization (IMO). Although few incidents of oil spills have been recorded in Aqaba, careful monitoring, preparedness and regulation enforcement shall all be required and formalized[3]3.

Based on the above, industrial related accidents/spillages, coupled with illegal activities, can impact significantly upon this sensitive marine environment especially in light of the ongoing and planned tourism and economic development proposals (as mentioned above). On top of the spill (pollution) risks associated with marine transport and of hydrocarbons in particular, special mention needs to be made of the importance of phosphate and potash exports (worth over 1 billion USD per year) from Jordan through Aqaba. The negative impacts of phosphate (which also adds radionuclides to the system, reaching health risk levels close to the terminal) and potash dust on marine ecosystems are all key issues to address.

#### Problem 8: Ballast Water

Invasive species (contained within ship/tanker ballast waters) are considered to be the third greatest threats to the world's oceans with at least 7,000 different species being transported in ships "ballast tanks" around the world (GloBallast/IMO 2014; IMO 2012). Ballast water on container ships, bulk carriers, and tankers, visiting the ports in Jordan and the neighboring countries in the GoA, remains a potential source of pollution that can carry and seriously pollute the marine environment of the GoA with invasive species. Therefore, port's managers and other official responsible authorities in the region need to embrace all possible measures to address and mitigate the threat that ballast waters can present. Jordan has participated over ten years in an international project with UNDP and IMO GloBallast, and as a result has established a vast array of experience and knowledge. In addition, a Ballast Water National Strategy has recently been developed in line with the Ballast Water Convention which is effective towards supporting and providing advisories on implementation and control[4]4.

#### Problem 9: Marine Debris

Most of the litter reported in GoA coastal waters results from recreational and shipping activities. Many items come from the Aqaba passengers' port just north of the Marine Science Station (MSS) beach whilst it is estimated that 19 million items enter the marine environment from ferryboat each year. Shipping and port activities contribute 30% of marine litter whilst the fishing industry represents only 3%. The most significant accumulated debris in Aqaba's seas is plastic whilst micro plastics are considered another supporting factor that is seriously threatening the status of scleractinian (reef-building) corals. The positioning of Aqaba as a major touristic destination, coupled with quantities of waste being generated (an estimated 120 tons per day of waste is collected and transported to the dumpsite located in Wadi Al-Yutum which is 8 km northeast of Aqaba town and the attitude of visitors) is creating a serious problem to marine life.

Marine litter reported in the proposed AMR include plastic items/fragments including sheets, bags, containers); polystyrene (cups, packaging, buoys); rubber (gloves, boots, tyres etc); wood (construction timbers, pallets, fragments of both); metals (drink cans, oil drums, aerosol containers, scrap); paper and cardboard; cloth (clothing, furnishings, shoes); glass (bottles, light bulbs); fishing gear (nets, abandoned/lost fishing gear); and plastic pellets. In almost all reports, plastics were by far the most abundant. Large quantities of plastic materials and in part the result of dropping other items such as soft drinks cans, match boxes, plastic straws, sanitary napkins, disposable diapers and garment pieces such as shoes, boots, sandals shirts and small blankets which were found on the southern beaches and on the bottom of the sea in the passengers port area. Thousands of cigarette butts and filters, cigarette boxes and

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spent disposable lighters are commonly observed on most beaches within the proposed AMR. It is also observed that the AMR area receives litter from several wadis and small valleys. Debris from several wadis and small valleys is transported to sea by occasional but very strong floods caused by rainstorms common to the region. Debris of foreign origin as indicated by inscription or imprinting were also found. Many of these were from Eilat on the west side of the GoA as indicated from the imprinting language (Hebrew). They include cardboards, canned food in tins, non-carbonated natural water plastic bottles, plastic oil containers and plastic cover and caps, and many other debris items were originated from Egypt and Saudi Arabia.

The seasonal distribution of the litter clearly indicates a relationship between passengers' port activities during the late spring and the whole summer. These periods coincided with high peaks of passengers' movement from the Arabian Gulf States and Saudi Arabia to Egypt via Aqaba port in Jordan and Nuwaibi port in Egypt. Lost or abandoned gear contributes to the marine debris and litter. This causes a phenomenon known as 'ghost fishing', which significantly affects coral health and abundance.

#### Problem 10: Living Marine Resource Extraction

The marine fishing industry is insignificant in meeting Jordan's current fisheries requirements (protein), the vast majority of which is imported[5]5. Because of the small size of the marine fishing industry in Jordan, fisheries management is not undertaken to a scale that delivers national needs. To this end, it is important for ASEZA (in the future) to develop a sustainable fisheries management plan that is based on scientific research outputs and developed in consultation with the local scientific community. Another major impact that is affecting sustainable fisheries management is associated with the gear being currently used which consists of non-biodegradable materials that can damage hard corals[6]6. Living marine extraction is also happening as corals are collected and dried as part of the ornamental trade business for souvenirs and jewellery at Aqaba and even as far as the Jordan capital city, Amman. In addition, substantial harvesting of live corals and fish specimens occurs directly from the sea for exhibition purposes at the marine aquarium[7]7.

#### Problem 11: Natural Predators and Coral Disease

There is a general agreement among scientists and researchers that predators such as corallivorous gastropods, including *Drupella cornus* and the crown-of-thorns (*Acanthaster planci*) as well as coral diseases represent common threats to coral populations in many countries around the world[8]8. Coral predation and diseases are threatening the coral reefs in Jordan[9]9. Natural predators, which could cause serious effects to reef building corals, is *Drupella cornus*, which is found in the Red Sea and along the Jordan coast of the GoA[10]10. *D. cornus* prey almost exclusively on living coral tissues[11]11 and display outbreaks similar to the outbreaks of *Acanthaster planci*[12]12. The field observations along the Jordanian coast reveals that this snail is mostly infects branching corals such as *Acropora* spp. and *Stylophora* spp., with an average of about 14 and 10 snails per colony for the *Acropora* and *Stylophora*, respectively, while only 4 snails per colony on the massive coral *Porites*[13]13.

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Along the Jordanian coast of the GoA, the Crown of Thorns (CoT) did not form serious problems in the past, although sometimes, individuals of CoT are encountered in some places, but no actual outbreaks have been recorded[14]14. The Skeleton Eroding Band (SEB) coral disease was studied along the Jordanian coast in the GoA[15]15. Although the infection rate was relatively low, this disease was frequently encountered with *Acropora* spp. and *Stylophora* sp., coral species while relative infection-rates were highest among *Seriatopora* sp. (75%), as well as *Stylophora* sp., *Hydnophora* sp., and *Galaxea* sp. (50% each). The SEB was found to a depth of 30 m, but may occur even deeper.

#### Root Causes and Barriers

Several unusual factors in the common 'Protected Areas' management approach confront the AMR founding principles as well as its functioning and require a major review of the roles and responsibilities of the AMR management team. The prevailing conditions within the AMP have accordingly driven the AMP management team to work in a reactive mode, to respond to constantly rising pressure on the Park's resources, rather than setting a strategic and adaptive approach to address the threats on the Park. This has also incurred an extensive pressure on the human resources of the Park and resulted in heavy turnover of the staff, due to hardship conditions and lack of needed incentives at the administrative level to respond to extensive workload.

Therefore, a combination of poor strategic management approaches to respond to the threats within the AMR coupled with a lack of information to document the negative impacts of these threats on marine resources, has prevented the AMP from building a strong case for strengthening its role to manage marine biodiversity effectively in Aqaba.

Around half of the total coastal stretch of the AMR remains accessible to the public and will have to absorb the extensive pressure of visitors and activities, which will generate a significant source of pressure on staff during peak times such as week-ends and holidays. The leisure activities practiced on the public beaches (including snorkeling, diving, glass boaters and beach visitors) all constitute an extensive pressure on the fragile ecosystem of the Park, which are not reflected in the absorption capacity of AMP's resource capabilities. For example, the increasing marine litter issue, which results from the increasing beach visitor numbers being experienced, is a significant threat facing the AMP's marine biodiversity. Likewise, fishing (commercial and recreational) constitutes another important threat to marine biodiversity and this needs to be more effectively monitored and controlled. Given the AMP's mandate and resources in enforcing fishing regulation, the AMP's role in the managing and regulating any activity that is jeopardizing marine biodiversity remains very important.

To this end, several root causes and barriers are confronting the current AMR's ability to function effectively and hence to address the various threats that face the conservation of its important marine biodiversity. These include the following:

- a) Lack of mechanisms to address regional / transboundary drivers of marine biodiversity degradation: At present, management and conservation of the marine and coastal environment of the region is almost entirely carried out at a national / local level, with very little coordination or information sharing among the region's countries[16]16, a situation that is at odds with the growing number of examples of regional approaches to the management of reefs elsewhere (e.g. Great Barrier Reef Marine Park, Coral Triangle Initiative, Mesoamerican Reef system). PERSGA has attempted to establish various regional agreements or strategies for the Red Sea
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region (including a 2006 Strategic Action Programme), but its member countries have not ratified or implemented such agreements. As a result, transboundary drivers of coral reef degradation, such as marine pollution, introduction of invasive predators / disease, unsustainable fishing levels and practices, continue in the GoA and Red Sea, as 'each country's individual development policies or lack of enforcement of its regulations can impact another's resources' and it is essential that the countries have the capacity to coordinate and work together to properly monitor, manage, and protect fragile environmental resources, especially within marine protected areas.' [17]<sup>17</sup>

- b) Insufficient policy, legal and regulatory frameworks and enforcement: Though Jordan has issued many laws, regulations, and instructions that pertain to the protection of the coastal and marine environment in the GoA, many of these mechanisms are insufficiently detailed and their enforcement is typically weak. The enforcement of fisheries regulations in the GoA is almost non-existent, and a 2020 report by PERSGA indicated low levels of enforcement of existing environmental regulations generally (including wastewater discharges). Jordan, for example, lacks clearly articulated objectives or fisheries management plans for the GoA whereas in Egypt there is no strategic vision or plan for the GoA.
- c) Rapid economic growth and resource management is not informed by science to mitigate impact: The last Red Sea status report authored by PERSGA (published in 2009) highlighted the urgent need to establish scientific bodies and institutions that can standardize data collection protocols and support data collection programs and broad scientific research across the entire region. Furthermore, a PERSGA report from 2020 showed a lack of local understanding of coral reefs and what threatens them; limited monitoring of regional environmental indicators such as fish stocks, by-catch levels and fish landings; an inability to obtain data on dive boats or tour guides in the region, etc.

Although some of the Park's responsibilities have been out-sourced such as trash collection and some maintenance activities, this extensive load on the Park's staff from every day's duties prevented it from responding to the conservation mandates entrusted to the Park including key mandates within its regulation such as 'Implementing, updating and monitoring scientific research programs to rehabilitate coral reefs and other natural resources... and facilitating and participating to scientific research programs...'. This gap in the operations of the Park has prevented it from gathering, analyzing and disseminating to the general public and to the decision makers needed scientific information to raise the concerns regarding the impact of the different threats on the marine biodiversity and thus the founding principles of ASEZA as a whole. Moreover, the Park's regulation also calls upon a special committee known as the 'Aqaba Marine Park Committee' to administer the Park, under the Chairmanship of the Commissioner and the membership of the Park's Manager, the Vice Chairman and three Members appointed by the Chief Commissioner upon the Commissioner's recommendation. However, this function is not being implemented and prevents the Park from fulfilling its role and adopting the necessary decision making process for strategic management of the Park.

Accordingly, the combination of lack of a strategic management approach in responding to the threats on the Park and lack of information to document the negative impacts of these threats on the Park's resources have prevented the AMP from building a strong case for strengthening its role and its activities in the management of this important natural asset of Aqaba (Mansour 2012).

The need for new sources of financing for conservation and management of coral reef ecosystems is now widely recognized, with public-private partnerships needed both nationally and internationally. A number of barriers exist that constrain attempts to increase financing for coral reef conservation in the region, including an insufficient level of "bankable projects" that meet the minimal conditions to qualify as an investment opportunity; the fact that existing business incubators in the region are not focused on blue economy approaches (with the exception of some tourism opportunities) or the marine environment; a lack of information on clear opportunities to generate lasting value and growth; high transaction costs in accessing support and investments; and a lack of experience in the region in linking economic, business and investment opportunities with conservation programs and objectives.

Therefore, it is clear from the above that prevailing "fire-fighting" day to day working conditions being faced by AMR staff have often driven the current management team to work in a reactive mode, having to respond to constantly rising pressures that the Park's resources are facing, as opposed to being able to set strategic and adaptive approaches that are would be better aligned towards targeting the threats that the AMR is facing.

#### **A1.2) Baseline scenario and any associated baseline projects**

As defined in the section above, the baseline scenario regarding marine biodiversity matters would see a further increase of tourism and none tourism related pressures, including uncontrolled pollution, rampant fishing, physical harm to the coral reef from diving and snorkeling operations (amongst others). On top of its global impacts, no action would negatively affect the product itself with loss of biodiversity (the attractor) and loss of investments (sea level rise). More baseline information on these issues are presented in Annex D. An improved appreciation of the national and local institutional policy, legislative structures planning and outreach matters is now presented below along with an appreciation of future staff and AMR stakeholder capacity and technical needs.

In support of this, in February 2022, the U.S. Department of the Interior's International Technical Assistance Program (DOI-ITAP) financed a stakeholder workshop in Aqaba to agree on priority capacity and training related needs for the staff of the AMR (see Annex J). The outcome of this event determined that additional project support is now required to enhance the necessary institutional support and capacity development aspects that both ASEZA and the AMR staffs should possess in the coming years. The findings of the February 2022 workshop also deduced some key areas of AMR staff capacity training that is required (see Annex J for details).

The following represents the baseline scenario for a range of supporting legal and regulatory matters.

#### ***Legal Structure***

The overall legislative framework is in place but still requires further development. Most conventions and legislation for environmental protection are implemented through different government agencies. There are a total of 18 acts and 8 regulations, including articles dealing with animal protection to decrease pressure on species at risk and by-laws for the identification and establishment of protected areas. Although no specific laws for alien invasive species exist, there are several by-laws and regulations that address this issue, including site-specific regulations within the country's nature reserves. Inspection campaigns on industrial facilities were intensified by the Ministry of Environment to verify compliance with environmental regulations.

ASEZA was established in the year 2000 as per Law No. 32 of 2000 and was mandated to transform Aqaba into a world class Red Sea business hub and leisure destination. In addition, it aims at enhancing the quality of life and prosperity of the Aqaba community through sustainable development. ASEZA was endowed with regulatory, administrative, fiscal and economic responsibilities. ASEZ has a 375km<sup>2</sup> land area containing the City of Aqaba and Jordan's entire marine coastline of 27km.

The legal framework for the establishment of ASEZA has supported the necessary policy for an effective coastal management system. That said, what is now needed is the supporting regulatory support to sustain, develop and operate an effective AMR as part of this coastal management system. More detail on specific relevant pieces of legislation are included within Annex D.

### ***National Network of Protected Areas***

A network of 18 protected areas was identified and proposed, targeting a 15% cover of Jordan's total area by 2017; 8 are now operating and 4 are under establishment. They are managed by a national NGO, The Royal Society for the Conservation of Nature (RSCN), making it a uniquely decentralized form of management. The cabinet has approved a network of protected areas to be established in Jordan, with an aim to conserve critical ecosystems and habitats and ensure the sustainability of their associated species. Marine Protected Areas (MPAs) however were not covered with this network, even though the AMP was declared by ASEZA. Following an internal review, the AMR is now proposed to be included within the Jordan National Protected Areas Network (JNPA). This inclusion is critical as the importance of the AMR cannot be overemphasized. It is not only aesthetically spectacular, with its un-spoilt coastal landscapes and diverse seascapes, but it also supports high levels of biodiversity, including many endemic and endangered species.

### ***Institutional Capacity***

To support the proposed new zoning strategy within the AMR (being implemented through the ongoing EU project), the AMRMP sets out important staffing details and training needs to help support AMRMP implementation. This is needed as existing AMP rangers need to be better supported with enforcement powers as they can also play an important role in visitor management on site if their numbers can be increased and if they receive the proper skills and knowledge through special training and capacity development.

### ***Data Collection and Research***

A number of data collection projects have been carried out in Jordan. Outside of protected areas, baseline surveys have been conducted by the RSCN, like the National Waterbird Census. Jordanian universities have also been playing a substantial role in biodiversity conservation by undertaking ecological research and ex situ conservation. No formalized and consistent programme exists to support a State of the Marine Environment approach despite individual donor supported projects (UNDP Jordan 2015) that have delivered individual outputs similar to this over the past 5-10 years.

### ***Public Awareness and Outreach***

Several national governmental and non-governmental organizations have implemented environmental protection public awareness programs with focuses on pollution prevention, nature conservation and wildlife conservation, among others. These activities, including awareness and training programs, have been carried out with different means and media, by targeting students in different educational phases, as well as the general public.

**Planning**

Associated plans of relevance that will offer support for this IUCN GEF-7 project include the following:

? **ICZM Country Report 2014:** Jordan completed an ICZM Country Report in 2014 that documented progress in ASEZA’s coastal zone management approach; offered a detailed assessment of status, trends, and threats in the Aqaba Special Economic Zone’s coastal and marine environment; and provided a set of recommendations and lessons learned for better sustainable coastal planning and management practices in the Gulf of Aqaba. A new by-law to support the plan is expected to be endorsed by cabinet in later 2022.

? **Sea Use Master Plan:** Jordan’s Sea Use Master Plan for the Gulf of Aqaba was created in 2015 to provide an overarching policy framework to guide marine development and activity in the territorial waters of Jordan. It is based on authoritative spatial data on the marine environment and its various uses and assets, as well as of the adjacent coastal area. The Plan was developed with the full support of the Aqaba Special Economic Zone Authority (ASEZA), and represents an innovative approach to marine planning in Jordan, based on the commitment of Jordan’s national authorities as well as ASEZA to making marine management more efficient.

? **National Biodiversity Strategy and Action Plan (NBSAP):** Jordan’s NBSAP 2015 ? 2020 makes surprisingly little mention of coral reefs and does not include any targets related to coral reef conservation. However, a UNDP-GEF project to update the NBSAP is expected to start in early 2023 and be completed in time for the 2024 United Nations Biodiversity Conference (COP16) of the Parties to the UN Convention on Biological Diversity (CBD) is planned to be held in 2024 in Turkey. The the Ministry of Environment has expressed its intention to include coral-related targets in the new NBSAP[18]18.

**Ongoing and Future Donor Projects of Relevance**

There is one notable 3 year EU funded project that is currently underway in Aqaba. This is entitled the *Enhance the Conservation of The Aqaba Marine Reserve by Improving Capacity for Effective Management?* project. This current project (started in July 2022 for 2 years) works with ASEZA as a key partner with other key stakeholders. That project is seeking to promote the AMR to be listed with UNESCO and also it is working on a Zoning Plan for the AMR which is to take place in Phase 1. This project shall support and compliment the 2 year GEF7 IUCN project with specific reference to some of the project outputs as follows:

EU Project (2022)	GEF-7 IUCN Project (this Medium Sized Project (MSP))
Output 1: Improving the reserve management facilities;	Operational support training/guidance offered etc
Output 2. The provision of signage system;	
Output 3. Prepare and implement relevant capacity development strategy	Complimentary to Output 1.1.5 through the production of a supporting manual and associated materials

Output4. Prepare and implement conservation management plan and eco-tourism development plan	Complimentary to Outputs 1.1.4 and 1.2.2 through the production of ToRs and initiation of 'quick win' activities identified within relevant plans and documents already in existence (i.e.: Sea Use Management Plan and Ecotourism Plan etc).
Output 5. Design a patrolling and monitoring program for the reserve	Complimentary to Outputs 1.1.3 and 1.1.7 through the production of a supporting Operational and Implementation Manual and supporting boat equipment to support effective reserve regulation enforcement etc.
Output 6. Socio economic profile	No overlap with this project
Output 7. Socio-economic program for local communities	No overlap with this project
Output 8. Implement awareness and outreach program	Complimentary to Output 1.2.4 through the production of a supporting manual and associated materials which may be enhanced and developed further.
Output 9. Obtaining Blue flag certification for a selected segment of the reserve coastline	No overlap with this project
Output 10. Enhancing the Resilience of the marine reserve	Complimentary to Output 1.2.1 through the identification and design of 1 NbS pilot area (for implementation under the EU project) to help maximize the marine and coastal biodiversity potential of the AMR
Output 11. International Recognition for the marine reserve	Complimentary to Output 1.2.3 through the initial start-up work to collaborate with a separate regional Marine Reserve((1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and 3) Ras Mohammed National Park Ras Mohammed in Egypt)) which may help support future improvements of the AMR to international standards.
Output 12. Establishing the design work for the proposed Marine Science Park	No overlap with this project



With regards to future projects (or pending) that will prove of relevance to this project, these are set out below in the following table which demonstrates clearly that this GEF7 IUCN project shall help provide the structure for more detailed work to be undertaken following its completion. Importantly, the architecture for a long term and sustainable implementation process for the AMR shall be initiated through this GEF7-IUCN project. It is purposely designed to set up 'pilot' approaches towards supporting (for example) the GCRF 'Inception Phase' activities (years 1-2) plus also to deliver the core capacity needs for the AMR to address to support relevant blue economy initiatives in Jordan (i.e.: the current EU project mentioned above) .

- ? To this end, designing the GEF-7 IUCN project activities to support future projects shall demonstrate a blended strategic approach to better encourage co-financing opportunities. This may include tasks that support the following:
- ? To promote the blue economy through the implementation of marine spatial planning and advance the operation of the AMR in accordance with the best and international practices.
- ? To identify and pilot innovative nature-based solutions and integrate such solutions into the investment framework in the coastal city of Aqaba (integrating NbS that supports terrestrial and marine ecosystem protection etc).
- ? To contribute to national efforts towards the collaborative, coordinated implementation of the UN's 2030 Agenda for Sustainable Development, in particular, SDG14 on Life Below Water, as well as the post-2020 Biodiversity Framework.
- ? To strengthen the policy framework through the revision and assessment of the existing relevant policies and strategies and identify measures that promote and advance the development of a blue economy in Aqaba which shall support the details for a comprehensive plan for the management of waste in Aqaba to be put in place.

