



Project Identification Form (PIF) entry – Full Sized Project – GEF - 8

An Inclusive Approach for Harnessing Marine Ecosystem Services and Transforming to Sustainable Blue Economy in the Red Sea and Gulf of Aden (HESBERSGA)

General Project information

Project Title:	An Inclusive Approach for Harnessing Marine Ecosystem Services and Transforming to Sustainable Blue Economy in the Red Sea and Gulf of Aden (HESBERSGA)		
Region:	Regional	GEF Project ID:	11050
Country(ies):	Regional, Djibouti, Egypt, Jordan, Somalia, Sudan, Yemen	Type of Project:	FSP
GEF Agency(ies):	UNEP	GEF Agency ID:	
Executing Partner:	PERSGA	Executing Partner Type:	Government
GEF Focal Area (s):	International Waters	Submission Date :	10/21/2022
Project Sector (CCM Only):			

Taxonomy:	International Waters, Focal Areas, Coastal, Transboundary Diagnostic Analysis and Strategic Action Plan Preparation, Ship, Learning, Plastics, Pollution, Nutrient pollution from all sectors except wastewater, Nutrient pollution from Wastewater, Marine Protected Area, Strategic Action Plan Implementation, Biomes, Coral Reefs, Mangrove, Seagrasses, Large Marine Ecosystems, Acquaculture, Fisheries, Climate Change, Climate Change Adaptation, Least Developed Countries, Disaster risk management, Ecosystem-based Adaptation, Mainstreaming adaptation, Private sector, Complementarity, Climate information, Livelihoods, Climate resilience, Community-based adaptation, Sea-level rise, Influencing models, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Stakeholders, Type of Engagement, Partnership, Consultation, Participation, Information Dissemination, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Communications, Education, Awareness Raising, Behavior change, Public Campaigns, Private Sector, Financial intermediaries and market facilitators, Capital providers, Large corporations, SMEs, Individuals/Entrepreneurs, Beneficiaries, Local Communities, Gender Mainstreaming, Gender Equality, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Access and control over natural resources, Participation and leadership, Access to benefits and services, Knowledge Generation and Exchange, Capacity Development, Capacity, Knowledge and Research, Innovation, Knowledge Exchange, Theory of change, Indicators to measure change, Adaptive management, Enabling Activities, Knowledge Generation		
Type of Trust Fund:	GET	Project Duration (Months):	48
GEF Project Grant: (a)	7,350,000.00	GEF Project Non-Grant: (b)	0.00
Agency Fee(s) Grant: (c)	698,250.00	Agency Fee(s) Non-Grant (d)	0.00
Total GEF Financing: (a+b+c+d)	8,048,250.00	Total Co-financing:	55,000,000.00
PPG Amount: (e)	200,000.00	PPG Agency Fee(s): (f)	19,000.00
PPG total amount: (e+f)	219,000.00		
Total GEF Resources: (a+b+c+d+e+f)	8,267,250.00		
Project Tags:	CBIT: No NGI: No SGP: No Innovation: No		

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”. (max. 250 words, approximately 1/2 page)

The RSGA region is continuously exposed to trans-boundary ecological and anthropogenic stress. Each country's individual development policies or lack of enforcement of its regulations impacts another's resources. It is essential countries build the capacity to coordinate and work together to protect fragile marine and coastal environmental resources. Countries have prepared TDA and adopted SAP, which have led their efforts during the last 20 years. However, there is a need to reassess the ecological, economic, sociocultural and governance situation as well as analyse the emerging issues to update TDA and SAP and create an instrument to guide regional efforts into the future. The proposed HEBSBERGA project represents an opportunity for the region to establish a new vision in designing a sustainable socio-economic growth model that is linked to the building and conservation of “blue natural capital.” More specifically the project aims to harness coastal and marine ecosystem services and to transform its current coastal economic development into a SBE. Its main goal is to strengthen management of RSGA ecosystems and support governance reforms to improve delivery of marine and coastal ecosystem services by accelerating efforts towards achieving SDG14 through transformation to Sustainable Blue Economy (SBE). The project will build on the revised TDA and SAP to implement new important principles, such as building circularity in blue economy sectors, implementing governance reforms, enhancing visibility, engaging regional partners, building capacity and developing models adapted to the regional needs. Involving a complex set of issues and conditions, the enabling transformational interventions will aim at overcoming current constraints and challenges, such as those related to fitting strategies, policies, capacities and access to technology adapting to new developments, and satisfying the evolving needs for effective governance to address environmental concerns, which influence the productivity and sustainability of existing and envisioned SBE investments that rely on and affect marine ecosystem services.