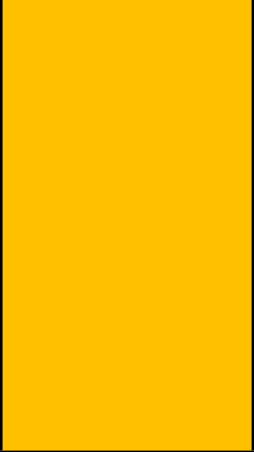
? To strengthen local capacities to scale up and sustain the disaster risk reduction/ management and crisis recovery efforts to minimize the impact of natural disasters e.g. flash floods on the marine and coastal environment.

? To strengthen the political and institutional framework for effective implementation of Aqaba's Marine Spatial Plan (MSP).

	<b>PROJECT 1: GEF-7:</b> <i>?Towards low carbon footprint from ecotourism activities and management effectiveness of Aqaba Marine Reserve? or possibly <u>reinstate the title</u> ?Enhancing management effectiveness of Aqaba Marine Reserve in Jordan?</i>	<b>PROJECT 2: Global Fund for Coral Reefs (GFCR)</b> <i>?Gulf of Aqaba and Northern Red Sea Resilient Reefs Programme?</i>	<b>PROJECT 3: GEF-8</b> <i>?Support and build a more sustainable, blue economy in Aqaba through marine spatial planning (MSP) and effective management of the first marine reserve in the country?</i>
<b>Implementing Agency</b>	The Royal Marine Conservation Society of Jordan JREDS	UNDP	UNDP (NIM)
<b>Timescale</b>	2 years	7 years (Inception approx. 1 ? - 2 years; Consolidation approx. 3 years, and Growth approx. 2 years)	5 years
<b>Proposed Start</b>	July 2023	Sept 2023 (PPG process to commence)	2024 (pre Concept)
<b>Budget (Grant) Value</b>	US\$663,073	US\$10M	US\$2M
<b>Co-financing Value (excl: PM costs)</b>	US\$5,200,000	USAID envisions that the \$15 million investment will leverage additional grant and debt and equity investments at a ratio of 20:1, thus increasing the potential of the GFCR to unlock private sector finance in the region well beyond the 30M initial estimate. Potential co-financing from USAID Egypt ?Red Sea Coral Reef Initiative? (RSCRI)	??
<b>Executing Partner (Agency)</b>	IUCN	IUCN	ASEZA
<b>Support Partner</b>	ASEZA	Coral Research and Development Accelerator Platform (CORDAP)	?
<b>Geographic Extent</b>	Aqaba Marine Reserve boundary limits	Gulf of Aqaba and Northern Red Sea (Jordan & Egypt)	Jordanian coastal area

<p><b>Project Aim/Objective</b></p>	<p><u>Improve management effectiveness and equity of Aqaba Marine Reserve by strengthening the capacity of the institution</u> to face future challenges and by enhancing the awareness of local stakeholder while having them actively engaged in governance and management processes.</p>	<p>Advance science on reef resilience and coral reef restoration, identify and protect climate refugia, establish a regional scientific hub and regional marine conservation coordination mechanism, and implement financing mechanisms to ensure sustainable financing of MPAs that harbour critical coral reef ecosystems.</p>	<p>The overall objective of the proposed project is to <u>conserve and restore Jordan's blue natural capital along the Gulf of Aqaba</u>, building resilience and supporting investments for sustainable blue economy development that provides benefits and livelihoods for the well-being of people.</p>
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<p><b>Project Outcomes/Outputs</b></p>	<p>1.1) AMR delivers ongoing successful conservation of its biodiversity and ecosystem service values through <u>improved governance, capacity for effective operational management for conservation and nature-based tourism</u>, sufficient equipment and sustained financing.</p> <p>1.2) Participatory approaches to equitable governance and effective management have <u>strengthened the management effectiveness and improved equity of the AMR</u> and reduced unsustainable resource use</p>	<p>Outcome 1: Heightened protection of functioning, resilient coral reefs in the region: <i>(strengthening and implementation of region-wide coral reef monitoring systems to assess the impact of anthropogenic activities so that they may be mitigated and to evaluate the effectiveness of specific management strategies and identifying directions for future adaptive responses). Capacity building programs for MPA management capacities, systems and resources, including: 1) the capacity to develop and manage sustainable financing programs for MPAs; 2) upgrading GIS capacities and networks as well as communications system; 3) management of tourism visitation; 4) improving local community participation and sharing in benefits; 5) enforcement of MPA boundaries and regulations; etc.</i></p> <p>Outcome 2: Communities and productive sectors transition away from activities that degrade reefs to reef-positive sustainable activities.</p> <p>Outcome 3: Coral reefs in the region are regenerated and restored through new technologies and adaptive and science-based approaches. <i>(developing a regional restoration plan that lists priority sites and recommended approaches / technologies. The restoration plan will then be implemented through partnerships with key regional stakeholders - especially the Research Hub in Aqaba).</i></p> <p>Outcome 4: Communities in the region are supported to build resilience to major shocks that may lead to</p>	<p>Output 1: A sustainable Blue Economic Development framework established and promoted.</p> <p>Output 2: The Aqaba Marine Reserve strengthened to conserve globally significant marine and coastal biodiversity, particularly the coral reef community.</p> <p>Output3: Inflow of land-based sources of pollutants/marine littering reduced through innovating for circularity</p> <p>Output 4: Innovative incentive mechanisms implemented to enhance sustainable and positive investments aimed to offset pressure on the marine environment.</p> <p>Output 5: Resilience of ecosystem components improved through identification of existing threats and vulnerabilities (including climate change and other natural and human hazards)</p> <p>Output 6: Nature-based infrastructure solution investments promoted and piloted.</p>
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degradation to coral reef ecosystems. *(strengthening the capacity of local stakeholders to build resilience and respond to climate, environmental and socio-economic shocks / crises that may impact coral reef ecosystems; and developing financing mechanisms for community resilience and recovery such as grants, parametric reef insurance programs, and crisis-conscious loan facilities).*

### **A1.3) Proposed alternative scenario with a description of outcomes and components of the project;**

A functioning and well structures AMR, with core capacities in place as part of a national JNPA network, will help to positively contribute to the marine conservation potential of the wider region, contributing towards the protection of key marine and terrestrial faunal diversity in the area which are considered, at least of significant proportion of its habitat, among the best representative of coral reef species. The key incentive for implementing this IUCN GEF7 project is paramount to help the effective and efficient delivery of ongoing and future donor funded projects in the coming years.

Embracing and ?selling? the importance of a fully operational AMR as part of the JNPA network is that the MoE (and ASEZA) may be able to convey to the Parties of the Convention on Biological Diversity that 100% of its coastal and marine areas are managed as conserved areas in support of Aichi Target 11 and Sustainable Development Goal 14 (SDG14). This would great enhance the value of the Aqaba brand internationally. In fact, a fully functioning and resources AMR, if managed properly, will contribute towards the successful implementation of several key elements, which can help support the AMR to be one of the most important contributors to Jordan's economy as follows:

- ? it is one of the nearest tropical seas to mainland Europe, which can attract many tourists due to the low travelling and accommodation costs.
- ? it embraces one of the most unique, fascinating and highly diverse coral reef communities[19]<sup>19</sup>.

The proposed alternative scenario, to be implemented with a range of stakeholders, is summarized as part of the intended key project outcome which is to improve the operational and performance management of the AMR, through improved system, tools, guides and capacity development support activities. To this end, the project shall address a range of parallel outcomes and outputs, namely:

- ? operationalizing key aspects of the AMR Management Plan (2021-2026) through targeted capacity building and training programmes;
  - ? designing a roadmap and supporting the implementation of a Management Effectiveness Assessment process that supports ongoing and future institutional monitoring, performance evaluation and surveillance systems;
  - ? preparing a bespoke AMR Operations and Procedures Manual for future implementation that includes topics such as marine habitat rehabilitation, ranger boat equipment maintenance and surveillance system repairs;
  - ? initiating a ?Collaborative Learning Strategy ? with 1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3) Ras Mohammed National Park [20]<sup>20</sup> to enable operational system improvements and capacity support needs to be made (based on lessons learned from established reserves in the region) as appropriate. Updates to existing marine reserve structures, systems and processes may then be proposed such as approaches to efficiently deliver marine biodiversity risk assessments etc.
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The project is designed through one Component only. It has two expected outcomes with 12 associated activities. A brief description is offered for each outcome and activity as appropriate:

Component 1: Strengthen management effectiveness, equity and operational capabilities of the Aqaba Marine Reserve

*Outcome 1.1: AMR delivers ongoing successful conservation of its biodiversity and ecosystem service values through improved governance, capacity for effective operational management for conservation and nature-based tourism, sufficient equipment and sustained financing.*

**GEF Funding: \$327,272; Co-financing: \$3,120,000 (excl: 10% PMC & M&E costs)**

Target(s) for Outcome 1.1:

- ? At least 10 separate outputs (namely guidelines, manuals, studies, programmes and/or systems?) produced to support AMRMP (2021-2026) delivery.
- ? Over 50 individuals trained on new skillsets as defined by this Outcome.
- ? At least 2 AMR boats upgraded to be operational and to contain modern surveillance systems in line with the expectations of the AMRMP (2021-2026).

*Proposed Activities:*

**1.1.1 AMR Roadmap prepared to guide direction for the effective and efficient delivery of the AMR Management Plan (2021-2026).**

It is important the AMRMP (2021-2026) is supported by a clear Roadmap to help support its implementation both during its actively defined management period and in the coming years. This will help to not only demonstrate the delivery of key Strategic Actions outlined within the AMRMP (see Table A below), but also shall be useful to communicate with key stakeholders in Jordan, and the international donor community on progress and aspirations for improving and enhancing marine biodiversity principles within the AMR boundaries into the coming years by promoting the AMR best practice and lessons learnt as part of the existing (and future) national and international network of natural reserves.

In addition to being a key monitoring and visioning document to support the AMRMP (2021-2026) implementation, it shall also be designed to clearly articulate the intended outcomes of the ongoing AMR zoning plan (EU project), thus fixing the boundaries of the reserve plus also seeking to provide timelines on how to embrace findings of historic plans (such as the ICZM Plan, the Sea Use Management Plan and the Marine Spatial Plan (UNDP projects) in tandem with potential new donor funded projects (i.e.: GCRF etc).

Importantly, the Roadmap should not be considered static, and any annual review of such should ensure that strategies and activities are still relevant for the changing socio-economic and climatic context that is facing Aqaba. Inevitably some management strategies may become obsolete, whilst new management activities may need to be included. Therefore, the following table identifies all Strategic Actions that have been identified to address the threats facing the AMR. The Roadmap now needs to review the



following Strategic Actions (some of which are to be implemented as part of this IUCN GEF-7 project) and from this, identify suitable funding and programmatic timelines for their suitable implementation.

Table A: Strategic Actions and links to IUCN GEF-7 project activities.

Strategic Actions Identified within the AMRMP (2021-2026)	Link activities within this MSP
<b>Strategy 1.1:</b> Develop, adopt and promote AMR specific development guidelines, with input from ASEZA guidelines (including ICZM and future Marine Spatial Plan updates post 2020).	See Activities 1.1.3 and 1.2.2
<b>Strategy 1.2:</b> Ensure effective surveillance and enforcement against illegal development activities within the AMR ? eg. non-permitted clearance of reef habitat, overwater / seawall construction, dredging etc;	See Activities 1.1.7 and 1.1.8.
<b>Strategy 1.3:</b> Ensure effective surveillance and enforcement against illegal development activities within the AMR ? eg. non-permitted clearance of beach areas, overwater / seawall construction, dredging etc .This should ensure effective management and monitoring of low impact tourism development.	See Activities 1.1.7 and 1.1.8.
<b>Strategy 1.4:</b> Identify and map sensitive areas that would be severely damaged by vegetation clearance and inform ASEZA and MoE;	See Activities 1.1.6 and 1.2.2.
<b>Strategy 1.5:</b> Strengthen and implement guidelines for sustainable development for any new developments, and ensure that new development activity is accomplished in a low-impact, eco-friendly manner (to be defined ? ISO13009 beach certification etc.) and minimizes impacts to the natural environment (Ensure infrastructure is in place to minimize tourism impacts on the reef ? signs, mooring buoys, designated dive sites).	See Activities 1.1.3 and 1.2.1.
<b>Strategy 1.6:</b> Ensure development guidelines are followed in the construction and operation of the AMR Headquarters and rangers stations;	See Activities 1.1.3 and 1.2.4
<b>Strategy 1.7:</b> Encourage local residents / education / tourism developments to adopt and follow new AMR development guidelines;	See Activities 1.2.3 and 1.2.4
<b>Strategy 1.8:</b> Ensure all EIAs produced (for ASEZA) that relate to future Aqaba developments are fully vetted and approved, and take into account zoning recommendations and regulations, and AMR guidelines.	N/A
<b>Strategy 1.9:</b> Identify resilient coral sites and work with stakeholders to develop and implement zoning for coral protection.	See Activity 1.2.1
<b>Strategy 1.10:</b> Strengthen and implement guidelines for sustainable development for any new developments emphasizing low-impact high-end development	N/A
<b>Strategy 2.1:</b> Develop, adopt and promote AMR development guidelines, with input from ASEZA/MoE and others;	See Activity 1.1.3
<b>Strategy 2.2:</b> Ensure effective surveillance and enforcement against illegal (non-port related) dredging activities within the AMR;	See Activity 1.1.7
<b>Strategy 2.3:</b> Identify and map sensitive areas that would be severely damaged by dredging and inform ASEZA;	See Activity 1.1.4

<b>Strategy 2.4:</b> Limit dredging within the AMR to small scale non-mechanical operations (artisanal permits only) and for access purposes only, with a more robust assessment process to include strengthened environmental clearance process for dredging applications;	See Activities 1.1.2 and 1.2.2
<b>Strategy 2.5:</b> Ensure all EIAs are fully vetted and approved, and take into account zoning recommendations and regulations, AMR guidelines etc	See Activity 1.1.3
<b>Strategy 3.1:</b> Identify resilient areas within the AMR in the context of site level management and the national protected areas system (NPAS).	See Activity 1.2.1
<b>Strategy 3.2:</b> Identify and increase protection of resilient coral reefs, source populations and key larval dispersal routes;	See Activities 1.1.6 and 1.2.2
<b>Strategy 3.3:</b> Establish monitoring protocols that inform management for building reef resilience;	See Activity 1.1.6
<b>Strategy 3.4:</b> Engage stakeholders in climate change adaptation strategies ? including shoreline protection through conservation / rehabilitation of beaches and reefs;	See Activities 1.2.1 and 1.2.4
<b>Strategy 3.5:</b> Investigate mechanisms for direct interventions ? eg. coral nurseries, shading of key sites, promoting higher herbivore densities;	See Activity 1.2.2
<b>Strategy 3.6:</b> Strengthen protection of marine trophic structure - maintenance of top predators and herbivores.	See Activity 1.2.3
<b>Strategy 4.1:</b> Identify resilient areas within the AMR in the context of needing flood risk management measures to be introduced (using Nature based Solutions where possible as part of the national protected areas system (NPAS).	See Activity 1.2.1
<b>Strategy 4.2:</b> Identify and increase protection of wadi systems plus ensuring the land use planning is cognisant of flood risks associated with wadi and flood conveyance routes;	See Activity 1.2.2
<b>Strategy 4.3:</b> Establish flood risk monitoring protocols that inform management for managing floods plus the impact that increased sedimentation can have on nearshore habitats;	See Activity 1.2.2
<b>Strategy 4.4:</b> Engage stakeholders in flood risk management strategies ? including flood conveyance interventions;	See Activity 1.2.4
<b>Strategy 4.5:</b> Investigate mechanisms for direct engineering interventions ? eg. Flood storage areas, use of vegetation, drainage channels etc.	See Activity 1.2.1
<b>Strategy 5.1:</b> Initiate and formalise tidal monitoring to help predict onset of extreme low tide events and build reef resilience.	See Activity 1.1.6
<b>Strategy 5.2:</b> Initiate strategies /protocols of action to mitigate the impacts of such low tide events;	See Activity 1.2.4
<b>Strategy 5.3:</b> Engage stakeholders in the impact of extreme low tide events and associated strategies ? including conservation / rehabilitation of reefs;	See Activities 1.2.1 and 1.2.4
<b>Strategy 5.4:</b> Investigate mechanisms for direct interventions ? e.g.: coral nurseries, shading of key sites, promoting higher herbivore densities.	See Activity 1.2.2
<b>Strategy 6.1:</b> Set up Monitoring strategies In order to identify water quality deterioration, several parameters should be investigated including pH, total dissolved solids (TDS), total alkalinity (TA), Cl <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , PO <sub>4</sub> <sup>3-</sup> , NH <sub>4</sub> <sup>+</sup> , Ca <sup>2+</sup> , Mg <sup>2+</sup> , Na <sup>+</sup> , K <sup>+</sup> , Sr, Cd, Co, Cr, Cu, Fe, Mn, Pb, and Zn.	See Activity 1.1.6
<b>Strategy 6.2:</b> Set up a MoU with industries to partner on programmes to reduce nutrient input to the open ocean ecosystems. As the coastal waters of Aqaba are extremely oligotrophic, with very limited nutrients supplied to Gulf's water through terrestrial runoff, any high NH <sub>4</sub> <sup>+</sup> levels is likely to be associated with leaks from sewer systems and/or because of water discharged from fish farms which are enriched with enhanced nitrogen or possibly from fertilizer plume events.	See Activity 1.2.3

<b>Strategy 7.1:</b> Support ASEZA by providing monitoring information to help support implementation of the zero-discharge policy and continue careful monitoring, preparedness and regulation enforcement support as required.	See Activity 1.1.6
<b>Strategy 7.2:</b> Continue to cooperate at regional level through the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), and adhere to recommendations/proposals already defined by the International Maritime Organization (IMO).	See Activity 1.2.3
<b>Strategy 8.1:</b> Support the implementation of the 'Ballast Water National Strategy' which has recently been developed in line with the Ballast Water Convention (effective towards supporting and providing advisories on implementation and control).	See Activity 1.2.4
<b>Strategy 9.1:</b> Produce a Marine Plastics Strategy for the AMR.	See Activity 1.2.2
<b>Strategy 9.2:</b> Initiate the new ISO13009 Beach Standard for all public beaches within the AMR.	See Activity 1.2.2
<b>Strategy 10.1:</b> Establish an effective surveillance and enforcement presence in the AMR, with effective enforcement of Fisheries regulations and zones;	See Activities 1.1.3 and 1.1.7
<b>Strategy 10.2:</b> Engage fishermen in surveillance and enforcement activities;	See Activities 1.1.7 and 1.2.3
<b>Strategy 10.3:</b> Establish zones for fisheries management based on informed decisions and strong scientific data;	N/A (EU project)
<b>Strategy 10.4:</b> Develop and implement an effective sustainable fisheries management plan for AMR and in adjacent open sea, integrating mechanisms including:	See Activity 1.2.2
? Education of fishers on policies and regulations and long term benefits	
? Catch monitoring,	
? Strategy evaluation and adaptation	
? Catch shares, quotas and permits	
<b>Strategy 10.5:</b> Investigate feasibility for active rehabilitation and restoration of traditional and non-traditional commercial species	See Activity 1.2.2
<b>Strategy 10.6:</b> Investigate potential for diversification into other marine resource use /extraction activities	N/A
<b>Strategy 10.7:</b> Develop and implement a supplemental / alternative livelihood programme targeting traditional users of the AMR, focused both within the AMR and in stakeholder communities outside, to reduce reliance on natural resource extraction within Aqaba.	See Activity 1.2.4
<b>Strategy 10.8:</b> Identify the primary stakeholder fishing communities and increase knowledge of coral reefs, sustainable fishing practices and the marine environment through implementation of a focused education programme targeted at primary level	See Activity 1.2.4
<b>Strategy 11.1:</b> Initiate an Action Plan to mitigate the risk of <i>Drupella cornus</i> and the crown-of-thorns ( <i>Acanthaster planci</i> ) on AMR stands of branching corals such as <i>Acropora</i> spp. and <i>Stylophora</i> spp.	See Activities 1.2.1 and 1.2.2
<b>Strategy 11.2:</b> Set up a research and monitoring programme to record the onset of natural predators and coral diseases (including the Skeleton Eroding Band (SEB) coral disease).	See Activities 1.2.3 and 1.2.4
<b>Strategy 11.3:</b> Collaborate with partners to develop national markets (restaurants, Chinese) and locate international markets for lionfish fillet and other products.	See Activities 1.2.3 and 1.2.4

<b>Strategy 11.4:</b> Engage commercial fishermen and tour guides in lionfish extermination as a management intervention within the AMR	See Activity 1.2.4
<b>Strategy 11.5:</b> Collaborate with partners to develop and implement mechanisms for increasing national awareness of the impacts lionfish is having on the reef fish within the AMR.	See Activity 1.2.4

It is proposed that this Roadmap will be produced by the Chief Technical Advisor (CTA) in tandem with the PMU.

**1.1.2 A Management Effectiveness System is designed to help AMR staff to comply with agreed Key Performance Indicators (KPIs) and for ASEZA to adhere with 6 monthly reporting procedures and protocols.**

Four main areas of performance evaluation are proposed as part of the AMRMP (2021-2026), namely:

- ? Institutional coordination and coherence;
- ? Improved knowledge, awareness and support;
- ? Mainstreaming Marine Conservation and Ecosystem Management into sustainable development; and
- ? Quality and effectiveness of management.[21]<sup>21</sup>

For the above areas to be successful, the production of an AMR specific ?Management Effectiveness Tracking Tool? (METT) is needed, updating or adapting existing drafts where these may already exist ([1] Whilst no specific METT exists for the AMR, staff do complete a separate World Bank annual MPA performance ?scorecard? tool on an annual basis. This Score Card is designed to ?Assess Progress in Achieving Management Effectiveness Goals for Marine Protected Areas? (2004). The METT shall be designed, adopted and applied to help mainstream performance management findings into the cycle of AMRMP revisions into the coming years. It shall be designed to align with ASEZA existing performance management systems or reporting expectations that are required. It shall also be used to initiate (or activate) an improved performance effectiveness system for the reserve that aligns with the framework of broader ASEZA reporting structure, using KPIs that are agreed upon by all relevant AMR stakeholders whom are tasked with delivering the AMRMP (2021-2026).

It is proposed that a specific series of stakeholder events with AMR and ASEZA staff, JREDS and other invited stakeholders will be arranged (including the Project Steering Committee including members from the Ministry of Environment, Ministry of Planning and IUCN ROWA as appropriate). These events shall determine the content of the METT, its reporting procedures and other supporting administrative processes that will be needed to make this an effective and implementable system. It is proposed that a two day workshop is needed to complete and involve a team of protected area staff and ideally other stakeholders, going through carefully, debating each point in turn and reaching consensus.

It is therefore anticipated that the fourth version (METT-4) shall be adopted as the structure that AMR shall agree to. To that end, the 2nd edition of the METT Handbook shall be used to structure the approach for the AMR. This is presented as an Excel tool<sup>[22]</sup> which aids implementation and compilation of results. It provides background on management effectiveness, advice on best use of the METT, case studies and links to the improving the quality of METT assessments using SMART and complementing management effectiveness assessments using the site-level assessment of governance and equity (SAGE) tool<sup>[23]</sup>.

It is proposed that this METT will be produced by the Chief Technical Advisor (CTA) in tandem with the PMU.

### **1.1.3 Production of an Operational and Implementation Manual to support the effective delivery of Activity 1.1.2.**

This represents a pivotal activity that will help to define the operational and implementation modalities required to effectively implement the AMRMP (2021-2026). That plan defines a series of five Management Programmes to support its delivery. These are introduced as a means of grouping management objectives within related areas – for example, those related to natural resource management, or to public use. Table B presents the 5 Programmes and their supporting sub-programmes.

This activity shall produce a detailed ‘Operational and Implementation Manual’ that has specific ‘parts’ or ‘sections’ included within it that focus, in detail, on each of the above 5 Management Programmes. Guidelines shall be produced to help outline procedures, standards, staffing and management needs plus budgetary information for each. Templates, standard operating procedures (SOPs), memorandums and generic guidance shall be produced that align with the AMRMR Roadmap details (see Activity 1.1.1 above) and the newly designed METT (see Activity 1.1.2 above).

The purpose of the Manual is to ensure that all AMR staff (and members of the Steering Committee) are aware of and are working in line with the administrative procedures and policies of the organization that align to the 5 Management Programmes set out above. The Manual will be produced in hard and soft copies to enable updates to be made on a regular basis.

Two consultancy positions shall be procured to help delivery this activity (one international and one national consultant).

Table B: AMR Management Programmes and sub-programmes

AMRMP (2021-2026) Management Programmes	Sub-Programmes	Indicative Manual Content
<b>A. Natural Resource Management Programme</b>	A1 Surveillance and Enforcement; A2 Fisheries Management; A3 Visitor Management; A4 Coastal/Beach Management	<p>A1 - Specific guidance may include how to establish an effective surveillance and enforcement presence in the AMR, with an optimum of three patrol units based from a reserve headquarters and two rangers stations; guidance on employment of staff to support the AMR Manager (including rangers); guidance on the engagement of fishermen in surveillance and enforcement activities and guidance on surveillance and enforcement of development regulations to support species protection.</p> <p>A2 ? Specific guidance may include how best to continue a sustainable fishery for the benefit of traditional fishermen using the AMR; advice on how to contribute towards the sustainability of the Aqaba fishing industry through effective management of the fish stocks; how to advise on the diversification of fishing effort; and how to address the need for alternative livelihoods.</p> <p>A3 ? Specific guidance may include advisories on visitor management and safety in support of tour guides and tour operators; help on how to enforce ASEZA regulations covering the need for certified guides and dive instructors, for tour guides/operators; how to support boat captains and dive guides to explain the rules of the Reserve to diver etc; guidance on training of rangers in enforcement of suitable regulations; production of standards and criteria for dive centres, glass bottom boat operators and lodge developments etc in line with the Aqaba Ecotourism Plan; how to devise a set of ?Limits of Acceptable Change? to determine carrying capacities set for tourism activities within the AMR (particularly dive sites - see Activity 1.1.4).</p> <p>A4 ? Specific guidance may include how to undertake beach risk assessments (in line with the new ISO13009 Beach Standard to complement existing Blue Flag programmes etc) and how best to reduce visitor impacts on public beach areas (through enforcement of new regulations etc).</p>

**B. Science Programme**

B1 Research;  
B2 Monitoring;  
B3 Data Management and Dissemination;  
B4 Collaboration with National / International Partners.

B1 ? Specific guidance may be prepared that focuses on the role of the AMR to support marine research (activities and responsibilities etc) including how to best engage with research partners for targeted project areas (namely climate change adaptation within the AMR and Biodiversity Risk Assessments (see Activity 1.1.4)); how to standardize the involvement of independent researchers wishing to work in the AMR and linked to this, clarity on research gaps and needs that are endorsed in partnership with ASEZA and the MSS.

B2 ? Specific guidance shall be prepared to support the implementation of technical monitoring work (coral health, social and economic monitoring etc); how to deliver routine follow-up monitoring (in line with the revised AMP Annual Training Programme); how to evaluate skills learned of trainees and how to develop a Limits of Acceptable Change programme at key visitor snorkel, dive and sport fishing sites, which may be integrated into the overall Research and Monitoring Plan.

B3 ? Specific guidance shall be prepared to support the Surveillance and Enforcement Programme (A1) by preparing guidance on help guide management decision making; guidance on how to best disseminate results to all types of stakeholders (academic/public/visitors/decision makers etc).

B4 - Specific guidance shall be prepared to support AMR staffs with how to develop standards for Limits of Acceptable Change (LAC) within the AMR and from this, implement a dedicated LAC monitoring programme; how to increase knowledge on connectivity and recruitment of corals and key commercial species in the marine environment of the AMR and wider Gulf of Aqaba area; how to increase information and understanding to input into strategy development towards greater sustainability of the fishery within and adjacent to the AMR; and how to ensure effective dissemination of research results in formats that are accessible to a wide variety of stakeholders.

<p><b>C. Education and Outreach Programme</b></p>	<p>C1 Stakeholder Engagement; C2 Alternative Livelihoods and Training; C3 Education and Dissemination of information.</p>	<p>C1 - Specific guidance shall be prepared to support the production of a Stakeholder communication strategy (that follows best international and national Protected Area practice); an educational and awareness raising strategy (national and international level) to demonstrate the global importance of AMR; and how best to promote national and international cooperation for the marine ecosystem conservation and biodiversity needs within the wider Gulf of Aqaba to support any future designation as a World Heritage Site, the <b>IUCN Green List</b> or Biosphere Reserve etc. C2 - Specific guidance shall be prepared to support the creation of a stakeholder stewardship strategy, plus strategic guidance on how best to engage and train fishermen and tourism managers using the AMR in alternative livelihood skills, financial incentives, investment in supplemental income generation mechanisms and investigation of innovative potential marine resource opportunities (socio-economic assessments etc ? see Activity 1.1.4). C3 - Specific guidance shall be prepared to support methods to broaden environmental education via the development of booklets, leaflets, brochures, posters and audio visual materials for the AMR; guidance on how to target communication and outreach efforts (internationally, nationally and within the proposed AMR); how best to exchange of information and knowledge and; how best to involve local communities and stakeholder in Aqaba to define their own standards for environmental quality (to protect those ecosystem services that support human need and well-being in Aqaba and that provide tangible benefits to local stakeholders etc.</p>
<p><b>D. Infrastructure Programme</b></p>	<p>D1 Operational Infrastructure and Equipment; D2 Maintenance.</p>	<p>D1 - Specific guidance shall be prepared to outline what is needed for a fully equipped, functional AMR headquarters and Visitor Centre (including any new Ranger Stations as required); what equipment needs to be purchased to enable at least two functional patrol units to operate well for effective surveillance and enforcement; what equipment is needed for all required administration equipment (communications, computer, office equipment) as required; D2 - Specific guidance shall be prepared to outline what maintenance actions (or retrofitting actions) are needed to better implement improved ?green buildings? and supporting operation policies for all AMR infrastructure (i.e.: using solar / wind powered electricity generation, following best practices guidelines during construction of infrastructure and operation of boats).</p>



<p><b>E. Administration Programme</b></p>	<p>E1 Administration Policies and Procedures  E2 Human Resource Management  E3 Financial Sustainability  E4 Timeline, Evaluation and Review</p>	<p>The Manual will pay particular attention on Management Programme E (Administration) as this Programme sets in place the Administration Policies and Procedures for the staff employed by the Management Board, and all human resource issues and supporting evaluation needs. Specific guidance shall be prepared to Guidance shall need to be provided on how to:</p> <ul style="list-style-type: none"> <li>? build the capacity of the Management Board to take on the management role;</li> <li>? ensure there are sufficient staff members employed (Reserve Manager and patrol units etc);</li> <li>? ensure an effective, transparent accounting system is established;</li> <li>? plan for future financial sustainability.</li> <li>? programmatic details in line with the AMRMP Roadmap (Activity 1.1.1)</li> </ul>
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#### **1.1.4 Undertake practical and targeted studies to support the adoption of international standards that will improve efficiency and effectiveness levels of the AMR.**

This activity will support the initiation (design and set up) of key targeted studies that may help to support the delivery of key activities already defined within the 5 Management Programmes (see Activity 1.1.3 for details). Due to the limited budget available (see Annex C ? Budget Table), 3 targeted activities are proposed under this activity as follows:

##### *AMR carrying capacity assessments (environmental ?load? studies - Management Programme A. Natural Resource Management Programme);*

A ?Carrying Capacity Assessment? exercise is needed to determine future actions on the ground. This is required as visitors to Aqaba will continue to enjoy water sports activities such as diving, which is a major industry at Aqaba with the presence of around 30 diving centers established so far and more than 80% of the diving sites are located within the boundaries of the proposed AMR. Snorkeling/swimming and diving are also considered the cause the most damage to marine biodiversity within the proposed AMR with the North King Abdullah Reef is found to be the site that is most affected by these activities. Therefore, careful considerations to AMR carrying capacity is required. The assessment shall evaluate the impacts of sectoral plans, programmes and projects potentially affecting the AMR defined area and from this, take into account through procedures for environmental impact assessment (EIA) and carrying capacity assessment, the capacity of beaches, nearshore and marine ecosystems to accommodate change (within the boundary of the AMR).

##### *Biodiversity Risk and Opportunity Assessment tool (Management Programme B. Science Programme);*

The design of the Biodiversity Risk and Opportunity Assessment (BROA) tool will be of benefit to the operation of the AMR in that it shall provide the AMR staff (and ASEZA) with a method to identify the impacts and dependencies of business operations in Aqaba on biodiversity in coastal and marine landscapes and from this to assess and prioritise the risks and opportunities arising from those impacts and dependencies from which an Action and Monitoring Plan may be produced by private sector businesses (glass bottom boat operators, tourist operators etc) to address those risks and opportunities. Guidance already prepared (in Activity 1.1.3) shall be used to support at least 2 stakeholder groups (private sector, public sector or CSO<sup>[24]<sup>24</sup></sup>) to prepare first draft BROAs which may be used to upscaled to other groups outside of this IUCN GEF-7 project. The activity shall involve (phase 1) planning and information gathering through a desk exercise that involves collecting secondary data and developing an information base to define the detailed scope of assessment, specific to the operations under consideration; (phase 2) - identifying, investigating and prioritising risks and opportunities guided by the planning and information gathering in phase 1. Risk and opportunity assessments, including investigatory site visits, field surveys, and engagement with stakeholders are undertaken, to build a realistic picture of the situation on the ground, and using the BROA Working Tables a comprehensive and prioritised list of risks and opportunities is produced; (phase 3) - Action and Monitoring Plans are produced for all medium and high biodiversity risks and for stakeholder adopted opportunities.

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Socio-economic assessments of relevant income generating activities (Management Programme C. Education and Outreach Programme).

The ongoing EU funded project entitled *Enhance the Conservation of The Aqaba Marine Reserve by Improving Capacity for Effective Management?* is planning to conduct (through its Output 7) a series of Socio-economic appraisals to support the AMR management team. The purpose of this activity is to compliment this work by offering support by enhancing this work by producing an assessment of income generating opportunities for stakeholder groups/sectors that are aligned to the BROA activities highlighted above. This way, a synergistic approach is adopted towards supporting the intentions of this Activity, in tandem with the ongoing project outputs being produced through the EU funded project[25]<sup>25</sup>.

Two consultancy positions shall be procured to help delivery this activity (one international and one national consultant). Specific details of the three proposed studies will be clearly articulated within specific ToRs for these positions.

#### 1.1.5 Preparation of a capacity development programme manual

Considerable preparatory work has been undertaken over the past 10 years to determine the capacity skills sets that are needed for AMR staff. This started in 2012 through the work of Mansour[1], which was built upon through the work of McCue (2021[2]) and most recently in February 2022 the production of a Training Needs Assessment report which has recently been completed (see Annex J).

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[1] Capacity Needs Assessment and Capacity Development Plan for ICZM in Aqaba

[2] McCue (2020) Training Manual for Aqaba Marine Reserve Staff/Rangers (First Edition), UNDP Jordan.

In order to complement existing work, plus supporting the EU funded project entitled *Enhance the Conservation of The Aqaba Marine Reserve by Improving Capacity for Effective Management? (Output 3)*, in addition to building on the First Edition Training Manual produced by McCue (2020), this activity shall produce a capacity development manual that supports existing AMP rangers with clear training and capacity development materials needed for wide implementation. The focus is placed on additional training programs that need to be designed on the basis of recent TNA that are flexible enough to allow additional training activities, as identified through a demand driven process during the participatory preparation and implementation work completed to date (see Annex J). Further to that TNA carried out in February 2022 (see Annex J), the following training subjects are outlined for consideration and elaboration:

	Training Area
1	Diving standard specifications

2	Divers? awareness on the protection of the marine environment
3	Best practices training for cleaning company workers
4	First aid for marine injuries
5	Full understanding of the reserve legislation
6	Awareness of the importance of the marine environment elements and how to deal with them
7	Communication skills and English language
8	Use of navigational devices training for fishermen and glass bottom boat drivers
9	Issuing brochures explaining the reserve facilities and their uses
10	Involve visitors in volunteer work through announced programs
11	Training in dealing with marine pollution and ship accidents
12	Providing the infrastructure for training in the fields of scientific research and monitoring

Building on the above, whilst embracing the First Edition Training Manual already produced by McCue (2020), the specific details (and hence delivery of the Second Edition Training Manual) shall be prepared.

The capacity development programme manual shall be targeted at AMR Rangers and supporting staffs who need training in specific aspects to ensure they are well equipped with taking on increased workloads and tasks whereby they can share their knowledge and experience with others in tandem with them protecting, managing and enforcing regulations within specific zones (as proposed through the EU funded (Output 4).

All capacity development materials produced shall be targeted at the needs of staff that are tasked with the effective implementation of the AMRMP (2021-2026) on a range of topics including performance management, surveillance and monitoring matters and related issues (as detailed within the Operational and Implementation Manual ? see Activity 1.1.3). The output of this activity shall be implemented through the delivery of Activity 1.1.8 (see below).

On the grounds that some considerable work has already been undertaken to support this activity already, one national consultancy position shall be procured to help delivery this activity.

#### **1.1.6 Establish and implement a Monitoring Programme to support the AMR Management Plan (2021-2026)**

This activity shall drive forward the setting of future benchmark (evaluation) thresholds and that will feed into AMR management planning cycle by providing interpretable data on the status of major AMR biodiversity assets and ecosystem service values.

Monitoring is complementary to the patrolling activity and provides information for a better understanding of the area. It is an important activity because the marine environment is continually changing, and recording these changes will be useful for making decisions about the administration and

**management of the area.** Therefore, amongst other aspects, it shall consider international best practice monitoring programmes already in existence, including work carried out on the 'The Eye on the Reef' training manual which is the largest tourism-driven coral reef monitoring program of its kind<sup>[28]<sup>26</sup>. Under the umbrella of Eye on the Reef there are a number of monitoring programs that address various environmental and biological information needs, including Reef health, the presence and absence of protected and iconic species, water quality and incident reporting. These programs include weekly and rapid monitoring systems, the Sightings Network, Reef Health Impact Surveys (RHIS) and Eyes and Ears Incident Reporting procedure. The program will therefore seek to offer training to foster improved stewardship of the Aqaba coral reef ecosystem by tourism operators and their staff, as well as provide opportunities to better understand the natural processes of the reef.</sup>

The Monitoring Programme shall be based on the needs of the AMR in order to direct management activities accordingly. It shall help to support the delivery of training opportunities that align against key Strategic Actions as set out within the AMRMP (2021-2026), namely:

- ? **Strategy 1.4:** Identify and map sensitive areas that would be severely damaged by vegetation clearance and inform ASEZA and MoE;
- ? **Strategy 3.2:** Identify and increase protection of resilient coral reefs, source populations and key larval dispersal routes;
- ? **Strategy 3.3:** Establish monitoring protocols that inform management for building reef resilience;
- ? **Strategy 5.1:** Initiate and formalise tidal monitoring to help predict onset of extreme low tide events and build reef resilience.
- ? **Strategy 6.1:** Set up Monitoring strategies In order to identify water quality deterioration, several parameters should be investigated including pH, total dissolved solids (TDS), total alkalinity (TA), Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, PO<sub>4</sub><sup>3-</sup>, NH<sub>4</sub><sup>+</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, K<sup>+</sup>, Sr, Cd, Co, Cr, Cu, Fe, Mn, Pb, and Zn
- ? **Strategy 7.1:** Support ASEZA by providing monitoring information to help support implementation of the zero-discharge policy and continue careful monitoring, preparedness and regulation enforcement support as required.

It is proposed that this Monitoring Programme will be produced by the Chief Technical Advisor (CTA) in tandem with the PMU.

#### **1.1.7 Purchasing and installing equipment needs for AMR ranger boats including sampling, bathymetry, and other equipment as required to better implement required regulatory and surveillance needs of AMR rangers.**

This activity specifically targets the Surveillance and Enforcement Sub-Programme within the AMR (see Activity 1.1.3) which is focused on delivering Objective 3 of the AMRMP Objective 3 of the AMRMP (2021-2026) as this refers to 'Effective surveillance and patrolling is being implementing to cover the entire AMR area'. This talks directly to AMRMR output 3.1 namely '*Necessary surveillance and enforcement capacity (equipment) is enhanced to support implementation of the AMRMP Vision*'. It shall

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also be designed to help deliver against key Strategic Actions as set out within the AMRMP (2021-2026), namely:

- ? **Strategy 1.2:** Ensure effective surveillance and enforcement against illegal development activities within the AMR ? e.g.: non permitted clearance of reef habitat, overwater / seawall construction, dredging.
- ? **Strategy 2.2:** Ensure effective surveillance and enforcement against illegal (non-port related) dredging activities within the AMR;
- ? **Strategy 10.1:** Establish an effective surveillance and enforcement presence in the AMR, with effective enforcement of Fisheries regulations and zones;
- ? **Strategy 10.2:** Engage fishermen in surveillance and enforcement activities.

The specific equipment needs of ranger boats shall be determined following a specific technical capacity ?gap analysis? exercise (carried out by the proposed project CTA in tandem with the PMU). The outcome of this shall help to identify the necessary operational patrol enforcement / surveillance team needs (human capacity and multi-agency support) to support implementation of the AMRMP Vision. This shall include trial tests to undertake patrols of the AMR to uphold the newly defined Reserve zones and regulations, and to ensure that fishing, tourism and development regulations are enforced. It is anticipated outcomes of this specific activity shall include:

- ? **Establishing an effective boat operations (engines etc), surveillance and enforcement presence in the AMR (delivered by an optimum of three patrol units based from a reserve headquarters and two rangers stations);**
- ? Employment of qualified boat patrol staff to help support the AMR Manager (including rangers);
- ? Engagement of fishermen to support in surveillance and enforcement activities;
- ? Effective surveillance and enforcement regulatory compliance that supports species protection.

The anticipated equipment that is likely to be required may include:

- a) CCTV;
- b) Surveillance cameras;
- c) GPS sensors.
- a) **Supporting diving and swimming gear (as needed);**
- b) **Boat engine replacement (as needed).**

The above shall be needs tested, financially evaluated for best price and assessed for maintenance/replacement (spare part cost implications etc). Training needs shall also be determined and introduced into Activity 1.1.8 (see below) as seen fit by the Project Steering Committee.

It is expected that (within the budget ceilings available ? see Annex C) that at least 2 AMR boats shall be upgraded to be operational and contain modern surveillance systems (as required) in line with the expectations of the AMRMP (2021-2026).

#### **1.1.8 Deliver a Training Programme (implementing Output 1.1.5).**

This activity focuses on providing training on procedural guidance on a range of AMR matters, ranging from practical operational needs, maintenance, health and safety matters in addition to more technical matters. Depending upon the outcome of Activity 1.1.7, a training module may be produced that targets specifically the need to monitor and control users and violations (Surveillance Systems etc) along with marine biodiversity specific ?score card? monitoring and reporting systems that complement wider AMR M&E reporting etc). This has been discussed earlier in Activity 1.1.5 (capacity development programme).