Project Objective

The relatively healthy state of some marine habitats in the Red Sea represents an abundant “blue natural capital” resource for the region. The term “blue natural capital” defines the three marine ecosystems (coral reefs, mangroves, and seagrass beds) in terms of the ecosystem services that result from their functional integrity. Hence, preserving current states and restoring natural ecosystems represents an investment in blue natural capital. This investment directly supports climate change adaptation and mitigation efforts while simultaneously creating sustainable and resilient marine ecosystems that are the foundation of a sustainable blue economic model. This model fosters development of several economic sectors that directly and indirectly benefit from marine resources, such as tourism, fishing, aquaculture, and offshore oil and gas, and less obvious benefactors, such as service providers in engineering and consulting. Additionally, when sustainable development actions are implemented in consideration of local stakeholders, communities and culture, they can have significant social benefits. Therefore, a Sustainable Blue Economy seeks to promote economic growth and social development while ensuring the environmental sustainability of the oceans and seas. New economic development and investment opportunities under the “blue economy” aim for socio-economic growth that does not

degrade the natural environment but instead depends on its continued health in order to thrive. Blue growth depends on ensuring the preservation and continued investment in blue natural capital, which, in turn, leads to continued economic growth. Hence, the HEBSBERGA project represents an opportunity for the region to establish a new vision in designing a sustainable socio-economic growth model that is linked to the building and conservation of “blue natural capital.”

Conserving and developing the RSGA's valuable habitats offers windows of opportunities to position the region as a global investment hub and a potential leader of sustainable development. An important factor among all the action steps is that the development and allocation of marine and coastal spaces and resources should not lead to erosion of opportunities and rights of communities. Therefore, the proposed project aims to harness coastal and marine ecosystem services and to transform its current coastal economic development into a Sustainable Blue Economy are fully justified. Its main goal to ***strengthen management of Red Sea and Gulf of Aden ecosystems and support governance reforms to improve delivery of marine and coastal ecosystem services by accelerating efforts towards achieving SDG14 through transformation to Sustainable Blue Economy***, is fully commensurate with the above aims

Indicative Project Overview

Project Objective

To strengthen management of Red Sea and Gulf of Aden ecosystems and support governance reforms to improve delivery of marine and coastal ecosystem services by accelerating efforts towards achieving SDG14 through transformation to Sustainable Blue Economy

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
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Component 1: Update of TDA and SAP to integrate new emerging issues and identify new priorities	Technical Assistance	Outcome 1.1: PERSGA member states adopt coordinated management measures and long- term actions through revision and update of the TDA and SAP to improve marine governance in the RSGA region	Output 1.1.1: Based on the analysis of the ecological, economic, sociocultural and governance situation, Transboundary Diagnostic Analysis (TDA) is updated, including mapping and economic valuation of ecosystems services, benefitting from a scientific assessment of opportunities and barriers utilising the existing and new knowledge on shared threats in the RSGA transboundary ecosystem	GET	1,000,000.00	6,000,000.00
			Output 1.1.2: Priority emerging issues, such as circularity, SDGs, climate change, gender mainstreaming, Sustainable Blue Economy (SBE), as well as hot spot priorities in NAPs and capacity building needs identified, to inform the Strategic Action Programme process			
			Output 1.1.3: Strategic Action Programme (SAP) is updated, defining the management measures and associated priority and long-term actions focused on the transition towards Sustainable Blue Economy signed by at least one relevant minister per country in RSGA countries and endorsed by other relevant partners			
Component 2:	Technical			GET	2,250,000.00	10,000,000.00