The training programme shall be delivered throughout the 2 year life span of the IUCN GEF-7 project, though it is anticipated that a clear programme of training modules shall be delivered that ensures that over 50 individuals are trained on new skillsets as defined by this Outcome (from a variety of stakeholder groups). Where necessary, partnership arrangements may be made with the Ben Hayyan Laboratory to support specific training modules that target new research opportunities and from this, establish working ties with peer institutions involved in food safety and marine conservation.

Routine follow-up monitoring from selected trainings shall be performed immediately following any training program to examine how the skills learned are being used within Aqaba.

One national consultancy position shall be procured to help delivery this activity.

*Outcome 1.2. Participatory approaches to equitable governance and effective management have strengthened the management effectiveness and improved equity of the AMR and reduced unsustainable resource use.*

**GEF Funding: \$245,522; Co-financing: \$2,080,000 (excl: 10% PMC & M&E costs)**

#### *Target(s) for Outcome 1.2:*

- ? At least 1 NbS intervention measure is designed in detail for future implementation.
- ? At least 5 separate Terms of Reference are produced to support AMRMP (2021-2026) implementation.
- ? One Collaborative Learning Strategy is produced and endorsed (by all parties) with an established Regional Marine Reserve/Park.
- ? One participatory communication, outreach and awareness programme is produced.

#### *Proposed Activities:*

#### **1.2.1 Design a participatory marine habitat rehabilitation programme that embraces Nature based Solution (NbS) intervention measures**

There is a need to identify the design of an implementable pilot area for future Nature based Solution implementation within the boundaries of the AMR to help maximize the marine and coastal biodiversity potential of the area. Due to limited programme and budgets (see Annex C ? Budget Table), this shall be a ?precursor? or ?support? task to future projects being designed within the AMR. It is, however, designed to help deliver against key Strategic Actions as set out within the AMRMP (2021-2026), namely:

**Strategy 1.9:** Identify resilient coral sites and work with stakeholders to develop and implement zoning for coral protection

**Strategy 3.1:** Identify resilient areas within the AMR in the context of site level management and the national protected areas system (NPAS).

**Strategy 3.4:** Engage stakeholders in climate change adaptation strategies ? including shoreline protection through conservation / rehabilitation of beaches and reefs

**Strategy 4.1:** Identify resilient areas within the AMR in the context of needing flood risk management measures to be introduced (using Nature based Solutions where possible as part of the national protected areas system (NPAS)).

**Strategy 4.5:** Investigate mechanisms for direct engineering interventions ? eg. Flood storage areas, use of vegetation, drainage channels etc.

**Strategy 5.3:** Engage stakeholders in the impact of extreme low tide events and associated strategies ? including conservation / rehabilitation of reefs;

**Strategy 11.1:** Initiate an Action Plan to mitigate the risk of *Drupella cornus* and the crown-of-thorns (*Acanthaster planci*) on AMR stands of branching corals such as *Acropora* spp. and *Stylophora* spp.

The proposed GCRF Concept Note that has outlined some key intervention activities in this area. Importantly, this shall also need to be designed in a participatory and collaborative manner, that includes improved engagement with local tourism actors (hotels, diving centers, tour operators) that inculcates an all-inclusive and gender sensitive approach towards maximising biodiversity related objectives (linking to the IUCN Global Standards for NbS[29]<sup>27</sup>).

Specific details of the proposed pilot project design (not implementation) will be finalised with the PSC, though building on the opportunity to offer blended support to ongoing/future project concepts being discussed (i.e.: GCRF project), one conceptual NbS intervention ?programme? is set out in the box below:

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**Pilot Coral reef restoration programme** ? this activity will encourage partnership working with regional / local coral reef research programs and scientists to identify areas with optimal conditions that can support coral restoration measures (linking experience from the IUCN GEF7 activity 1.2.3 to produce a Collaborative Learning Strategy with 1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3) Ras Mohammed National Park and regional organisations such as KAUST NEOM, CORDAP, the Aqaba Marine Research Station, NIOF, and other partners.

The NbS intervention site shall be designed to encourage innovation with regards to the use of new technologies for coral restoration and/or translocation for scalable coral restoration / translocation and implementation of additional pilot projects etc. It shall be designed to support AMRMP (2021-2026) Strategy 5.4, namely *?Investigate mechanisms for direct interventions ? e.g.: coral nurseries, shading of key sites, promoting higher herbivore densities?* and Strategy 3.5: *Investigate mechanisms for direct interventions ? eg. coral nurseries, shading of key sites, promoting higher herbivore densities;*

This activity will provide the ground work necessary in terms of developing formal partnership arrangements (in line with the Operations and Implementation Manual ? see Activity 1.1.3) in addition towards securing roles and responsibilities (Memorandums of Understanding etc) with the scientific community and investment stakeholders to secure robust implementation of the programme in the short to medium term (i.e.: over the next 10 years). The capacity development program (see Activity 1.1.5 above) shall include specific attention on implementing NbS interventions, how to adhere to the IUCN Global Criteria for NbS implementation and finally how to engineer the schemes and from this, monitor performance and effectiveness of (for example) coral reef restoration/rehabilitation schemes.

Other possible NbS interventions of relevance to the AMR may possibly be proposed for conceptualisation once additional feasibility work is undertaken (see Activity 1.2.2 below).

It is proposed that one International Consultant will be procured to support delivery of this activity with support from the Chief Technical Advisor (CTA) in tandem with the PMU.

### **1.2.2 Review, update or develop, in a participatory manner, a series of Terms of Reference (ToR) for core activities to be funded to support AMR Management Plan implementation.**

Building upon and supporting Activity 1.2.1, this activity shall produce at least 5 new Terms of Reference (ToR) for projects designed to help implement the AMRMP (2021-2026). It is, however, designed to help deliver the necessary support work that is required to assist the delivery of a series of Strategic Actions as set out within the AMRMP, namely:

**Strategy 1.4:** Identify and map sensitive areas that would be severely damaged by vegetation clearance and inform ASEZA and MoE;

**Strategy 2.4:** Limit dredging within the AMR to small scale non-mechanical operations (artisanal permits only) and for access purposes only, with a more robust assessment process to include strengthened environmental clearance process for dredging applications;

**Strategy 4.2:** Identify and increase protection of wadi systems plus ensuring the land use planning is cognisant of flood risks associated with wadi and flood conveyance routes;

**Strategy 4.3:** Establish flood risk monitoring protocols that inform management for managing floods plus the impact that increased sedimentation can have on nearshore habitats;

**Strategy 9.1:** Produce a Marine Plastics Strategy for the AMR.

**Strategy 10.4:** Develop and implement an effective sustainable fisheries management plan for AMR and in adjacent open sea, integrating mechanisms

**Strategy 10.5:** Investigate feasibility for active rehabilitation and restoration of traditional and non-traditional commercial species

**Strategy 11.1:** Initiate an Action Plan to mitigate the risk of *Drupella cornus* and the crown-of-thorns (*Acanthaster planci*) on AMR stands of branching corals such as *Acropora* spp. and *Stylophora* spp.

**Strategy 11.2:** Set up a research and monitoring programme to record the onset of natural predators and coral diseases (including the Skeleton Eroding Band (SEB) coral disease).

In support of some key recommended studies, as identified by AMR stakeholders during the preparation of this IUCN GEF-7 MSP, the following are proposed to be prepared under this activity (NB: only 5 are proposed for production under this project).

Terms of Reference Title	Indicative Content (sub-activities)
1) Update and Implement the Aqaba Sea Use Management Plan (2016) and ICZM Plan (2016)	General public hearing sessions. Sea Use plan update. Sea use plan approval. Transform into digital map. Review and update of the environmental regulations related to marine environment, including: ICZM Bylaw Approval, etc.

<p>2) Implementation of all relevant interventions proposed within the existing Aqaba Eco-tourism Plan (2014);</p>	<ul style="list-style-type: none"> <li>o Promote volunteerism</li> <li>o Develop a visitors and activities management plan based on reliable field information and studies</li> <li>o Determining the reserve carrying capacity of visitors.</li> <li>o Securing environmentally friendly transportation within the reserve.</li> <li>o Providing guiding and informative panels about the marine creatures in the reserve.</li> <li>o Providing watchtowers to follow the users</li> <li>o Providing a mobile or fixed clinic station on the beaches along the reserve coastline.</li> <li>o Provide security point(s) distributed along the reserve coastline.</li> <li>o Provide a map of the reserve showing its boundaries as well as major features.</li> <li>o Providing adequate toilets and safe corridors for the people with disabilities.</li> <li>o Providing beach areas and private swimming pools for women, and providing a nursery for children.</li> <li>o Production of an innovative AMR Marketing Plan to help promote community engagement and associated product development.</li> </ul>
<p>3) Feasibility Study - Establishment of an Aqaba Marine Research Center (supported by genomic facilities)</p>	<p>Identify the location, and finalize all official designation paperwork  Finalize architecture design, in an environmentally friendly manner  Build the research center components which should include, but not limited to 1) research stations, 2) genomic facilities, 3) education and awareness hubs, 4) demonstration areas, 5) training halls, 6) natural history museum and 7) accommodation rooms for external researchers  Establish the national and international corporations?  mechanism with other research hubs and centers  Apply for international eco-certification programs dedicated for environmental building  Capacity building programs</p>
<p>4) Upgrade to the Online Marine Water Monitoring System</p>	<p>Establishment new online marine monitoring floating station  Update and rehabilitate the current floating monitoring stations  Procure &amp; Connect all stations to a decision support system (data management &amp; reporting).</p>

5) Marine Pollution Modelling & Environmental Load Studies	Carry out studies for coastal areas to reduce activities with a negative impact on the marine environment Marine Pollution modelling to simulate the sea-land & atmosphere-sea interactions (i.e. : seabreeze, land breeze, dispersion and dissipation). Outputs to include maps plus dispersion prediction simulations with different scenarios (gaseous pollution accidents in the atmosphere & oil Spillages and pollution accidents in the marine waters).
6) Marine Pollution Management Plan	All necessary details required to develop a Marine Pollution Management Plan. Possibility to include sub topics within this such as invasive species and other topics including the implementation of the 'Ballast Water National Strategy' which has recently been developed in line with the Ballast Water Convention (effective towards supporting and providing advisories on implementation and control).
7) Baseline Data Collection, Storage and Information management related studies	ToRs that cover high priority research and field surveys that are aimed at gathering new field data to determine the health of marine habitats and marine species, This may include a ToR to design and create a Marine Information Management System (MIMS) to be used as a database to help compare change over time as a result of different development projects or natural and climatic changes to enable a Red List of species to be compiled.

Two consultancy positions shall be procured to help delivery this activity (one international and one national consultant). For efficiency purposes, these consultants may possibly be the same as those to be procured for Activity 1.1.4.

**1.2.3 Develop a Collaborative Learning Strategy with a relevant internationally nominated marine reserve (1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3) Ras Mohammed National Park, Egypt)**

Challenges faced by marine park (or reserve) managers, government agencies and resource users are typically generic across different regions and countries. Networking and exchanging experiences (i.e.: 'twining' arrangements) amongst MPAs is an effective tool to promote peer-to-peer dialogue. Learning Exchanges are a method of capacity building that can be particularly successful especially where similar cultures bond coastal communities facing the same challenges. Reciprocal exchanges offer both parties an opportunity to promote their own achievements and as such, work to foster pride and ownership in peoples' ongoing work.

This activity is therefore designed to help support (through lessons learned from regional marine park exemplars) how efforts may be adapted or improved upon in order to deliver against key Strategic Actions as set out within the AMRMP (2021-2026), namely:

**Strategy 1.7:** Encourage local residents / education / tourism developments to adopt and follow new AMR development guidelines

**Strategy 3.6:** Strengthen protection of marine trophic structure - maintenance of top predators and herbivores

**Strategy 6.2:** Set up a MoU with industries to partner on programmes to reduce nutrient input to the open ocean ecosystems. As the coastal waters of Aqaba are extremely oligotrophic, with very limited nutrients supplied to Gulf's water through terrestrial runoff, any high NH<sub>4</sub><sup>+</sup> levels is likely to be associated with leaks from sewer systems and/or because of water discharged from fish farms which are enriched with enhanced nitrogen or possibly from fertilizer plume events

**Strategy 7.2:** Continue to cooperate at regional level through the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), and adhere to recommendations/proposals already defined by the International Maritime Organization (IMO).

The purpose of this activity is to create the support work to help develop a reciprocal 'twining' program with a suitable marine reserve (or park), to help gather key lessons learned and to improve regional knowledge exchange on important approaches, systems, tools, and standards so that improved operational and capacity related matters can be realised and potentially implemented. The output of this activity shall be an agreed Collaborative Learning Strategy (to be later formalized into a 'Twining Agreement' after this project concludes) between AMR and, potentially one of the following:

- 1) Abu Galum Managed Resource Protected Area;
- 2) Nabq Managed Resources Protected Area; and/or
- 3) Ras Mohammed National Park in Egypt (see Map 3 in Annex E).

Where possible, and if suitable, the IUCN created 'Marine Protected Area Agency Partnership (MPAAP<sup>[30]28</sup>)' could be introduced to raise the intentions of this activity to a more international arena. The MPAAP is an informal, high-level venue for senior government officials from national marine protected area agencies to discuss common issues and explore opportunities for cooperation. MPAAP members collaborate and share information and best practices related to the management of MPAs, including science and socio-economic benefits.

To this end, sub-tasks will include arranging 'learning missions' (both ways) so that an appreciation of current administrative requirements are understood. The production of Coordination Exchange MoUs between reserves (as prepared in Activity 1.1.3) will be used to help support the implementation of 2 short 'work exchange' programmes to encourage identified individuals (from each reserve) to visit the other site bringing with them their learned experiences that will support regional marine biodiversity development. In addition, a regional stakeholder forum event will be organised (in Aqaba) that helps to identify barriers to effective Management Plan Implementation, and from this, indicative action plans produced for future funding (outside of this IUCN GEF-7 project).

A key output of this activity shall be the production of an electronic library that may be accessed by staff at both reserves where information, guidelines, forms, templates and reports may be uploaded to help reserve staffs to access data and/or contact details of specific experts. Areas that may be included within this library to support collaboration may include the following:

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- ? Information sharing on management approaches to common threats like climate impacts, ocean acidification, invasive species, coral disease, ship strikes, or fishing impacts etc;
- ? Sharing approaches to the application of technology to MPA management;
- ? Sharing of best practices for tracking the emergence of new pressures and mitigation efforts
- ? Sharing of scientific information;
- ? Promoting the development of 'protected area' networks;
- ? Developing common messages regarding benefits of MPAs and management approaches
- ? Sharing approaches to working with indigenous peoples.
- ? Joint training programs, materials and mainstreaming management tools,
- ? Monitoring and evaluation related procedures of relevance.

No specific consultant shall be procured for this activity. **Instead, staffs from the AMR, the PMU with support from the CTA shall be used to help delivery this activity (see Annex Q for Terms of Reference for the CTA and other supporting consultants).** It is expected that the outputs and support from the National Outreach consultant (see Activity 1.2.5 below) will be of value for this Activity.

#### **1.2.4. Create a participatory communication, outreach and awareness programme for improving livelihoods of the communities associated with the AMR**

The purpose of this activity is to support AMR staff to develop communication programs and systematic communication with partners and stakeholders to enable staff to better engage with local communities, visitors, the private sector and decision makers on matters relating to sustainable land and sea use practices taking place within the AMR. It shall also support outreach and awareness on current or future NGO partnership arrangements that exist (or are being planned<sup>[31]</sup><sup>29</sup>). With the core output being the production of a fully gender and socially inclusive outreach and awareness programme that is designed to improve livelihoods and communities within the AMR boundary. **Activities shall include education to dive centres such as the development of new virtual reality (VR) dive site information that is being developed through ASEZA. Sub** activities shall be designed to support the implementation of the following Strategic Actions as defined from the AMRMP (2021-2026):

- **Strategy 1.7:** Encourage local residents / education / tourism developments to adopt and follow new AMR development guidelines.
  - **Strategy 10.7:** Develop and implement a supplemental / alternative livelihood programme targeting traditional users of the AMR, focused both within the AMR and in stakeholder communities outside, to reduce reliance on natural resource extraction within Aqaba.
  - **Strategy 10.8:** Identify the primary stakeholder fishing communities and increase knowledge of coral reefs, sustainable fishing practices and the marine environment through implementation of a focused education programme targeted at primary level.
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- **Strategy 11.3:** Collaborate with partners to develop national markets (restaurants, Chinese) and locate international markets for lionfish fillet and other products.
- **Strategy 11.4:** Engage commercial fishermen and tour guides in lionfish extermination as a management intervention within the AMR.
- **Strategy 11.5:** Collaborate with partners to develop and implement mechanisms for increasing national awareness of the impacts lionfish is having on the reef fish within the AMR.

The programme shall, in particular, set out pathways for future funding into new areas of support for the AMR to focus on, including the following:

- ? How to devise a strategy to establish fish farms for fishermen on land, giving them the management of this project and providing the necessary funding (i.e.: studies, training and qualifications etc);
- ? Strategies and approaches to support deep water cleaning of fishing boats to encourage their seaworthiness for deep water fishing plus the adoption of new fishing sites for night fishing within specifically controlled areas;
- ? How to establish a viable and sustainable ?Fishermen-Fund? to support the fisherfolk to provide the necessary financing during closed fishing seasons (to be determined). This will determine the sources of financing for this fund (such as factories, ports, tourist resorts and the percentage of fish imports from abroad, etc.) in addition to establishing a spending mechanism from the fund.
- ? How to reduce the negative environmental impacts associated with Marine Tourism (supporting work planned by Green Fins[32]<sup>30</sup>).

Interventions may include support interventions such as the delivery of workshop events, meetings, outreach materials (including VR etc)

or awareness events that align with some (or all) of the above pathways.

One national consultancy position shall be procured to help delivery of this activity.

#### **A1.4) Alignment with GEF focal area and/or impact program strategies;**

Funding for this project is derived from the GEF Focal Area: Biodiversity. Alignment with the focal area objective is a central theme throughout this project. Both defined Outcomes (1.1.1 and 1.1.2) fall both within Component 1 will both help ASEZA (supported by its secretariat), to produce annual synthesis reports on the state of the marine environment to progress against marine science-based targets including biodiversity which supports this key focal area.

More specifically, the project aligns with GEF7 Biodiversity Objective 1 (Mainstream biodiversity across sectors as well as landscapes and seascapes) by improving policies and decision-making, informed by biodiversity and ecosystem values ? with a focus on policy stakeholders and Objective 3 (Further develop biodiversity policy and institutional frameworks) by improving capacity related support to enhance biodiversity policy, planning, and building capacity at all levels that is required to restore and maintain

functional marine ecosystems whilst also providing lessons learning and knowledge exchange and south-south cooperation within regions.

In summary, the project is designed to help AMR to support Biodiversity Objective 1, but with a focus on improving policy and decision-making within the AMR and beyond.

**A1.5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;**

Efforts to improve the operation and management of the AMR will, in an incremental manner, positively contribute to efforts to protect, maintain, and increase, biodiversity, reduce, stabilize, and reverse marine habitat degradation, and mitigate climate change impacts. This is demonstrated below:

As stated throughout, there is an urgency to deliver effective management of the AMR Management Plan (2021-2026) to ensure that specific science-based marine biodiversity related targets are achieved. The design of this project is incremental in nature, and due to its budget amount (see Annex C), is realistically in what it can achieve within the 2 year timeline. To that end, it is deemed as being an 'igniter' for future projects to move forward and develop in more detail.

It is cognisant of the recent international biodiversity commitments that were defined at the recent COP15 event in Montreal (advancing the development of the post-2020 biodiversity framework at CBD COP 15). Thus, the support from the GEF, as the financial mechanism of the CBD, will be essential in sustaining momentum on the post Montreal COP15 commitments made. This is relevant to many of the 23 Targets that were agreed upon at Montreal, though in particular, a few specific ones remain as a priority, namely:

- ? *Target 2: Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity?*
- ? *Target 20: Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South- South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the framework?*
- ? *Target 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent, in accordance with national legislation.*

The GEF funding for this project will help enhance the capacity of AMR staffs to better implement the AMRMP (2021-2026) in addition to stakeholders in Aqaba to appreciate the long term partnerships that are required to conserve marine biodiversity in the GoA. Through the targeted actions identified within



this project, it is hoped that outcomes will help these groups further understand their environmental footprint and how their footprint directly impacts people's lives and wellbeing. Adhering to new operational guidelines, and learning from a wide range of stakeholders (local and regional) will enable AMR management to take action that will directly improve rural livelihoods, reduce biodiversity degradation, increase carbon sequestration (where possible ? see Activity 1.2.1) while improving food security and human well-being.

#### **A1.6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF):**

GEF investments are predicated on the delivery of global environmental benefits associated with biodiversity, climate change mitigation, international waters, land degradation and forests, and chemicals and waste. These investments respond to the challenges laid out by the multilateral environmental agreements ? the three Rio Conventions ? the CBD for biodiversity, the UNFCCC for climate change mitigation, and United Nations Convention to Combat Desertification (UNCCD) for land degradation ? as well as a range of other conventions (e.g., the Ramsar Convention on Wetlands of International Importance for international waters, the Stockholm, Basel, and Rotterdam Conventions for chemicals and waste, etc.) and international instruments (e.g., the UN Ocean Decade<sup>[33]<sup>31</sup></sup>). Increasingly, GEF is seeking to deliver multiple environmental benefits through integrated investments across the various dimensions of the global environment.

Degradation of the marine environment globally continues to accelerate, and there is a pressing need to act to prevent surpassing tipping points and to prevent major marine environmental problems of species extinction risk from becoming catastrophic. The overall and specific targets that emerge from the convening and methods development processes will serve as essential inputs for the negotiation of the post-2020 biodiversity agenda, catalyzing solutions that, if implemented and properly resourced, will generate a cascade of global environmental benefits by flexibly reducing the impact throughout the causal chain of environmental degradation. Accurately mapping and equitably attributing responsibility for specific targets of marine biodiversity degradation in a transparent is a necessary step for identifying the true cost of downstream decision, accurately reflecting the consequences and impact of the choices by individual entities.

#### **A1.7) Innovativeness, sustainability and potential for scaling up.**

This project consolidates the intentions of the AMRMP (2010-2016) by providing a required structure and capacity to support effectiveness and purposeful operational delivery. In addition, it provides services that progress some very important plans that have been produced for the AMR region yet not had the opportunity to properly move forward. The outcomes of the project will help to escalate the AMR as becoming one of the most recognized marine reserves internationally for marine biodiversity based expertise, and security that the AMR (as an entity) will continue long beyond the two-year duration of the project.

Innovation. This project will focus on providing the tools necessary for AMR (over time) to deliver innovation with regards to developing, communicate, and promote marine biodiversity. The framework

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that the Operational and Implementation Manual will offer, shall enable AMR to better define the quantitative and qualitative decisions needed to secure a continued and functioning roadmap for sustained marine biodiversity delivery within the boundaries of the AMR. From this is may be able to provide a scientific synthesis that underpins the setting of targets, considering the trade-offs and interactions that take place between the human and natural systems. A concerted capacity building, outreach and awareness programme will also ensure that the AMRMP is well publicized and becomes recognized as the best source of guidance regarding the delivery of marine biodiversity principles and target in the region.

The approach proposed within the design of this project is institutionally appropriate, building on existing institutional structures whilst learning from experts in the region, thus underpinning a step change in the way that protected areas are managed within Jordan. This project therefore represent the start of a game changing connection between science and society to support a rich and biodiverse marine environment in tandem with supporting actions to promote resilient and prosperous societies in Aqaba.

Sustainability. The entities in this project, ASEZA, JREDS, the MSS and the AMR (in tandem one of 1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3) Ras Mohammed National Park and its associated networks, coupled with the mobilization effort already exist in some nascent form. Prospects for funding opportunities to move forward the outputs of this IUCN GEF-7 project are positive as concept notes are already produced (from the GCRF, GEF-8 and others). Therefore, whilst this project envisions a two-year timeframe with specific deliverables, discussions, work-plans, and fundraising strategies are already underway for beyond this period.

Potential for Scaling Up. This project is designed so that further donor funded interventions may support the outputs produced by this project. By building on the findings of the foundational work already completed by the AMR (plus building on the EU funded project that is already underway for the AMR), it is anticipated that larger innovative products (policies, studies, solutions etc) may be sparked to span across sectors, go beyond country-by-country approaches, and can be mainstreamed into global, national and local marine biodiversity related policy setting.

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[1] Al-Taani et al. 2020

[2] Al-Taani et al. 2020

[3] Al Tawaha et al. 2019

[4] <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Implementing-the-BWM-Convention.aspx>

[5] De Young (2006)

[6] Dameron et al. 2007; Abu-Hilal and Al-Najjar, 2009; Gilardi et al. 2010; Niaounakis, 2017; Sheehan et al. 2017; Lamb et al. 2018

[7] Al Tawaha et al. 2019

- [8] Birkeland 1989; Schumacher 1992
- [9] Al-Moghrabi 1996 and 2001; Al-Horani et al. 2006
- [10] Johnson and Cumming 1995
- [11] Turner 1994
- [12] Turner 1994a; Black and Johnson 1994; McClanahan 1997
- [13] Al-Horani et al., 2011
- [14] Antonius and Riegl, 1997; Loya and Gur, 1996; AlMoghrabi, 1997
- [15] Winkler et al. 2004
- [16] Kleinhaus K, Al-Sawalmih A, Barshis DJ, Genin A, Grace LN, Hoegh-Guldberg O, Loya Y, Meibom A, Osman EO, Ruch J-D, Shaked Y, Voolstra CR, Zvuloni A and Fine M (2020) Science, Diplomacy, and the Red Sea's Unique Coral Reef: It's Time for Action. *Front. Mar. Sci.* 7:90. doi: 10.3389/fmars.2020.00090
- [17] Red Sea and Gulf of Aden Strategic Ecosystem Management Project ? Terminal Evaluation (2019)
- [18] Pers. Comm. With Ministry of Environment ? 8 August 2022
- [19] About 1000 species of fish, 150 species of reef building corals, 120 species of soft corals and 1000 species of molluscs, flourish in the GoA. Coral species in the Gulf represent about 40% of the maximum number of coral species found in any area of the Indo- Pacific (Jordan Country Study on Biological Diversity).
- [20] <https://national-parks.org/egypt/ras-muhammad>
- [21] Delivered through (i) the formal adoption of the AMRMP (2021-2026); (ii) active implementation of these via agreed Action Plans (see Section 5); (iii) routine monitoring and evaluation of management and its outputs, outcomes and impacts, as well as the consideration of results in adaptive management; and (iv) the sustained availability of human, financial and technical resources to enable effective management;
- [22] The new digital version (using Excel) of the METT speeds up the process of inputting and analysing the data and also prevents users from only filling in part of the assessment. The METT is open source and we encourage users to adapt as necessary.
- [23] The METT consists of two main sections: datasheets of key information on the protected area and an assessment form containing a questionnaire with four alternative responses to 38 questions, each with an associated score, a data field for notes and a justification for the answers, and a place to list

steps to improve management if necessary. Each of the 38 questions is discussed in turn and advice given

on interpretation and completion. Additionally, the Handbook includes discussion about linking the METT with other tools and approaches, particularly the SMART system used to improve ranger monitoring, which can also provide the kind of quantitative data that strengthens METT results.

[24] Agreed upon by the Project Steering Committee

[25] At the time of writing, Output 7 work as yet to commence Specific details shall be determined through collaboration between the two Project Steering Committees to ensure an aligned synergistic approach is achieved.

[26] ?Capacity Needs Assessment and Capacity Development Plan for ICZM in Aqaba

[27] McCue (2020) ?Training Manual or Aqaba Marine Reserve Staff/Rangers (First Edition)?, UNDP Jordan.

[28] The program was developed in the 1990s with the specific goal of documenting observations made by marine tourism staff who work on the Great Barrier Reef (Australia) every day. Tourism operators are some of our most important partners in monitoring the health of the Great Barrier Reef Marine Park. Operators know their sites well and can collect long-term data that's invaluable for research and management in assessing the long-term conditions of the Reef.

[29] The IUCN Global Standard for Nature-based Solutions is a self-assessment that consists of eight criteria and associated indicators, which address the pillars of sustainable development (biodiversity, economy and society) and resilient project management. Guidance can be found at <https://portals.iucn.org/library/sites/library/files/documents/2020-021-En.pdf>

[30] <https://www.iucn.org/our-work/topic/marine-ecosystems/marine-protected-area-agency-partnership-mpaap>

[31] ASEZA are currently entering into partnership with Green Fins as part of the current GEF7 project to reduce the negative environmental impacts associated with marine tourism in Aqaba.

[32] <https://greenfins.net/>

[33] <https://oceandecade.org/>

## **1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**

The AMR extends over 7km in length from the Passenger Terminal in the north to the Royal Diving Club in the southern boundary limit of the AMR. The park's terrestrial boundary currently lies 50 m east of the Mean High-Water Mark (MHWM) and the marine boundary lying 350m west of the MHWM. A series of Maps are presented as a separate file (entitled Annex E: Project Maps and Coordinates)

*Map 1: Study Area (Aqaba Marine Reserve boundaries)*



*Map 2: Aqaba Marine Reserve Zones (2014)*



### Alpha Marine Park Marine Zonation

Scale: 1:50,000  
Date: 2023

- Marine zone
- Shallow zone
- Deep zone
- Other
- Beach line
- Marine boundary
- Coastal boundary
- Deep zone



*Map 3: Area of three MPAs in the Egyptian area of the Gulf of Aqaba: 1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and 3) Ras Mohammed National Park (site of priority coral reef sites)*



### **1c. Child Project?**

**If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/A

### **2. Stakeholders**

**Select the stakeholders that have participated in consultations during the project identification phase:**

**Civil Society Organizations** Yes

**Indigenous Peoples and Local Communities** Yes

**Private Sector Entities** Yes

**If none of the above, please explain why:**

The project idea was developed based on several consultation meetings held between IUCN, The Ministry of Environment and The Aqaba Special Economic Zone Authority (ASEZA) which is responsible for the management of AMR. These discussions, in addition to the revision of key documents like AMR's first management plan, AMR's Training Needs Assessment report, and other preliminary assessments were the basis for formulating the first draft of the PIF.

During the revision of the PIF, the project was re-designed to focus on one focal area which is biodiversity. The components related to the CC-M were removed (see Annex B ? response to Project Reviews).

After receiving the comments from the GEF on the first draft, IUCN organized a consultation workshop for key stakeholders including government, private sector and civil society organisations from Aqaba to identify the development needs of the AMR. The workshop was organized with funding from US Department of Interior who approved to cover the cost of the workshop to support the development of the PIF for this project as they believed that this fund is very important strengthen the capacities of this recently established AMR. The workshop included background introduction on the AMR, an overview of its current management plan, and an overview of the idea of this project. The workshop also included group work covering the following sessions:

1. SWOT Analysis to identify the strengths, weaknesses, opportunities and threats for the development of the AMR.
2. Training needs assessment for AMR staff and management authority, and
3. Discussion of potential role of women and youth in AMR programs.



This workshop which was held for two days on the 9th and 10th of February, 2022 provided guidance for the IUCN team to revise the PIF, and will feed the project document preparation phase. The workshop was attended by the Chief Commissioner at ASEZA, the commissioner of Environment, The Minister of Environment also participated virtually in the workshop opening to stress on the importance of providing sufficient support to the newly established AMR (see Annex J).

During the project document preparation phase similar discussions and more bilateral meetings will be conducted.

**Please provide the Stakeholder Engagement Plan or equivalent assessment.**

The proposed SEP focuses on the time period all the way through to the end of the 2 year project and beyond. This SEP will mainly focus on project engagement with lower level stakeholders that are not part of the project directly. Envisaged activities should include the following:

- ? Community participation for project implementation (information dissemination, sensitization);
- ? Identification of critical issues (land disputes, proper involvement of vulnerable groups);
- ? Implementation specific supervision and monitoring needs;
- ? Awareness, Education and Knowledge Transfer strategies.

It is acknowledged that the SEP is an evolving tool that will need to be updated on a regular basis throughout project implementation. To that end, communication, stakeholder engagement and knowledge transfer, as instructed by JREDS in tandem with the AMR Management team, should adhere to certain ethical and accuracy principles in order to be effective. This strategy therefore will adhere to the following:

<b>Consistency</b>	In all communication, maximum care will be taken to ensure consistency of messages with concept of the program. Consistency will also be maintained across stakeholders, time and space.
<b>Two-way</b>	Ample space for feedback and dialogue provided so that messages can be adjusted accordingly to meet the information needs of stakeholders.
<b>Timeliness</b>	Information availed when needed, relevant to stakeholders and able to be interpreted in the correct context.
<b>Clarity</b>	Presented in terms that are easy to understand, not open to misinterpretation.
<b>Accessibility</b>	Available in a range of formats to meet the needs of diverse stakeholders
<b>Targeted</b>	The right messages for the right audiences with most appropriate methods.
<b>Credible</b>	Accurate, meaningful and trustworthy messages.
<b>Planned</b>	Regular revision and updates of messages, facilitating proactive engagement.
<b>Efficient</b>	Fit for purpose, cost effective and delivered on time.
<b>Inclusiveness</b>	All views represented. Interpreters used where needed, as well as non-text-based presentations for less literate communities.
<b>Equity</b>	Dialogue is based on equally valued contributions from all.
<b>Flexibility</b>	Opportunities remain to revise decisions and revisit issues.
<b>Transparency</b>	Information is freely available and directly accessible for those who are or will be affected by decisions and activities.
<b>Integrity</b>	Engagement is made in good faith with open mindset.

1.1 The Engagement Process

The value that additional stakeholder engagement adds in terms of better decision outcomes, depends to a significant extent on how well the consultation process has been planned, organized and executed. The following steps will be followed in the planning and implementation of this specific SEP:

? Defining the objective of the consultation: This is the why aspect which needs to be answered *a priori*. This means the facilitators (AMP officers) need to be very clear about the program, and the key messages and promises to the stakeholders. It is important to define the specific results which are expected out of the consultation (consent, buy-in).

? JREDS to identify and create a database of all possible stakeholders to address who will participate in the engagement: The process needs to be characterized and ranked in terms of their relevance, interest, influence etc. Short list participants for invitation on the basis of this screening exercise. In addition, meetings should be advertised in the local paper or in a public place; notice boards of schools, mosques and on telecommunications poles to invite attendees. Thought and respect should be given to those with low literacy rates, it may be more appropriate to broaden the database through site visits, talking to communities and identifying other participant groups.

? Define the issues to be discussed: This is the crux of the consultation. Stakeholders will be invited and come to the meeting to learn and influence the plan and decision making for the pilot projects, why it is happening, how it is going to affect them, to voice their fears, concerns, and contributions etc. The principles outlined in the above section need to be taken into consideration i.e. inclusiveness, transparency, integrity etc. It is important to plan and prepare the information requirements for the consultation. Details and materials should be carefully reviewed for feedback and recommendations by an objective source where possible.

? JREDS to work out the communication and dissemination arrangements: Stakeholder consultation is in many ways about sharing accurate information, receiving feedback and reporting results. The type of medium for communication should be appropriate for each type of stakeholder, for example forums, billboards, local TV, radio, web related low barrier formats, written communication materials, etc. This aspect should include a monitoring exercise to follow and report what happened to or with the stakeholder inputs.

? Facilitators (AMP/ASEZA officers) need to arrange the appropriate venue and time: This is about logistics; deciding how long and where the consultation is to take, considering costs for participating beneficiaries should be limited. It should also include determining the required resources, ? human as well as financial ? budget, and identification of the right persons to organize the consultation.

? JREDS in collaboration with the facilitators need to plan how the consultation is conducted: Deciding who will conduct the facilitation; if specific expertise, resources, and third party participation are required; how records of the interviews will be kept and analysed; and how the consultation will be documented.

? Managing stakeholder expectations; clear communication is essential, describing the project realistically and not overselling any of the objectives or outcomes: This is key to ensuring that the community considers the program a success. If the project is oversold it will be perceived as a failure when it does not reach these expectations. This is an opportunity for the project to include stakeholder inputs, needs and wants. The project should be flexible in the early design phase to meet the requirements of stakeholders and communities, where feasible. Where those requirements are not feasible or unlikely to be met by the outcome of the project, this should be communicated back to the stakeholders.

? Awareness and Education ? an important indicator of successful regional programme (globally) is where national and local stakeholders are properly engaged through awareness building exercises that are designed to be bespoke to the country or local situation. Such initiatives may include training and education events as well as awareness events on various key climate adaptation or sustainability messages that related to either a local topic, or equally on the program (its, delivery approach and/or project management approaches). One recommended approach to consider with this respect is to compliment national actions towards the implementation of a series of Sustainable Development Goals (e.g.: SDG 14 ?Life under Water? and to demonstrate how the program is dove-tailing its approach into the national delivery mechanisms for this specific SDG. This not only would help convey to a broad audience the importance (from a sustainability perspective) of the project approach, but also how this work feeds into supporting the country action towards implementing international expectations. This is key to help support the achievement of specific indicators linked to a country?s performance against the

SDGs is a very easy mechanism to not only improve local educations and awareness on key matters, but also seeks to improve knowledge management in terms of communicating the relevance of the local project at both the national and international arena. Specific awareness / education techniques to achieve this include local events, song or music competitions, drama shows, use of YouTube or video ?success? stories etc).

? The Transfer of knowledge ?Knowledge management techniques (to disseminate findings) may include a review of how the existing techniques in place can be used to tailor the approach needed for success.

The table format in Prodoc Annex M shall be adhered to by JREDS to clearly articulate the broad engagement measures that intend to be pursued per stakeholder. NB: this plan should be presented to IUCN at the end of the inception phase.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Stakeholder Group and Function	Influence of SH on project	Impact of SH on project	Importance of engaging with SH	Role in the project
Govt Agencies				

<p>The Aqaba Marine Park Administration</p>	<p>Key SH responsible for delivering against the AMRMP (2021-2026). Major influencer on how the performance of the AMR (as a reserve) operates in the coming years.</p>	<p>Their influence is very high. They have the current authority to improve all matters relating to environmental management within the Reserve boundaries. This includes the collection of seashells, coral, bivalves and echinoderms as well as all forms of fishing (i.e., by nets, hooks, spear-guns or fish traps). The only fish collection activities permitted within the Park is bait fishing (by permit only) and scientific collection.</p>	<p>Their participation is pivotal to the success of the project. They can also help bring clear leadership into the AMRs dialogue and target adoption any actions that will be needed to ensure effective marine sustainability within the AMR.</p>	<p>Primary SH with a key role in delivering against the key project activities. Key SH to receive training.</p>
<p>The Aqaba Special Economic Zone Authority (ASEZA)</p>	<p>Key SH responsible for delivering policy and regulation within Aqaba and provider of budgets for the Marine Park Administration and hence implementation of the AMRMP (2021-2026). Major influencer on how the performance of Marine Park Administration delivers in the coming years.</p>	<p>ASEZAs impact is very high as they have representation from key ministries, and have the power to plan and execute projects in the region.</p>	<p>Their participation is pivotal to the success of the project. This is because ASEZA is administered and supervised by a series of ?Boards of Commissioners? which is composed of six full time minister level members, including the Chief Commissioner and the Vice Chief Commissioner.</p>	<p>Primary SH with a key role in delivering support and advice against the key project activities. Key SH to receive training.</p>

Jordan Maritime Authority (JMA)	Supporting SH responsible for delivering maritime enforcement in the GoA). Minor influencer on how the performance of the AMR (as a reserve) operates in the coming years. The JMA enjoys financial and administrative autonomy and is linked to the Minister of Transport and its main office in Aqaba	The Authority has impact as it is responsible for the inspection and regulation of shipping, ship movements, ship safety, and records. While the Authority has a role in the regulation of on board equipment.	JMA holds importantly the three aims of efficiency - achieving the highest performance standards, protection of the marine environment and enhancing the maritime safety and security.	Its role is as environmental regulator with regard to pollution in marine environment and coastline lies with ASEZA. It is however a secondary SH with a supporting role in delivering against the key project activities
Royal Department for Environmental Protection (Environment Police)	This is a key SH that has a permanent presence at ASEZA and accompanies the ASEZA staff in their monitoring visits to provide necessary security cover to the ASEZA staff.	This SH has impact in that it deploys regular surveillance checks within the AMR especially after office hours and at night.	Their role is importance as although a guide for environmental violations does exist and is available at the level of the environment police staff, limited expertise and know-how for monitoring and enforcement is available at the level of the environment police	Secondary SH with a supporting role in delivering against the key project activities (enforcement focused). SH to receive training.
<b>Civil Society Organisations</b>				

Marine Conservation Society of Jordan (JREDS)	This is a key SH that has a permanent presence (and influence) to deliver the project on behalf of ASEZA. Its influence is high as JREDS assist in developing certain actions within the Aqaba Marine Park, though there is no formal MoU established between them to assist in specific activities (and to help the Park Rangers to free their time so their enforcement commitments can be achieved).	JREDS impact on the project is high. It has conducted, on a regular basis, extensive awareness campaigns including clean up diving campaigns which have greatly contributed to raising awareness of the importance of safeguarding the marine environment (including Blue Flag implementation for FEEE).	JREDS influence on the project is high as it will be the Executing Agency of the project and host the Project Management Unit which will be responsible for the overall management of the project (incl. day-to-day implementation, financial management, project monitoring, liaising of project partners, communication and dissemination of results, coordination with GEF Agency UNEP.	JREDS role will also include being chair the Project Steering Committee. JREDS will, as Thematic Focal Point, lead the implementation of all deliverables of Component (Comp.) 1 (and the 2 outcomes).
Jordan Sustainable Development Society (JSDS)	Supporting SH whose influence relates to them having responsibility for delivering ongoing research, public awareness campaigns, international, and public policy recommendations	This SH has a moderate impact in that the organization is dedicated to promoting the principles and policies of sustainable development in Jordan.	Their participation is of secondary importance yet they are important to provide support to JREDS when required to promote the success of the project. They can also help bring clear support to the AMRs dialogue on marine sustainability within the AMR.	Secondary SH with a supporting role in delivering against the key project activities (enforcement focused). SH to receive training.
Jordan Environment Society	Supporting SH whose influence relates to them having responsibility for delivering ongoing work towards encouraging the establishment of environmental laws and standards in Jordan	This SH has a moderate impact in that the organization is dedicated to promoting the regulations that may offer support to the project.	Their participation is of secondary importance yet they are important to provide support to JREDS when required to promote the success of the project.	Secondary SH with a supporting role in delivering against the key project activities. SH to receive training.