Harnessing ecosystem services in participating countries to support Sustainable Blue Economy

Assistance

Outcome 2.1: Enhanced frameworks and national action plans for conservation, restoration, and building resilience of key coastal ecosystems (coral reefs, seagrass and mangroves) that provide ecosystem goods and services for Sustainable Blue Economy investments

Output 2.1.1: Assessment of readiness for SBE at national level, including ecosystem services assessment and valuation, through examination of broader national ecological, economic, sociocultural and governance aspects and identification of SBE transition pathways and enabling environment for implementation

Output 2.1.2: Development of sectoral/cross-sectoral measures to inform integrated SBE policy and transition planning ensuring policy coherence, including design of pollution reduction measures, compensation and payback policies, business investments, nature protection, etc

Output 2.1.3: Plans developed to extend MPAs coverage and management effectiveness and enhance their resilience

Output 2.1.4: Application of ICZM and MSP, including establishment of the monitoring system, and climate adaptation measures

Output 2.1.5: Integration of coastal ecosystem services in national accounting systems

Output 2.1.6: National intersectoral coordination mechanisms for consistent planning and implementation of SBE principles put in place

Component 3: Support to the Sustainable Blue Economy transition by creating financial incentives and building enabling environment for investments	Technical Assistance	Outcome 3.1: Public and private sector partnerships in Sustainable Blue Economy mobilised, financial instruments developed, and capacities built to manage them successfully	Output 3.1.1: Incentives to stimulate investment in SBE projects, pollution reduction, recycling, circular economy, blue investments, development of ICZM and MSP, expansion of MPAs, etc. developed and tested Output 3.1.2: Strengthened capacities in innovative financing, principles, standards, green investments in SBE to relevant stakeholders, and demo partnership subprojects	GET	3,050,000.00	30,000,000.00
Component 4: Knowledge management for Sustainable Blue Economy, Communication and Monitoring & Evaluation	Technical Assistance	Outcome 4.1: PERSGA enabled with improved information (lessons and benefits of the project) to assist countries to sustain and replicate actions	Output 4.1.1: Collection, sharing and use of reliable knowledge on SBE, ICZM, MSP, MPAs in the region Output 4.1.2: Strengthened capacities for knowledge management in relation to SBE, ICZM, MSP and MPA, and monitoring Knowledge Management performance	GET	700,000.00	3,000,000.00

Outcome 4.2: Increased visibility and awareness raising on Sustainable Blue Economy	Output 4.2.1: Institutional R & D services to SBE policy planning, and public and private investments promoted
	Output 4.2.2: Communication and Outreach Programme for awareness raising developed and implemented
	Output 4.2.3: Web site developed and project integrates IW:LEARN activities including at international fora to contribute to knowledge sharing and lessons learned in the RSGA region and for all Regional Seas network
	Output 4.3.1: Timely Project Monitoring and Evaluation (M&E) to inform adaptive management for successful delivery of project results implemented

Outcome 4.3: Effective
Monitoring and
Evaluation of project
outcomes and outputs

Monitoring and Evaluation (M&E)

Sub Total (\$)	7,000,000.00	49,000,000.00
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Project Management Cost (PMC)

GET	350,000.00	6,000,000.00
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Sub Total(\$)	350,000.00	6,000,000.00
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Total Project Cost(\$)	7,350,000.00	55,000,000.00
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Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate

change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Global Environmental Problem

The Red Sea and Gulf of Aden (RSGA) region is dominated by an arid coastal zone with minimal freshwater resulting in tropical clear waters that support vibrant coral reefs and associated communities. Due to the variety of topographic features noted above, the region has a high diversity of coastal-marine ecosystems, as well as many endemic species. There are protected shallows, exposed sandy and rocky shorelines, extensive mangroves, seagrass and macro-algal beds. The diversity of corals, many of which are found only in the Red Sea, may be greater than anywhere else in the Indian Ocean. More than 1,300 species of fish have been recorded from the Red Sea, thought to be higher than any other semi-enclosed sea.

The Red Sea itself is a semi-enclosed sea with relatively limited nutrient inputs either from the land or from water exchange with the Indian Ocean (Figure 1). Vertical mixing is also somewhat limited. The waters of the Red Sea are consequently relatively nutrient poor. The Gulf of Aden is subject to a seasonal upwelling caused by the Somali current which increases local rainfall, nutrient inputs, and ecological production. The Red Sea and Gulf of Aden region is inhabited by 235 million persons. This population is projected to reach over 380 million people in 2030.



Figure 1: Red Sea and the Gulf of Aden

As a region, the littoral countries of the RSGA share deep historical, cultural, and linguistic ties, but individually the countries are at very different stages of development. Faced with different sets of political, social and economic challenges, and exhibiting varying levels of institutional capacity, concerted regional action has traditionally been lacking. Yemen being a low-income country has a yearly gross domestic product (GDP) per capita of US\$1,106, while Djibouti, Egypt, and Sudan are lower-middle income countries (US\$1,927-2,898), Jordan an upper-income country (US\$4,129), and Saudi Arabia a high-income country (US\$20,849).

Figure 1: Red Sea and the Gulf of Aden

The RSGA region is globally known for the uniqueness of its coastal and marine biodiversity, including its contribution to the fishery sector and its economic, historical, and social value to the wider region. Its ecosystems support a rich biological diversity with a high proportion of endemic species that also includes many important fish species, with number of World Heritage Sites including Socotra Archipelago, Dugonab Bay, and Senganeeb Atoll. The Red Sea has been identified as a potential climate refuge for coral reefs, because of the relatively higher resilience of its corals compared to other parts of the world and RSGA also supports extensive seagrass beds and mangroves, which are critical fish breeding and feeding grounds. The Gulf of Aden has levels of biological productivity that are amongst the highest in the world.

The marine resources of the Red Sea and Gulf of Aden (RSGA) have provided prosperity for the region for centuries but are threatened by recent developments. A traditional and essential source of food, trade, and livelihoods, the marine resources of the RSGA are facing many new threats. From over-exploitation of species, destruction of spawning, nursery and feeding grounds, pollution, improper resource management, and weak governance, the living marine environment is being depleted with significant loss of biodiversity as a consequence.

Mangrove, seagrass, and coral reef ecosystems are all interconnected, depending on and facilitating one another's healthy existence.[1] Most recently, these marine ecosystems of the Red Sea have been shown to also provide thermal refugia for coastal ectotherm animals, whereby the photosynthetic activity, enhanced by increased temperatures, favors seawater oxygen supersaturation that fuels the peak oxygen demand of animals, thus protecting the fauna during the summer thermal stress.[2]

The Red Sea and Gulf of Aden region is continuously exposed to trans-boundary ecological and anthropogenic stress. Each country's individual development policies or lack of enforcement of its regulations can impact another's resources. It is therefore 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.

Development, aquaculture, and associated increasing pollution across the coast pose immediate threats to these ecosystems' health, not only through land use and destruction but also through changes in the topography of the coast.[3] In addition, consequences of climate change (such as sea-level rise, temperature increase, higher frequency of storms, and changes in ocean currents) present equal if not greater threats to these vegetated marine habitats.[4] Loss of mangroves and seagrasses leads to the subsequent loss of ecosystem services, including current and future carbon and pollutant sequestration capacity, as well as the release of previously sequestered carbon and pollutants through oxygenation and remobilization of sediments.[5].[6]