<p>Royal Scientific Society (RSS)</p>	<p>Supporting SH whose influence relates to them having responsibility for environmental assessment and protection in Jordan since 1976. It is one of the largest research institute service providers in Jordan. RSS has about 40 laboratories, all are nationally certified and about 20 are internationally accredited (mainly by UKAS).</p>	<p>This SH has a moderate impact in that the organization is dedicated to promoting the regulations that may offer support to the project. The Environmental Research Centre (ERC) impact may offer value regarding applied research and studies to serve the development process of Jordan with attention given to environmental protection.</p>	<p>Their participation is of secondary importance yet they are important to provide support to JREDS when required to promote the success of the project. ERC is important as it currently is providing technical services to national companies to assist them in establishing their quality system in accordance with ISO/IEC 17025 standard towards the national/ international accreditation.</p>	<p>Secondary SH with a supporting role in delivering against the key project activities (enforcement focused). SH to receive training.</p>
<p>The Royal Society for the Conservation of Nature (RSCN)</p>	<p>Supporting SH whose influence relates to them having responsibility for having a significant role in biodiversity conservation in Jordan.</p>	<p>This SH has a moderate impact in that the organization is dedicated to promoting the regulations that may offer support to the project. It is recognized as an agency enforcing hunting laws, in coordination with the Forestry Department rangers, the army, and the police.</p>	<p>Their participation is of secondary importance yet they are important to provide support to JREDS when required to promote the success of the project, for example, it cooperates with the Border Authority and the Ministries of Environment and Agriculture to control and monitor the invasion of alien species.</p>	<p>Secondary SH with a supporting role in delivering against the key project activities (enforcement focused). SH to receive training.</p>
<p><b>Local Stakeholders</b></p>				

<p>Royal Jordanian Navy</p>	<p>Supporting SH whose influence relates to them having responsibility for having a significant role in policing the environmental performance of marine vessels operating in Jordanian waters.</p>	<p>This SH has a low impact on project activities, through its wider impact is key as it is dedicated to conducting daily patrols of port areas and keeps a patrol boat on 24-hour watch in the ship anchorage area next to the Main Port.</p>	<p>Their participation is of secondary importance yet they are important to provide support to JREDS when required to (in collaboration with the Ports Corporation), assist in preventing polluting discharge from ships and helps bring the polluters before the courts.</p>	<p>Secondary SH with a supporting role only</p>
<p>Fishermen Cooperative Al Thagher</p>	<p>This is a key SH that as its influence is high as constitutes the largest association of fishermen in Aqaba with a membership of 190 fishermen owning around 65 boats.</p>	<p>This SH has a high impact on project activities as it is possible to foresee cooperation with an organized fishermen association in view of promoting marine resources, and calling upon fishermen as watchdogs for illegal practices, mainly at the level of recreational fishing practitioners.</p>	<p>Their participation is pivotal to the success of the project. They represent a key SH as the fishing cooperatives never receive support from the government or from other funding agencies and therefore, they cannot provide their members with financial loans or any other type of support (</p>	<p>Primary SH with a key role in delivering against the key project activities. Primary SH to receive training and livelihood support in Outcome 1.1.2</p>



<p>Womens Groups (Aqaba) and local CSO groups.</p>	<p>Women?s participation in the project can help ensure that the targets developed are pragmatic and applicable to a specific audience.</p>	<p>Efforts to ensure women?s equal representation may bring more women into the project and the development and promotion of targets. However, if their comments and thinking are not included, this could alienate women from the project. Women?s thinking and input is essential to ensure that the targets developed, and the messages disseminated by the AMR are pragmatic and feasibly adoptable.</p>	<p>Their participation can also help bring women business and civic leaders into the AMRs dialogue and target adoptions. Finally, women?s participation can inspire younger generations of women to adopt better marine environmental practices and even study environmental sciences.</p>	<p>Primary SH to receive training and livelihood support in Outcome 1.1.2</p>
<p>Jordanian Business Women</p>	<p>Women?s participation in the project can help ensure that the targets developed are pragmatic and applicable to a specific audience. Their participation can also help bring women business and civic leaders into the AMRs dialogue and target adoptions</p>	<p>As there are fewer female business leaders within Jordanian companies, unless there is a concerted outreach effort to them, they may be less inclined to participate in the project and adopt targets.</p>	<p>Women?s participation can, amongst other things, inspire younger generations of women to adopt better marine environmental practices and even study environmental sciences.</p>	<p>Primary SH to receive training and livelihood support in Outcome 1.1.2</p>
<p><b>Private Sector</b></p>				

Aqaba Water Company (AWC)	This is a supporting SH to the project as its influence is related to the delivery of excellent water and water management policies.	Its impact as a SH is high, as no treated wastewater has ever been or will be discharged into the Aqaba Gulf. The concern of deteriorating seawater quality is much more of a localised problem.	Their participation is of secondary importance yet they are important to provide support to JREDS when required to advise on point sources of possible seawater contamination which may need to be clearly determined (eg: the Port, meat or fish market drainage or from wadi run off etc).	Secondary SH with a supporting role only
Aqaba Development Corporation (ADC)	This is a supporting SH to the project as its influence is related to the development and management of its strategic assets within ASEZA to unlock and leverage value from this asset base	Its impact as a SH is potentially high if unrestricted developments occur within the buffer zone to the AMR.	Their participation is of key importance to advise on new strategic developments that may impact on AMR operational activities (eg: the Port, meat or fish market drainage or from wadi run off etc).	Secondary SH with a supporting role only
Aqaba Ports Corporation (APC)	This is a supporting SH to the project as its influence is related to the development and management of port activities (at the Mo?tah and Mushtarak Ports, berths at the Industrial Port and the more recent Aqaba Container Terminal (ACT),	Its impact as a SH is potentially high if unrestricted developments occur within the buffer zone to the AMR.	Their participation is of key importance to advise on new strategic developments that may impact on AMR operational activities (eg: the Port etc).	Secondary SH with a supporting role only
Hotels and Real Estate Developments	This is a supporting SH to the project as its influence is related to hotel and housing development.	Its impact as a SH is potentially high if unrestricted touristic or housing developments occur within the buffer zone to the AMR.	Their participation is of key importance to advise on new strategic touristic or housing developments that may impact on AMR operational activities (similar to Tala Bay/Saraya development etc).	Primary SH to receive training.

Hotels Association of Aqaba	This is a supporting SH to the project as its influence is related to hotels and visitor management (including tours etc). Since around 70% of the hotels in Aqaba are internal, beach access to these hotels constitutes a priority especially in light of the conditions currently applicable at the allocated beach for hotels at Berenice Hotel and which cannot be fulfilled by all hotels.	Its impact as a SH is potentially high in order to promote environmentally sustainable practices within the AMR (Green Key and Blue Flag principles etc).	Their participation is of key importance to advise on new strategic touristic or housing developments that may impact on AMR operational activities (similar to Tala Bay/Saraya development etc).	Primary SH to receive training.
Watersports Companies	This is a key SH to the project as its influence is related to watersport activities. A key private sector tourism business (except for the hotel business) is the recreational yachting and water transport firm called ?Sindbad?. They have contracts to operate from each of the northern beach hotels to provide water recreational services. An aim of Sindbad is to sell marine transportation between 4 nations within the Gulf of Aqaba as a package.	Their impact is high as although risk disclaimers are provided by companies (such as Sindbad and other operators for individuals), there is NO coastal activity risk assessment carried out in Aqaba to enable appropriate coastal recreational management to take place in an integrated manner.	Their participation is of key importance to advise on new outreach to guests/clients on environmentally sustainable practices that are needed within the AMR.	Primary SH with a key role in delivering support and advice against the key project activities. Key SH to receive training.

Research Organisations				
Ben Hayyan Aqaba International Laboratory	Its influence is moderate on project activities. Adhering to highest standards and best management practices, it shall provide technical services and studies as well as applied research in the fields of water quality assessment, wastewater and grey water management, water demand management and reclaimed water re-use.	Its impact as a SH is low as no laboratory work is required within this project.	Their participation is of low importance as no laboratory work is required within this project	Secondary SH with a supporting role in delivering against the key project activities. SH to receive training.
Marine Science Station (MSS)	Its influence is moderate on project activities. The MSS is affiliated to the University of Jordan and its Director reports directly to the Deputy President of the University of Jordan. The MSS has several laboratories as well as a diving unit and a boat. The MSS has been responsible for the National Monitoring programme for the past 11 years under ASEZA's responsibility.	Its impact as a SH is potentially high in order to promote marine research support to JREDS as required.	The MSS is of potential importance to the project (Outcome 1.2) as it hosts and manages the Aqaba Aquarium, despite its limited resources and limited number of visitors, this aquarium can be positioned as an integral part of Aqaba's ecotourism attraction and a major pillar in environmental awareness campaigns and activities.	Secondary SH with a supporting role in delivering against the key project activities. SH to receive training.

University of Jordan - Faculty of Marine Sciences (in Aqaba)	Its influence is moderate on project activities. . The Faculty has a joint cooperation with the MSS on several academic research topics covering the marine ecosystem, however, the practical application of this research in the management and conservation of the marine ecosystem remains limited.	Its impact as a SH is potentially high in order to promote marine research support to JREDS as required.	The MSS is of potential importance to the project (Outcome 1.2) in that it may offer insight into tangible outreach and awareness methods that could help ASEZA and the AMR to deliver against its strategic objectives that relate to marine research matters.	Secondary SH with a supporting role in delivering against the key project activities. SH to receive training.
Jordanian Women Marine Scientists	Academic women?s participation in the project can help ensure that the research related targets developed are pragmatic and applicable to a specific audience. Their participation can also help bring women business and civic leaders into the AMRs research dialogue and target adoptions	Ensuring women?s participation in peer review processes may result in a more grounded and realistic analysis of methodology and targets.	Women?s participation in the project can help ensure that the targets developed are pragmatic and applicable to a specific audience. Their participation can also help bring women business and civic leaders into the AMR dialogue and target adoptions.	Secondary SH with a supporting role only

Select what role civil society will play in the project:

**Consulted only;**

**Member of Advisory Body; Contractor; Yes**

**Co-financier;**

**Member of project steering committee or equivalent decision-making body; Yes**

**Executor or co-executor; Yes**

**Other (Please explain)**

### 3. Gender Equality and Women's Empowerment

#### **Provide the gender analysis or equivalent socio-economic assesment.**

Cultural norms and traditions as well as the early exit of women from the labour force to start families has led to generally low participation rates for women in income earning activities in the region. A lack of suitable job opportunities for women in Aqaba, as well as discrimination against female job applicants, are also important factors contributing to the comparatively high unemployment rate for women. There are however some sectors in which female participation levels are higher. For example, in the public service sector, women have made advances in working in government institutions and as teachers and administrative staff in schools for girls. Women also have found employment in the tourism sector, although typically such opportunities are in jobs where they will not have direct contact with tourists (for example in the production of handicrafts and jewellery). With regard to youth, various youth-based organizations (including several universities) exist in the region and will constitute important partners to ensure that young person are involved in and benefit from programme activities.

During the AMR Development Needs Assessment Workshop (February 2022 ? see Annex J) which was essentially held for revising the PIF of this project, a session was dedicated to discuss the potential role of women and youth in AMR programmes. Stakeholders focused on the importance of targeting youth and women in any funding opportunity to support the reserve, and this will be considered through the business plan and socioeconomic development opportunities that will be part of this project.

During the project preparation phase a more extensive gender analysis has been conducted to integrate specific gender sensitive indicators in the project's monitoring plan (see Gender Action Plan in Annex I), which will consequently enable the tracking of the number of women participating and benefiting from the project's activities. Gender sensitive indicators have been considered and included as key result areas relevant to Outcomes 1.1 and 1.2. In addition, awareness raising and local community training will consider the distinct roles and needs of women and men. The gender aspect has also been considered within the general implementation of the project (baseline situation, project mid-term, and project end). Examples of project implementation gender markings include: a. the number of women involved in the project team; b. the number of women in the project's steering committee; and c. the number of women who are employed in jobs or are benefiting from socio-economic opportunities created by the project.

<b>Gender Action Plan</b>	
<b>Project's Impact Statement:</b>	<b>The project will pursue the following gender equality objectives:</b> ? Decision-making and leadership in the marine conservation and protected area sector: Enhance women's participation and role in national marine biodiversity sector design and decision-making processes, with women as ?agents of change?;

	<p>? Increase the access to and control over diversified and important role of women in developing marine biodiversity by supporting improved access, use, and opportunity of women in the Aqaba Marine Reserve</p> <p>? Access to socioeconomic benefits and services through improved opportunity setting within the Aqaba Marine Reserve: Target women as specific beneficiaries, and invest in women's skills and capacity.</p>
Gender-related aspects (e.g. specific indicators/targets):	? Increased level of institutional and staff capacity and actions to mainstream gender in the marine conservation sector (see Annex A for possible indicators)
<b>Project's Outcome Statement:</b>	Promote women representation in participatory and decision-making processes and empowerment of women as part of the Aqaba Marine Reserve Management Plan (2021-2026) implementation strategy.
Gender-related aspects (e.g. specific indicators/targets):	(see Annex A for possible indicators)

Project activities	Gender equality aspects or objective(s) within each activity **	Indicator ***	Target mid-term	Final Target	Responsible institution	Comments
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**Output 1.1:**

1.1.1 AMR Roadmap prepared to guide direction for the effective and efficient delivery of the AMR Management Plan (2021-2026).	<p>Prepare a ?Gender Representation Guidelines? document (2 or 3 pages max.) for all participatory and decision-making bodies and capacity building measures of the project.</p> <p>The guidelines lay out (within the Roadmap) through which measures a balanced representation of women in these bodies can be ensured. The guidelines are prepared in collaboration with</p>	Number of gender representation guidelines produced that focus on men and women needs within the AMR Roadmap	Gender Representation Guidelines document drafted for the Roadmap and issued by the end of Month 3.	Gender Representation Guidelines document is adopted and utilised within the Roadmap and revised within the AMR Management Plan as required.	PMU/ASEZA	
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	key gender units within ASEZA or Govt of Jordan, in consultation with gender experts in the country (e.g. from UN Women).					
1.1.2 A Management Effectiveness System is designed, in a gender sensitive manner, to help AMR staff to comply with agreed Key Performance Indicators (KPIs) and for ASEZA to adhere to with 6 monthly reporting procedures and protocols.	<p>Develop a KPI sheet template which allows to identify gender issues which may be used by AMR and ASEZA in all in project meetings, training and workshops that feeds into the Management Effectiveness System.</p> <p>Report on the project's gender mainstreaming activities in each progress and Project Implementation (PIR) report.</p>	Number of reports produced per year to support the Management Effectiveness System (i.e.: progress report, PIR) that use the new KPI sheet template etc).	KPI sheet template (supported by key reports as needed) prepared and ready to be used by the end of Month 3	KPI sheet template/reports are adopted and utilised within the Roadmap and revised within the AMR Management Plan as required.	PMU/ASEZA	
1.1.3 Production of a gender sensitive Operational and Implementation Manual to support the effective delivery of Activity 1.1.2.	Based on the Gender Representation Guidelines (Activity 1.1.1), encourage AMR and ASEZA (as coordination body) to outline details to include within the Operational and Implementation Manual) on how to appoint women as representatives/key stakeholder roles.	Number of men and women involved in the production of the Operational and Implementation Manual to support the Management Effectiveness System.	At least 30% of AMR Management team are female members.	At least 50% of AMR Management team are female members.	PMU/ASEZA	
1.1.4 Undertake practical and targeted studies to support the adoption of international standards that will	Based on the Gender Representation Guidelines (Activity 1.1.1), ensure that women are involved in the	Number of men and women involved in undertaking practical studies/projects)	At least 30% of persons involved in participating in studies to support adoption of	At least 50% of persons involved in participating in studies to support adoption of	PMU/ASEZA	



<p>improve efficiency and effectiveness levels of the AMR.</p>	<p>design of new studies that may be required to promote sustainable marine conservation and biodiversity to an international standard in Aqaba that all include a gender analysis and action plan to mainstream gender equality right from the beginning of the project development process.</p>		<p>international standards are women.</p>	<p>international standards are women.</p>		
<p>1.1.5 Preparation of a capacity development programme manual that is targeted at delivering the effective gender aware implementation of the AMR Management Plan (2021-2026)</p>	<p>Based on the Gender Representation Guidelines (Activity 1.1.1), participation of women in national, regional / international events, meetings and trainings will be promoted actively within the manual. Any agencies or institutions that will be invited to participate in capacity development events will be encouraged to nominate women to participate in such events.</p>	<p>Number of manuals produced that focus on men and women needs within the AMR Management Plan (2021-2026)</p>	<p>1 Draft Capacity Development Manual produced for wide stakeholder acceptance (within 6 months)</p>	<p>1 Completed and ASEZA endorsed Capacity Development Manual produced and accepted widely by stakeholders.</p>	<p>PMU/ASEZA</p>	
<p>1.1.6 Establish and implement a gender sensitive Monitoring Programme to support the AMR Management Plan (2021-2026)</p>	<p>Based on the Gender Representation Guidelines (Activity 1.1.1), the participation of women / appointment of women representatives will be encourage in all</p>	<p>Number of Monitoring programmes produced that focus on men and women needs within the AMR Management</p>	<p>1 Draft Monitoring programme produced for wide stakeholder acceptance (within 6 months)</p>	<p>1 Completed and ASEZA endorsed Monitoring programme produced and accepted widely by stakeholders.</p>	<p>PMU/ASEZA</p>	

	project consultation meetings and workshops that involve matters relating to AMR Management Plan monitoring	Plan (2021-2026)				
1.1.7 Purchasing and installing equipment needs for AMR ranger boats including sampling, bathymetry, and other equipment as required to better implement required regulatory and surveillance needs of AMR rangers.	During the preparation of technical standards and regulations for ranger boats and supporting infrastructure, the AMR rangers will need to consider that all updates meet international standards for physically impaired persons and safe traveling of children, women or vulnerable persons.	The technical standards? definitions for marine boats will include features to enhance women's and vulnerable passengers? (e.g. elderly) safety and comfort following global best practices	Technical specifications agreed upon for all boat updates (within 6 months) that comply with international standards to enhance women's and vulnerable person safety	All boat equipment installed in compliance with international standards to enhance women's and vulnerable person safety	AMR Rangers together with motor boat expert	
1.1.8 Deliver a Training Programme (implementing Output 1.1.5).	Based on the Gender Representation Guidelines (Activity 1.1.1), participation of women in trainings will be promoted actively. Acknowledging that women representation is very low within the marine biodiversity and conservation, the project will assess through which channels women can be reached.	Number of men and women who received training on marine biodiversity matters.	25 women (person days) recorded for attending training events.	50 women (person days) recorded for attending training events.	PMU/ASEZA	
<b>Output 1.2:</b>						
1.2.1 Design and implementation of a gender sensitive and participatory	Based on the Gender Representation Guidelines	Number of men and women who participated in project activities	At least 2 women involved (and recorded) to be	At least 4 women involved (and recorded) to be	PMU/ASEZA	

marine habitat rehabilitation programme that embraces Nature based Solution (NbS) intervention measures (identifying 1 pilot area for future implementation) to help maximize the marine and coastal biodiversity potential of the AMR.	(Activity 1.1.1), ensure that women are involved in the design of one new NbS studies that may be required to promote sustainable marine conservation and biodiversity in Aqaba to help maximise marine and coastal biodiversity.	(e.g. meetings, workshops etc).	actively involved in the design of the marine habitat rehabilitation programme that embraces Nature based Solution (NbS) intervention measures.	actively involved in the design of the marine habitat rehabilitation programme that embraces Nature based Solution (NbS) intervention measures.		
1.2.2 Review, update or develop, in a participatory manner, a series of gender sensitive Terms of Reference (ToR) for core activities to be funded to support AMR Management Plan implementation.	Ensure that women are involved in the design of new study Terms of Reference that may be designed to promote sustainable marine conservation and biodiversity projects in Aqaba	Number of men and women involved in the production of ToRs for practical studies/projects designed to support AMR Management Plan implementation.	At least 30% of persons involved in designing ToRs are women.	At least 50% of persons involved in designing ToRs are women.	PMU/ASEZA	
1.2.3 Develop a gender aware Collaborative Learning Strategy (CLS) with a relevant internationally nominated marine reserve (Ras Mohammed, Egypt) to help adopt key lessons learned to better improve regional knowledge exchange on important approaches, systems, tools, and standards.	Engage in preparing the collaborative learning mechanisms and strategies required to improve regional gender sensitive knowledge exchange on important approaches, systems, tools, and standards.	Number of strategies, plans (e.g. management plans and land use plans) and policies derived from the CLS that include gender considerations (this indicator applies to relevant projects).	1st draft of gender sensitive CLS prepared by the end of Year 1.	Final gender sensitive CLS prepared by end of Year 2	PMU/ASEZA	
1.2.4. Create a gender sensitive participatory communication, outreach and	Based on the Gender Representation Guidelines (Activity 1.1.1),	Number of men and women who will benefit from awareness programmes	25 women (person days) recorded for attending	50 women (person days) recorded for attending	PMU/ASEZA	

awareness programme for improving livelihoods of the communities associated with the AMR plus to support AMR staff to better engage with local communities, visitors, the private sector and decision makers on matters relating to sustainable land and sea use practices taking place within the AMR.	the participation of women / appointment of women representatives will be encouraged in all project consultation and outreach meetings and workshops that involve matters relating to AMR Management Plan monitoring	and / or project activities (e.g. meetings, workshops etc).	project related events.	project related events.		
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**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?**

Yes

**Closing gender gaps in access to and control over natural resources; Yes**

**Improving women's participation and decision making Yes**

**Generating socio-economic benefits or services or women Yes**

**Does the project's results framework or logical framework include gender-sensitive indicators?**

Yes

**4. Private sector engagement**

**Elaborate on the private sector's engagement in the project, if any.**

There is good potential for public-private partnerships in Jordan, based on the success of various partnerships for other environmental (non-MPA focused) programs in the country overall and in the Aqaba region specifically. Most of the developments supervised by the ASEZA have been through Public Private Partnerships. All tourism stakeholders, the hotels, dive and snorkeling operations, the transport sector, etc. to be involved in the GEF project are all private operators. Through its Aqaba Development Corporation (ADC), ASEZA has been overseeing, through Public Private Partnerships (PPPs), the establishment and expansion of the Aqaba Container Terminal (ACT), Aqaba Ports Marine Services Company (APMSCO), Aqaba Air Cargo Terminal (NAS) and Aqaba Logistics Village (ALV). The Container Terminal is the second busiest of the Red Sea in terms of volume and Aqaba's main harbour was moved south to the New Port, on the border with Saudi Arabia. The old harbour is destined to become a major high end tourist resort with thousands of residential units planned.

This GEF-7 IUCN project will seek to work with a variety of private sectors partners, including tourism and fisheries sector businesses, developers, marine transportation, investment authorities, financial institutions, and others that could support development, funding and/or implementation of reef-friendly business and livelihoods opportunities, blended finance mechanisms, conservation trust funds, etc. to address drivers of coral reef degradation. The project will seek to partner with the ADC, which acts as the central development body for ASEZA and has ownership of significant land and infrastructure in the Aqaba region. ADC is currently establishing an Investment Acceleration Unit, with a focus on the tourism sector; all investments made by ADC must be sustainable and marine friendly. Other potential partners include the Aqaba Dive Association (a NGO / industry body representing 17 dive centres); the Aqaba Hotel Association; Jordan Shipping Association, the Aqaba Container Terminal and passenger port (which has a Corporate Social Responsibility program, including support to mitigate the negative effects from port activities such as waste flows on the marine environment; and various development companies (e.g. Ayla Oasis Development Company, Saraya Holdings, Al Maabar Company), which together have several billion USD in projects underway in the Aqaba coastal zone, including hotels, residences, marinas, etc.

## 5. Risks to Achieving Project Objectives

**Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):**

Identified Risk	Risk Assessment	Mitigation Measures
Government resources (e.g. counterpart staff) and cofinancing contributions are not forthcoming in a timely manner	Medium	The project will aim to have a participatory approach starting from the project preparation phase. The co-financing was discussed with key stakeholders and will be re-confirmed during the project document development during the PPG (see Annex O for official letters).
Change in leadership in relevant governmental bodies could cause delay in implementation of the project activities	Low	The project will establish a Project Steering Committee (PSC) which will ensure that the policy agreements reached during the Inception Phase remain in place. Preliminary TOR for the PSC will be drafted during the PPG. The AMR has the highest level of political support in Jordan as HM the King is personally supporting any initiative that serves the reserve, so we assume that the AMR will remain a priority even if leadership of the relevant government body changes.
Failure of government partners to resolve the conflicts between stakeholders	Low	All relevant stakeholders will be involved from the start to create ownership and strengthen commitment to proposed changes and reforms. The PSC will also play an important role in high level coordination and political support to the project

## 6. Institutional Arrangement and Coordination

**Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

The GEF agency for this project will be the International Union for the Conservation of Nature- Regional Office for West Asia (IUCN-ROWA), which has well established internal policies guidelines and procedures. The IUCN-ROWA has a wealth of expertise when it comes to marine conservation, management of marine protected areas, and sustainable fishing. IUCN-ROWA aims to share critical conservation knowledge and to work collectively with its partners, members, non-governmental organizations, and government entities to address major issues in the region based on the concept of people-centered development. Within this context IUCN ROWA works closely with the Jordanian Ministry of Environment and ASEZA to achieve the Convention on Biological Diversity and other international conventions targets which are aligned with IUCN 2021-2024 programme[1]. ASEZA will be an implementing partner in the project.

IUCN has internal monitoring and evaluation procedure from the project proposal development phase until closure. IUCN's Project portal allows for tracking and monitoring projects against predefined indicators derived from IUCN's programme and the Sustainable Development Goals.

The Royal Marine Conservation Society of Jordan (JREDS) will be the executing agency for this Project, who will work in coordination with IUCN and ASEZA. JREDS, which was founded in 1993, is the only NGO in Jordan concerned with the conservation of the marine environment. It was founded by a group of concerned Jordanian ecological divers, headed by HRH Princess Basma bint Ali, one of the first female divers in Jordan. The initiative, which started as a simple for-fun nature dive officially became the first specialized Jordanian non-profit, non-governmental organization dedicated to the conservation of the marine environment in 1995. Currently JREDS has three programmes: Marine conservation, Outreach and advocacy program, and sustainable development program. JREDS is currently managing several projects from different donors covering applied ecosystem management, enhancing the legislative framework for fisheries, confronting plastic pollution, socio-economic development among other projects and periodic activities.

JREDS is proposed to be the executing agency instead of ASEZA which is a government entity for the following main reasons:

- ? The ASEZA, as a government entity, must adhere to the Jordanian government procurement procedures (see Annex L for proposed Procurement Plan) while executing any project, which are long and complicated procedures and might affect the implementation of the project within the planned short time frame which is 2 years.
- ? JREDS, as an executing agency, is the only NGO in Jordan specialized and dedicated for the conservation of the marine environment. JREDS already has an office in Aqaba, and already has a well-established relationship with ASEZA and the AMR management. As an NGO with extensive

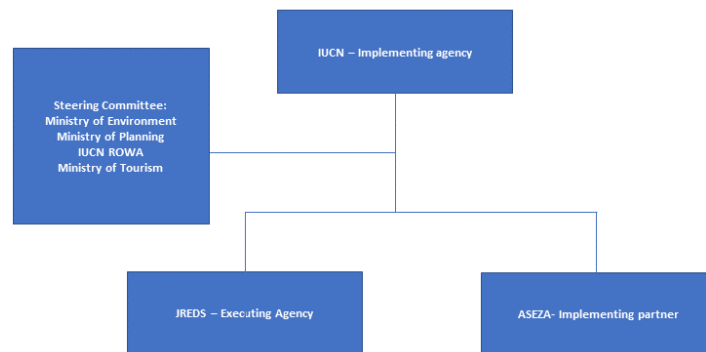
experience in executing projects funded by international donors, JREDS will be capable of executing this project in coordination with all stakeholders.

? IUCN, as the GEF agency, has a robust internal procedure for monitoring and financial control, however, its internal systems are much more flexible than the government systems. IUCN with its global mandate, will be able to guide and support JREDS in the execution of this project.

Below is the proposed institutional arrangement for this project:

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[1] IUCN Programme 2021-2024 focuses on three main pillars: healthy lands and waters, healthy oceans and climate change mitigation and adaptation. In this project, IUCN ROWA will address healthy oceans through biodiversity conservation and climate change mitigation and adaptation. IUCN aims to address climate risks and impacts on nature and implement nature-based solutions for climate mitigation and adaptation.



The project will coordinate with an important complementary project funded by the European Union which is entitled ?The Mediterranean Forum For Applied Ecosystem-Based Management - MED4EBM. The project contributes by assisting ICZM actors in four coastal areas of Jordan, Italy, Lebanon and Tunisia to jointly develop and apply a common methodology to make ecosystem-based ICZM much easier to design and implement by applying innovative techniques and methods. A software tool is developed to help institutional actors to better handle the complex multi-stakeholders analytical processes that characterize EBM applications and assess the relationships between ecosystem components, functions and services, as well as the associated human activities. Moreover, the project will provide government officials and

managers with the necessary tools, skills and competences to develop and implement ecosystem approaches to the management of activities in the marine and coastal environments.

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[1] IUCN Programme 2021-2024 focuses on three main pillars: healthy lands and waters, healthy oceans and climate change mitigation and adaptation. In this project, IUCN ROWA will address healthy oceans through biodiversity conservation and climate change mitigation and adaptation. IUCN aims to address climate risks and impacts on nature and implement nature-based solutions for climate mitigation and adaptation.

## **7. Consistency with National Priorities**

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

This project is expected to enable approaches and solutions that help countries address multilateral environmental agreement (MEA) targets and commitments such as the National Biodiversity Strategies and Action Plans (through UNCBD), National Action Programs (through UNCCD), and National Capacity Self Assessments (through UNCBD, UNFCCC, UNCCD) in an integrated, innovative and transformational way with co-benefits.

This project is also consistent with and will reinforce and catalyze, national strategies and plans made under relevant conventions. The methods that will be developed through the project will allow the key stakeholders (public, private and CSOs) to create targets in a collaborative manner. The relevant plans, policies and strategies of relevance (national priorities) are listed below:

- National Bio Strategy Action Plan (NBSAP);
- CBD National Report ( National Biodiversity and Action Plan, National Network of Protected Areas Report);
- Cartagena Protocol National Report;
- Nagoya Protocol National Report;
- UNFCCC National Communications (NC);
- UNFCCC Biennial Update Report (BUR);



- UNFCCC National Determined Contribution;
- UNCCD Reporting;
- ASGM National Action Plan (ASGM NAP);
- Minamata Initial Assessment (MIA);
- Stockholm National Implementation Plan (NIP);
- Stockholm National Implementation Plan Update;
- National Adaptation Programme of Action Update.

## **8. Knowledge Management**

### **Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.**

During the preparation of the PIF, existing knowledge products (reports, data, recommendations, etc) from previous/ existing work were used and referred to. Previous and existing management plans, habitat mapping report, previous training needs assessment, the AMR designation file, existing GIS data available at the ASEZA were all referred to while preparing this PIF. The purpose of this was to build on and continue existing work, address gaps, and avoid redundancy. Existing platforms, like the MED4EBM project database (introduced in Section 6) could be one of the platforms where the project could inform and use. Other existing platforms, like the Clearing House Mechanism CHM, hosted by the Ministry of Environment, was also referred to, however, existing knowledge on the marine reserve was limited.

During the project implementation, capturing and sharing knowledge and lessons learned will constitute an important element of the project and an essential way to ensure sustainability and replicability of project achievements. The project results, lessons learned will be communicated through several strategic means of communications: IUCN will provide the opportunity to widely distribute knowledge outputs to the conservation community through its member network during the World Conservation Congress, Regional Conservation Forums and other regional/ global forums, workshops and events. The project will also utilize the existing CHM platform to communicate key knowledge outputs as the Ministry considers the CHM site a central platform for all environmental data in Jordan.

The project will also identify important best practices and lessons learned that can be of value to all key stakeholders, specifically national decision makers as well as important development actors in the country. These best practices and lessons learned will be documented; the project team will prepare guidelines and toolkits for facilitating the wider replication and ?up-scaling? of results from the project; The project will utilize IUCN?s library and knowledge management platform to publish these knowledge outputs, as it

provides a reputable and widely accessible publication platform. IUCN has high standards for publishing ISBN publications and grey literature, and its library is one of the highly accessible biodiversity conservation platforms worldwide. This will allow for the wide dissemination of project outputs.

## **9. Monitoring and Evaluation**

### **Describe the budgeted M and E plan**

The project will comply with IUCN standard monitoring, reporting and evaluation procedures. Reporting requirements and templates are an integral part of the legal instrument to be signed by the Executing Agency and the Implementing Agency.

The project M&E plan (see Annex K) has been designed to be consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome as well as end-of-project targets. These indicators along with the ESMS screening criteria included in Annex H will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification to track the indicators are summarized in Annex A.

The M&E plan (Annex K) will be reviewed and revised as necessary during the project Inception Workshop (IW) to ensure project stakeholders understand their roles and responsibilities vis-?-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. General project monitoring is the responsibility of the Project Management Unit (PMU) but other project partners could have responsibilities in collecting specific information to track the indicators. It will be the responsibility of the Chief Technical Advisor (CTA) to inform IUCN of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

The Project Steering Committee (PSC) will receive periodic reports on progress and will make recommendations to IUCN concerning the need to revise any aspects of the Results Framework or the M&E Plan. Project oversight to ensure that the project meets IUCN and GEF policies and procedures is the responsibility of the IUCN Task Manager. The IUCN Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The IUCN Task Manager will develop a project Supervision Plan at the inception of the project, which will be communicated to the Project Management Unit and the project partners during the IW. The emphasis of the Task Manager's supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring.

Progress vis-?-vis delivering the agreed project global environmental benefits will be assessed with the PSC at agreed intervals. Project risks and assumptions will be regularly monitored both by the Project Management Unit, the project partners and IUCN. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The PIR will be completed by the CTA and ratings will be provided by

IUCN's Task Manager. The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. IUCN's Task Manager will have the responsibility of verifying the PIR and submitting it to the GEF. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

Since this is a Medium-Size Project (MSP) of circa 2 years duration, no Mid-Term Evaluation (MTE) will be undertaken.

In-line with IUCN Evaluation Policy and the GEF Evaluation requirements, the project will be subject to an independent Terminal Evaluation (TE). The Evaluation Office will be responsible for the TE and will liaise with the project manager throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among IUCN staff and implementing partners. The direct costs of the evaluation will be charged against the project evaluation budget (see Annex C ? Budget Table). The TE will typically be initiated after the project's operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office to feed into the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the project manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalization of the Recommendations Implementation Plan.

The GEF Core Indicator Worksheet is presented as Annex F. It will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above, the TE will verify the information of the tracking tool. The direct costs of reviews and evaluations will be charged against the project evaluation budget. The GEF contribution for this project's M&E activities is US\$ 30,000 (see Annex C).

M&E Activity	Description	Responsible Parties	Timeframe	Indicative Budget (US\$)
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Inception Workshop (IW)	Report prepared following the IW; which includes: - A detailed workplan and budget for the first year of project implementation, - An overview of the workplan for subsequent years, divided per component, output and activities. - A detailed description of the roles and responsibilities of all project partners - A detailed description of the PMU and PSC, including an organization chart - Updated Procurement Plan and a M&E Plan, Gender Action Plan - Minutes of the Inception Workshop	Execution: CTA Support: PMU	1 report to be prepared following the IW, to be shared with participants 4 weeks after the IW (latest)	GEF: 0 US\$ To be co-financed by GoJ
Steering Committee Meeting	Prepare minutes for every Steering Committee Meeting / meetings.	Execution: CTA Support: - PMU	At least 3 per year, minutes to be submitted 1 week following each PSC meeting	GEF: as part of venue / catering costs under Outcomes 1.1 and 1.2
Half-yearly progress report	Part of IUCN requirements for project monitoring. - Narrative of the activities undertaken during the considered semester - Analyzes project implementation progress over the reporting period; - Describes constraints experienced in the progress towards results and the reasons.	Execution: CTA Support: PMU	Two (2) half yearly progress reports for any given year, submitted by July 31 and January 31 (latest)	GEF: as part of CTA budget
Quarterly expenditure reports	Detailed expenditure reports (in Excel) broken down per project component and budget line, with explanations and justification of any change	Execution: CTA Support: PMU	Four (4) quarterly expenditure reports for any given year, submitted by end of Q1, Q2, Q3 and Q4 (latest)	GEF: as part of CTA budget

Project Implementation Review (PIR)	Analyzes project performance over the reporting period. Describes constraints experienced in the progress towards results and the reasons. Draws lessons and makes clear recommendations for future orientation in addressing the key problems in the lack of progress. The PIRs shall be documented with the evidence of the achievement of end-of project targets (as appendices).	Execution: CTA and Task Manager Support: PMU	1 report to be prepared on an annual basis, to be submitted by beginning of Q3 latest	GEF: as part of CTA budget
Annual Inventory of Non-expendable equipment	Report with the complete and accurate records of non-expendable equipment purchased with GEF project funds	Execution: CTA Support: PMU	1 report per year as of Q4, to be submitted by mid Q1 latest	GEF: as part of CTA budget
Co-financing Report	Report on co-financing (cash and/or inkind) fulfilled contributions from all project partners that provided co-finance letters.	Execution: CTA Support: co-finance partners	1 annual report from each co-finance partner, and 1 consolidated report, to be submitted by end of Q4 (each year) latest	
Medium-Term Review (MTR) (optional)	The purpose of the MTR is to provide an independent assessment of project performance at mid-term, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. It will verify information gathered through the GEF tracking tools.	Execution: Independent Evaluator / TM Support: CTA, PMU	At mid-point of project implementation if deemed needed by the Task Manager	GEF: US\$ 10,000 If this budget is not used, it will be rolled over to the Terminal Evaluation budget.

Final Report	The project team will draft and submit a Project Final Report, with other docs (such as the evidence to document the achievement of end-of-project targets). Comprehensive report summarizing all outputs, achievements, lessons learned, objectives met or not achieved structures and systems implemented, etc. Lays out recommendations for any further steps to be taken to ensure the sustainability and replication of project outcomes.	Execution: CTA Support: PMU	Final report to be submitted no later than three (3) months after the technical completion date	GEF: as part of CTA budget
Terminal Evaluation (TE)	Further review the topics covered in the midterm evaluation or review (if undertaken). Looks at the impacts and sustainability of the results, including the contribution to capacity development and the achievement of global environmental goals.	Execution: Independent Evaluator / TM Support: CTA, PMU	Can be initiated within six (6) months prior to the project's technical completion date	GEF: US\$ 20,000 (potentially increased to US\$30,000 if a Mid Term Evaluation is not carried out).
<b>TOTAL M&amp;E COST GEF US\$30,000</b>				

## 10. Benefits

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?**

In summary, this project is needed to create the support mechanism required to harness the best possible leadership, technology, science, innovation, and communication on marine biodiversity to positively support the transformation of the current AMR structure into a world class marine reserve.

The improved operational management of the AMR (and broader marine conservation sector) will lead to management improvements, environmental habitat improvements, and if undertaken successfully, several new employment opportunities, ranging from the maintenance and repair of glass bottom boats, new innovative climate resilient ?nature based solutions? piloted, the improved operation of AMR assets and infrastructures, to the recycling of waste material etc. It will also spur the development of new areas of business, mainly related to tourism and recreational sector but also opportunities where the private sector may be able to help with the purchase, or loan of technological monitoring equipment. Another chance lies in the possibility for setting up collaborate learning strategies with appropriate marine parks in the region ((1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3)

Ras Mohammed National Park ? see Annex E Map 3). This promotion of coordinated learning and supporting capacities is likely to accelerate the development of this sector and hence the protective ?value? of the AMR, by advising on the future creation of new business opportunities and associated employment opportunities for all. Furthermore, by modernizing the AMR and improving its operation, progress on enhancing marine biodiversity conservation in Aqaba, using modern and best practice techniques, will benefit the country?s economy in general that is in line with the current ASEZA Master Plan[1].

Last, but not least, the project will increase parity between women and men working within the boundaries of the AMR and beyond. Women will have a stronger say in marine biodiversity matters, and more women will benefit from capacity building and training measures and hence new employment opportunities within the reserve and collectively, an improved management model will help to support the sustainable development of growth potential of both private and public stakeholders within the confines of the reserve.

[1] JICA are seeking to fund a project for Updating ASEZ Master Plan into 2023 (status of this to be determined at the time of writing)

## 11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

### Overall Project/Program Risk Classification\*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Low		

#### Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The expected outcome of the project is that the Aqaba Marine Reserve (AMR) in Jordan has human resources, equipment and funding to fulfil its role as the custodian of the exceptional biodiversity values and consolidates the sustainable service delivery of its ecosystems. This is expected to be achieved by operationalizing key aspects of the AMR Management Plan (2021-2026) through targeted capacity building and training programmes; designing a roadmap and supporting the implementation of a Management Effectiveness Assessment process; preparing a AMR Operations and Procedures Manual including for ranger boat equipment maintenance and surveillance system; and initiating a Collaborative Learning Strategy ?

The project is expected to deliver environmental impacts that are very positive. None of the planned activities are expected to lead to adverse environmental impacts. Social impacts are expected to be overall positive as well ? among other reasons because the protection of the marine biodiversity is essential for tourism sector which is an important source of employment. However a few aspects have been identified that require some attention during project implementation.

Gender: The project context is characterized by cultural norms and traditions that, combined with early exit of women from labour force to start a family, have led to a low to very low participation rate in



income earning activities in the ASEZ region. While the project The lack of suitable job opportunities for women and the discrimination against female job applicants are other important factors contributing to the comparatively high unemployment rate of women. As a result, many young women stay at home without any professional occupation despite a frequently high level of education and the desire to work. These are contextual conditions and given limited size and scope of the project it cannot be expected that the project contributes to significant improvements of the employment situation. However, the project does seek to promote women's representation in participatory and decision-making processes and empowerment of women as part of the AMR Management Plan implementation strategy, among others by preparing a 'Gender Representation Guidelines' document for all participatory and decision-making bodies and capacity building measures of the project. As such it will contribute to improved capacity which might translate into positive but limited employment impacts. The project should seek opportunities in this respect.

Standard on Inv Resettlement and Access restrictions:

The project will strengthen the management effectiveness and the operation of the AMR and will provide capacity building for improving surveillance. As such it could potentially contribute to new restrictions or increased enforcement of existing restrictions, in particular vis a vis the small scale fishery sector. However, it needs to be emphasized that the AMR's land tenure follows the ASEZA master plan as all lands belong to ASEZA. As the AMR has already been formally recognized and respective laws/regulations are in place, the groups identified as potentially been affected by the restrictions (fishers, tourist operators) do not have formal rights to extract or use any natural resource within the boundaries of the AMR. This relates to the land (as defined in the Master Plan) being defined by core zones, each with legal rights to the respective area that includes natural resources therein. These zones are:

1. Coral Coastal Zone: It includes the AMR, starting from the Marine Sciences Station (MSS) extending south to the Royal Diving Club.
2. Coral Reserves: The Coral Reserves protect the coral reefs within the above defined Coral Coastal Zone. These reserves extend from a line 350 meters seaward from the Mean High Water Mark (MHW) to a line 50 meters inland from MHW.
3. Beach Protection Zone: The Beach Protection Zone (BPZ) limits development within an area 50 meters to 150 meters landward from the MHW. Examples of restricted development include natural landscaping and certain recreational facilities. These limits protect the natural environment, water quality, and health of the coral reefs.

The artisanal fishery sector based out of the Gulf of Aqaba is very small in size. It comprises of about 80 fishermen working on 60 boats, the majority of them (70%) working only part-time and have other income sources. Given the small size of the sector, the diversification of income resources and the fact that fishing is still permitted within the boundaries of the proposed AMR, issue relating to local fishing and community dependency on resource access and extraction are deemed low risk and manageable. In fact as supporting mechanism to the fishermen in response to the limited areas they have, the ASEZA

allows collection of live bait in the early morning hours and fishing in the pelagic water outside the boundaries of the marine park and 100m before the territorial water. Fishing in the northern parts of Aqaba is also allowed under conditions of keeping a distance from ship anchors, swimming and marine sports areas as well as security sensitive sites. The project is expected to contribute to the development of a sustainable fisheries management plan based on scientific research outputs and developed in in consultation with the local scientific community and local stakeholders (including fishermen).