The cumulative impacts of anthropogenic activities are increasingly affecting the oceans. As growing demand and technological advances allow the exploitation of even more - and new - marine resources, oceans are being recognized as a new frontier for economic development. The rush of public and private sectors to harness this potential exacerbates the risks on marine ecosystems, on economies, and on people who depend upon them. According to the OECD,[7] the global ocean economy, measured in terms of the ocean-based industries' contribution to economic output and employment, was valued in 2010 at US\$1.5 trillion, or approximately 2.5 percent of world gross value added (GVA). The OECD report does not include valuation of the full range of ecosystem services provided by oceans. A report by WWF, in collaboration with business consultancy the Boston Consulting Group,[8] estimates that the economic value of coastal and oceanic environments is conservatively US\$2.5 trillion per year, more than 65% larger than the ocean-based industry economic value estimated by OECD above. The WWF report further states that the overall value of the ocean as an asset is 10 times \$2.5 trillion, or \$25 trillion.

Economic activity in the ocean, as well as in adjacent coastal areas, is expanding rapidly, driven primarily by global population growth, general economic growth, increasing globalization of trade, and rising income levels across the world. Looking to 2030, the OECD[9] predicts that many ocean-based industries have the potential to out-perform the growth of the global economy as a whole, both in terms of value added and employment. The projections suggest that between 2010 and 2030 under a 'business-as-usual' scenario, the global ocean economy could more than double its contribution to global Gross Value Added (GVA), reaching over US\$3 trillion. Particularly strong growth is projected in marine aquaculture, offshore wind, fish processing, and shipbuilding and repair. Ocean industries also have the potential to make an important contribution to employment growth. In 2030, ocean industries are anticipated to employ approximately 40 million full-time equivalent jobs in the business-as-usual scenario. However, an important constraint on the development of the blue economy is the current deterioration of ocean health, and the lack of ecological sustainability in many of the ocean industries themselves. This may ultimately constrain their growth and cause their decline, or even their collapse in some areas, as natural carrying capacity limits are exceeded. The current situation in the RSGA region is affecting a number of coastal and marine economic sectors.

Coastal and Marine Tourism: The Red Sea region has become one of the world's premier tourism destinations, owing in large part to the region's unique and prosperous coral reefs. In PERSGA member states where tourism has substantially grown to be a major sector of the economy, e.g. Egypt and Jordan, coastal tourism represents a significant component. For example, according to the statistics of the Ministry of Tourism and Central Bank of Egypt, the tourism sector accounts for 12% of the GDP, and considered as a major employer in the country engaging a workforce of 1.25 million, while around 65% of the sector rely on coastal tourism. In 2018/2019 fiscal year, tourism revenues in Egypt reached 12.57 billion dollars. In Jordan, tourism revenues reached 6.86 billion USD in 2019, accounting for 15.42% of the gross national product, while coastal tourism based in Aqaba represents one of the most significant components of the sector in the country. For the remaining PERSGA member states, coastal and marine tourism development based on the Red Sea and Gulf of Aden is taking accelerating steps and gaining importance in the economic investment plans. Coastal ecotourism is considered underexploited in the central and southern parts of the region, where greater potential is endowed by prosperous coral reefs and pristine habitats of extensive coasts and archipelagoes.

Coastal and marine tourism is seen as providing justifiable option by the RSGA states, chiefly as non-extractive industry with perhaps better economic benefits compared to consumptive use of marine resources, given its comparative advantage for the region. However, it is recognized that unless sustainably managed, tourism development can increasingly come into conflict with protection and conservation of the coastal and marine environment, while the tourism industry mainly depends on the quality of the ecosystem health as main attraction for the business success and viability. In the context of the inclusive SBE approach, the RSGA coastal tourism sectors need to develop and maintain high management standards farmed by sound policies that apply sustainability principles, e.g. carrying capacity EBM principles, BEPs, etc., requiring effective partnerships, stakeholders and community driven processes for effective implementation and monitoring, along with active regional platform for coordination of policies, guidelines and sharing knowledge and expertise.