Because social risks being considered small in scale and appropriately managed through the participatory stakeholder approach when developing the road map and resource management plans, the project is considered a low risk project.

#### **Supporting Documents**

Upload available ESS supporting documents.

<b>Title</b>	<b>Module</b>	<b>Submitted</b>
<b>GEF ID 10905 Annex H ESMS Screening Report</b>	<b>CEO Endorsement ESS</b>	
<b>ESMS Jordan Aqaba</b>	<b>Project PIF ESS</b>	

**ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).**

Overview

This IUCN GEF7 MSP is designed to complement existing donor funded projects being delivered for the Aqaba Marine Reserve (AMR), such as the EU funded *Enhance the Conservation of The Aqaba Marine Reserve by Improving Capacity for Effective Management?* project. Whilst complying with the GEF accepted PIF (2021), and ensuring that the GEF Core Focal area remains as *biodiversity?*, the project shall address a range of parallel outcomes and outputs, namely:

- a) operationalizing key aspects of the AMR Management Plan (2021-2026) through targeted capacity building and training programmes;
- b) designing a roadmap and supporting the implementation of a Management Effectiveness Assessment process that supports ongoing and future institutional monitoring, performance evaluation and surveillance systems;
- c) preparing a bespoke AMR Operations and Procedures Manual for future implementation that includes topics such as marine habitat rehabilitation, ranger boat equipment maintenance and surveillance system repairs;
- d) initiating a *Collaborative Learning Strategy?* with Ras Mohammed Marine Reserve to enable operational system improvements and capacity support needs to be made (based on lessons learned from established reserves in the region) as appropriate. Updates to existing marine reserve structures, systems and processes may then be proposed such as approaches to efficiently deliver marine biodiversity risk assessments etc.

Project Results Based Framework

<b>Title</b>	<b>?Supporting the Effective Operation and Performance Management of the Aqaba Marine Reserve, Jordan?</b>
<b>Project Outcome</b>	<b>AMR has the human resources, equipment and funding to fulfil its role as the custodian of the exceptional biodiversity values and consolidates the sustainable service delivery of its ecosystems, including tourism.</b>
<b>Compliance to SDGs</b>	<i>This project will contribute to the following Sustainable Development Goal (s):          Goal 5: Achieve gender equality and empower all women and girls          Goal 6: Ensure access to water and sanitation for all          Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all          Goal 11: Make cities inclusive, safe, resilient and sustainable          Goal 12: Ensure sustainable consumption and production patterns          Goal 13: Take urgent action to combat climate change and its impacts          Goal 14: Conserve and sustainably use the oceans, seas and marine resources          Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss</i>

<b>Objective</b>	<p><i>Enhance existing capacity development programmes with practical professional development in modern techniques of value to an international standard marine reserve.</i></p> <p><i>Develop a clear Road Map and Management Effectiveness Assessment system that aligns to the principles of the AMR Management Plan (2021-2026) and the strategic requirements of ASEZA.</i></p> <p><i>Support the delivery of tangible and effective operational and implementation tools (monitoring and reporting procedures, performance standards, manuals, boat equipment etc) to help guide AMR staffs day-to-day management in accordance to the expectations of national, regional and international marine biodiversity standards.</i></p> <p><i>Create a Communication, Outreach and Awareness programme that facilitates improved regional knowledge exchange on important approaches, systems, tools, and standards to better support the delivery of improved marine biodiversity at the local, national and regional level.</i></p>
<b>Objective Level Indicators</b>	<p><i>Enhanced capacity development programme manual produced and implemented.</i></p> <p><i>AMR Road Map and supporting Management Effectiveness Assessment system produced and implemented to support performance and surveillance monitoring needs of ASEZA.</i></p> <p><i>Production of an Operational and Implementation Manual that contains details on all templates/advisories/procedures/standards required to guide AMR staffs day-to-day management in accordance to national, regional and international marine biodiversity standards (including marine habitat rehabilitation procedures etc).</i></p> <p><i>Support the delivery of improved marine biodiversity at the Aqaba and Gulf of Aqaba level through a targeted communication, outreach and awareness programme.</i></p>

The following presents a revised structure for the Results Based Framework (RBF), using the updated PIF (2021).

<b>Expected Outcomes and Indicators</b>	<b>Project Baseline</b>	<b>End of Project Target</b>	<b>Expected Outputs, Indicators and Targets</b>
<b>Component 1: Strengthen management effectiveness, equity and operational capabilities of Aqaba Marine Reserve (AMR)</b>			

<p>1.1 AMR delivers ongoing successful conservation of its biodiversity and ecosystem service values, in a gender sensitive manner, through improved governance, capacity for effective operational management for conservation and nature-based tourism, sufficient equipment and sustained financing.</p>	<p>No Roadmap is in place despite the updated AMR Management Plan (2021-2026) being produced.  No Operational Manual is in place for AMR staff to refer to despite the updated AMR Management Plan (2021-2026) being produced.  No formal capacity development programme manual is produced despite Training Needs Assessments being produced (2021).  No formal Monitoring Programme on marine biodiversity reporting exists for Aqaba.  Ranger boats are absent of the necessary sampling and surveillance needs of an international standard marine reserve.  A formal training programme is not in place on modern management and surveillance systems.</p>	<p>At least 10 separate outputs (namely guidelines, manuals, studies, programmes and/or ?systems?) produced to support AMRMP (2021-2026) delivery.  At least 2 AMR boats upgraded to contain modern surveillance systems in line with the expectations of the AMRMP (2021-2026).  Over 50 individuals trained on new skillsets as defined by this Outcome.</p>	<p><u>AMR Roadmap</u> prepared to guide direction for the effective and efficient delivery of the AMR Management Plan (2021-2026).  <u>A Management Effectiveness System</u> is designed to help AMR staff to comply with agreed Key Performance Indicators (KPIs) and for ASEZA to adhere to with 6 monthly reporting procedures and protocols.  Production of a gender sensitive <u>Operational and Implementation Manual</u> to support the effective delivery of Activity 1.1.2. This shall focus on staff management needs along with producing guidelines to help with maintaining reserve management facilities and processes (including any support required for the AMR camera monitoring system in place).  <u>Undertake practical and targeted studies to support the adoption of international standards that will improve efficiency and effectiveness levels of the AMR.</u>  This includes completing Biodiversity Risk Assessments, AMR carrying capacity assessments (environmental ?load? studies) and socio-economic assessments of relevant income generating activities.  Preparation of a <u>capacity development programme manual</u> that is targeted at delivering the effective gender aware implementation of the AMR Management Plan (2021-2026) on topics including performance management related issues (as detailed within the Operational and Implementation Manual ? see Activity 1.1.3).  1.1.6 <u>Establish and implement a gender sensitive Monitoring Programme</u> to support the AMR Management Plan (2021-2026) that</p>
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			<p>drives forward the setting of future benchmark (evaluation) thresholds and that will feed into AMR management planning cycle by providing interpretable data on the status of major AMR biodiversity assets and ecosystem service values.</p> <p>1.1.7 <u>Purchasing and installing equipment needs for AMR ranger boats</u> including sampling, bathymetry, and other equipment as required to better implement required regulatory and surveillance needs of AMR rangers.</p> <p>1.1.8 <u>Deliver a Training Programme</u> (implementing Output 1.1.5). This focuses on providing training on procedural guidance on AMR procurement matters/H&amp;S etc) plus offering a training scheme target specifically at the needs to implement a system to monitor and control users and violations (Surveillance Systems) and marine biodiversity ?score card? monitoring and reporting systems that complement wider AMR M&amp;E reporting etc));</p>
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<p>1.2. Participatory approaches to equitable governance and effective management have strengthened the management effectiveness and improved equity of the AMR and reduced unsustainable resource use</p>	<p>Key documents and management plans exist though efforts to implement the actions identified in the plans require additional support and funding. No collaborative learning strategy is prepared with a regional Marine Reserve (or Park) to help AMR staff to learn from regional best practices. No communication, outreach and awareness programme is in existence that focuses specifically on providing support to improve the livelihoods of local communities, visitors and business operating within the AMR.</p>	<p>At least 1 NbS intervention measure is designed in detail for future implementation. At least 5 separate Terms of Reference are produced to support AMRMP (2021-2026) implementation. One Collaborative Learning Strategy is produced and endorsed (by all parties) with an established Regional Marine Reserve/Park. One participatory communication, outreach and awareness programme is produced.</p>	<p>1.2.1 Design and implementation of a gender sensitive and <u>participatory marine habitat rehabilitation programme</u> that embraces Nature based Solution (NbS) intervention measures (identifying 1 pilot area for future implementation) to help maximize the marine and coastal biodiversity potential of the AMR. This shall include improved engagement with local tourism actors (hotels, diving centers, tour operators) to better inculcate activities with biodiversity related objectives (linking to NbS global standards).</p> <p>1.2.2 Review, update or develop, in a participatory manner, a <u>series of gender sensitive Terms of Reference (ToR) for core activities to be funded to support AMR Management Plan implementation</u>. This may include (amongst others) ToRs designed to support the improvement of visitor activity management (based on carrying capacities); the creation and design of marine biodiversity information databases; the design of a Business and Marketing Plan to attract financing opportunities; the implementation of all relevant interventions proposed within the existing Aqaba Eco-tourism Plan (2014); update to and translate of the Aqaba Integrated Coastal Zone Management Plan (2016); and update to the Aqaba Sea Use Management Plan (2016).</p> <p>1.2.3 <u>Develop a gender aware Collaborative Learning Strategy</u> with a relevant internationally nominated marine reserve ((1) Abu Galum Managed Resource Protected Area; 2) Nabq Managed Resources Protected Area; and/or 3) Ras Mohammed</p>
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		<p>National Park, Egypt)) to help adopt key lessons learned to better improve regional knowledge exchange on important approaches, systems, tools, and standards. This shall include the administrative requirements needed to support ?job-swaps? between the two marine reserves to encourage expertise exchange of learned experiences to support regional marine biodiversity development.</p> <p>1.2.4. <u>Create a gender sensitive participatory communication, outreach and awareness programme</u> for improving livelihoods of the communities associated with the AMR plus to support AMR staff to better engage with local communities, visitors, the private sector and decision makers on matters relating to sustainable land and sea use practices taking place within the AMR.</p>
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[1] ?Gulf of Aqaba and Northern Red Sea Resilient Reefs Programme?

**ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).**

Sections in CEO Endorsement	GEF Sec Comments	Agency response
<p><b>Part I</b> ? Project Information Focal area elements</p> <p>1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Project description summary</p> <p>2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	



<p>3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?</p>	<p>2/15/2023</p> <p>NA.</p>	
<p>Co-financing</p> <p>4. Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?</p>	<p>4/13/2023</p> <p>Cleared</p> <p>2/15/2023</p> <p>Please fix the cofinancing table which is not aligned with the cofinancing letter. The Letter notes that all cofinance is in-kind and for recurrent expenditures and all from the Government.</p> <p>In addition, the letter is from the ?Recipient Country Government?, Government of Jordan and not the UNDP. Please correct the field below to reflect on the correct source of co-financing as ?government of Jordan? if this is the case, otherwise please provide a separate letter of evidence from UNDP if the source is the GEF agency.</p>	<p>11th April 2023</p> <p>This is noted and the changes have been made in the portal.</p>
<p>GEF Resource Availability</p> <p>5. Is the financing presented in Table D adequate and does the project demonstrate a cost-effective approach to meet the project objectives?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Project Preparation Grant</p> <p>6. Is the status and utilization of the PPG reported in Annex C in the document?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	

<p>Core indicators</p> <p>7. Are there changes/adjustments made in the core indicator targets indicated in Table E? Do they remain realistic?</p>	<p>4/13/2023</p> <p>We note that the footnote states: " <i>staff do not complete a separate World Bank annual MPA performance scorecard tool on an annual basis. This Score Card is designed to Assess Progress in Achieving Management Effectiveness Goals for Marine Protected Areas? (2004).</i></p> <p>Please use the score that you score as the baseline score as it is equivalent to the METT and will serve as a baseline measure for evaluation of the project going forward. Enter it into the portal and then in the portal explanation under the core indicators note the footnote above.</p> <p>2/15/2023</p> <p>Provide a METT score for the marine MPA.</p> <p>Indicator 5 is listed as zero for CEO endorsement. Is this correct? If there will be no hectare indicator please do not complete and do not enter zero.</p> <p>Embed the GEF core indicators in the project results framework as well.</p>	<p>14 April 2023</p> <p>This is well noted and updates have been made in the portal to include the World Bank scorecard score with associated explanation.</p> <p>11th April 2023</p> <p>1. Clarification text is offered in the Prodoc (p27) and the CEO Endorsement form (p?) regarding the fact that no METT score exists for the Aqaba Marine Park. The reason for the new project is to complete such a score in participatory manner. Reference is made in a footnote to the 2004 World Bank MPA Effectiveness Tool that AMR do use.</p> <p>2. please note that the Indicator 5 has not been filled out in the portal on the agency preparer side,</p>
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		<p>this must be something generated in the GEF portal. We hope this is no longer an issue.</p> <p>3. Annex A now has GEF core indicators (listed also in Annex F) embedded into the project results framework (word for word), namely:</p> <p>2.2. Marine protected areas under improved management effectiveness</p> <p>4.1. Area of landscapes under improved management to benefit biodiversity (hectares)</p> <p>11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p>
<p><b>Part II ? Project Justification</b></p> <p>1. Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	

2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?	2/15/2023 Yes, cleared.	
3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?	4/13/2023 Cleared. 2/15/2023 Please eliminate all references to potential GEF-8 projects in the Table under the project description and anywhere else it is presented in the text.	11th April 2023  All reference to GEF8 projects are deleted from the Project Document and the CEO Endorsement Form accordingly.
4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?	2/15/2023 Yes, cleared.	
5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?	2/15/2023 Yes, cleared.	
6. Is there further and better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?	2/15/2023 Yes, cleared.	
7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?	2/15/2023 Yes, cleared.	
Project Map and Coordinates  Is there an accurate and confirmed geo-referenced information where the project intervention will take place?	2/15/2023 Yes, cleared.	
Child Project  If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?	2/15/2023 Yes, cleared.	

<p>Stakeholders</p> <p>Does the project include detailed report on stakeholders engaged during the design phase? Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Gender Equality and Women's Empowerment</p> <p>Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?</p>	<p>4/13/2023</p> <p>Cleared.</p> <p>2/15/2023</p> <p>The project's gender action plan specifies among its objectives: "Increase the access to and control over diversified and important role of women in developing marine biodiversity by supporting improved access, use, and opportunity of women in the Aqaba Marine Reserve". As such, Agency is requested to select "Yes" to the item in the portal submission: "Closing gender gaps in access to and control over natural resources."</p>	<p>11th April 2023</p> <p>This is noted and has been adjusted in the GEF portal entry for submission.</p>
<p>Private Sector Engagement</p> <p>If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Risks to Achieving Project Objectives</p> <p>Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	

<p>Coordination</p> <p>Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Consistency with National Priorities</p> <p>Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Knowledge Management</p> <p>Is the proposed Knowledge Management Approach for the project adequately elaborated with a timeline and a set of deliverables?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Environmental and Social Safeguard (ESS)</p> <p>Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Monitoring and Evaluation</p> <p>Does the project include a budgeted M&amp;E Plan that monitors and measures results with indicators and targets?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	
<p>Benefits</p> <p>Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?</p>	<p>2/15/2023</p> <p>Yes, cleared.</p>	

<p>Annexes</p> <p>Are all the required annexes attached and adequately responded to?</p>	<p>4/13/2023</p> <p>Cleared.</p> <p>2/15/2023</p> <p>In the budget it allocates \$10,000 for Midterm evaluation, but in the text it says there will not be a midterm evaluation since the project is only two years long. In the budget it also notes the total cost for evaluation will be \$29,000 but the written text in the budget allocates \$10,000 for Midterm and \$20,000 for final evaluation. Please revise and allocate resources for a final evaluation only and with a correct amount.</p> <p>A Chief Technical Advisor (CTA) is being charged across components. Per Guidelines, the costs associated with the project's execution have to be covered by the GEF portion (and the co-financing portion) allocated to PMC. This item alone represents 36% of the overall project budget. When the situation merits (i.e. not enough co-financing funds), the project's staff could be charged to the project's components with clear Terms of Reference describing unique outputs linked to the respective component? (paragraph 4 ? page 42 of the Guidelines). Please charge this item to the PMC (both GEF resources and co-financing) or provide clear ToRs showing outputs to the components.</p>	<p>11th April 2023</p> <p>Text updated to delete reference to the need for a MTR. (see p55 of the Project Document).</p> <p>Budgets are also updated (US\$29,000 for the TE plus US\$1000 for any document translation totalling US\$30k. Working in Annex K to align to this change.</p> <p>Regarding the CTA issue, separate ToRs for the CTA and other supporting consultants have been produced and included as a new Annex Q.</p>
<p>Project Results Framework</p>	<p>4/13/2023</p> <p>Cleared.</p> <p>2/15/2023</p> <p>Please embed the GEF core indicators in the project results framework.</p>	<p>11th April 2023</p> <p>Annex A and the Prodoc are updated to embrace the 2 relevant GEF Core Indicators.</p>

GEF Secretariat comments	2/15/2023 NA.	
Council comments	2/15/2023 NA.	
STAP comments	2/15/2023 NA.	
Convention Secretariat comments	2/15/2023 NA.	
Other Agencies comments	2/15/2023 NA.	
CSOs comments	2/15/2023 NA.	
Status of PPG utilization	2/15/2023 Yes, cleared	
Project maps and coordinates	2/15/2023 Yes, cleared	
Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)		
Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)		



Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)		
GEFSEC DECISION RECOMMENDATION	4/23/2023	
Is CEO endorsement recommended? (applies only to projects and child projects)	No. Please address the issue related to the MPA assessment noted above, make the revisions, and resubmit.  2/15/2023  No. Please revise per above and resubmit.	

**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).  
(Provide detailed funding amount of the PPG activities financing status  
in the table below:**

PPG Grant Approved at PIF: \$25,000 (Excluding Agency fee of US\$2,250)			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Consultant contract fees	25,000	5,000	20,000
<b>Total</b>	<b><u>25,000</u></b>	5,000	<b>20,000</b>

**ANNEX D: Project Map(s) and Coordinates**

**Please attach the geographical location of the project area, if possible.**

See previous sections in submission.

**ANNEX E: Project Budget Table**

**Please attach a project budget table.**

Expenditure Category	Detailed Description	Component 1		Sub-Total	M&E	PMC	Total (USD.)
		Outcome 1.1	Outcome 1.2				
<b>Goods</b>	72800 Computers and software (IT equipment for electronic library - Activity 1.2.3)					2,000	2,000
	73400 Rental & Maint of Other Equip: vehicle fuel (\$50/wk*52 weeks*1vehicle*2yrs)					5,200	5,200
	72200 Equipment: Equipment related to surveillance boats (etc.)	10,022	10,022				20,044
	72200 Supplies (supplies, communications, maintenance of IT equipment - CCTV, cameras, GPS and ranger gear)					500	500
<b>International Consultants</b>	71200 International Consultant: Chief Technical Advisor (CTA) (3 days/wk*2 years = 300 days (spanning 24 months @US\$800/day)	120,000	120,000				240,000
	71200 International Consultant: Operational and Implementation Manual Writer (Activity 1.1.3) – 75 days@US\$750/day	56,250					56,250
	71200 International Consultant: Marine Science Consultant (Activity 1.1.4 and 1.2.2) – 50 days@US\$750/day	20,000	17,500				37,500
	71200 International Consultant: Nature based Solutions Specialist (Activity 1.2.1) – 50 days@US\$750/day		37,500				37,500
	71200 International Consultants: Terminal Evaluation (\$29,000) (100% 1kM&E)				29,000		29,000
<b>Local Consultants</b>	71300 Local short-term consultants: Operational and Implementation Manual Support (Activity 1.1.3) – 55 days@US\$550/day	30,250					30,250
	71300 Local short-term consultants: Marine Science Support Consultant (Activity 1.1.4 and 1.2.2) – 60 days@US\$550/day	16,500	16,500				33,000
	71300 Local short-term consultants: National Institutional Capacity Consultant (Activity 1.1.5) - 60 days@US\$550/day	33,000					33,000
	71300 Local short-term consultants: National Institutional Development Consultant (NIDC) - 60 days@US\$550/day	16,500	16,500				33,000
	71300 Local short-term consultants: National Training Expert (Activity 1.1.8) – 45 days@US\$550/day	24,750					24,750

	National Outreach and Awareness Consultant (Activity 1.2.4) – 50 days@US\$550/day						27,500	27,500
<b>Salary and benefits / Staff costs</b>	JREDS Project Manager (part salary costs)						36,437	36,437
<b>Trainings, Workshops, Meetings</b>	75700 Workshops and Meetings (Support to the start-up of the Green Fins Project in Activities 1.1.2 and 1.2.4)						942	942
<b>Travel</b>	71600 Travel: Travel Costs to Egypt (Collaborative Learning Strategy – Twining Activity 1.2.3)						4,200	4,200
	71600 Travel: Travel Costs for staff to attend the Regional Stakeholder Forum in Aqaba (20 person nights for staff from Egypt to stay in Aqaba).						3,000	3,000
<b>Other Operating Costs</b>	74100 Professional services: M&E: Translation of TE to Arabic \$5,000) (100% M&E)					1,000		1,000
	74100 Professional services: auditing costs						8,000	8,000
<b>Grand Total</b>		<b>327,272</b>	<b>245,522</b>	<b>572,794</b>	<b>30,000</b>		<b>60,279</b>	<b>663,073</b>

#### **ANNEX F: (For NGI only) Termsheet**

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

#### **ANNEX G: (For NGI only) Reflows**

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencies is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

#### **ANNEX H: (For NGI only) Agency Capacity to generate reflows**

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).