Marine Fisheries: Marine capture fisheries of the Red Sea and Gulf of Aden produce annual revenues that exceed 300 million US\$. The sector employs over 100,000 registered fishers, supporting more than 500,000 of their dependents, and providing jobs to many others working in related labor, such as deck handling, processing, transport, trade on ice, other supplies such as fishing gears, and fish products. Yet, declining and fluctuating trends are reported for several fisheries in the region, which stress the sector role and sustainability, and impede its role foreseen in the blue economy visions of the PERSGA member states. PERSGA SOMER report[1] concluded that fisheries in the RSGA have continued to drop between 2008 and 2018, particularly in terms of catch per unit effort. This decline is mainly linked to degradation and destruction of the key coastal habitats, which has been caused mainly by coastal development, creating demand for homes, roads and other infrastructure; marine pollution, including nutrient runoff and oil spills; climate change, causing ocean acidification and extreme weather events; and overfishing.

[1] PERSGA (2020). State of the Marine Environment Report for the Red Sea and Gulf of Aden (SOMERSGA II). PERSGA, Jeddah, KSA

Other Blue Economy sectors: The rich mineral resources of the region also support significant economic activities (oil and gas, freshwater generation, and mineral extraction), which are expected to grow due to increasing regional and international demands. In addition, the strategic location of the Red Sea, as a major route linking international shipping through Suez Canal and Bab-el-Mandeb, induces continual growth in maritime and port industry in the region.

The RSGA region possess good potential for renewable wind, wave and solar energy, based in coastal areas. Preliminary studies by KAUST (2016) suggested that the mountain ranges bordering the Red Sea cause it to act like a virtual wind channel, with winds moving along its long axis. Such studies could identify regions of high wind and **wave energy** potentials in the Red Sea, especially at northern and central parts, and recommended further site studies to enable harvesting. Despite the low energy generation potential of enclosed seas, energy converter devices set up in these areas are less exposed to severe climate conditions, making them easier to maintain. Furthermore, the coastal areas in the region are amongst the highest in the world in solar radiation rates and potential for solar energy as perfect solutions.

The genetic resources and biodiversity of the Red Sea is rich, diverse and particularly unique to the region, and due to the extreme factors (e.g. temperature, salinity) characterizing the Red Sea, the potential and prospects for marine biotechnology products is considered high. The Red Sea region has also deep cultural heritage with rich indigenous knowledge of coastal fishing communities on traditional uses of pharmaceutical, cosmetic and other uses of marine products, which need to be carefully surveyed and researched. PERSGA countries could have significant benefits from opportunities of marine biotechnology investments that sustainably deliver considerable wealth and business opportunities to local economies through the development of a wide range of applications such as food industry, environment conservation (e.g. resilient coral species), energy, pharmaceuticals, cosmetics, etc. However, this will require addressing several challenges regarding governance, policy and capacities to tackle issues of biosafety, accessing resource, intellectual property rights, ethical and benefit sharing matters associated with marine biotechnology business. Other requirements may include to encouraging consistent research into various levels of exploring potential products, resource viability, socio-economic and marketing aspects, etc. to enable development of consistent business models. Strategic partnerships also need to be stimulated between relevant government agencies, private sector and marine biotechnology research institutes at national and regional levels.

Root causes

The root causes of the environmental pressures and impacts on ocean health and ocean wealth for the RSGA Region originate from both outside and within the region depending on the environmental issue or resource being considered. The following are identified as the main root causes:

- Unsustainable fisheries: Overexploitation of marine fisheries is a major global issue and often a key driver of change in the marine environment. Capture fishery, as a traditional economic activity, remains a main source of food and income for coastal communities in the region. However, stocks of several economically important fish species are fluctuating mainly due to degradation of their essential coastal habitats. Other significant issues are: habitat destruction; illegal, unreported and unregulated (IUU) fisheries; navigation risks and threats of hydrocarbon spills; pollution from urban, industrial and tourism hotspots; illegal disposal of pollutants by transiting vessels and the impacts of climate change to the long-term stability of these waters.
- Unregulated coastal development: Marine Ecosystems are already severely deteriorating and are further threatened by increasing population pressure and large coastal development. Anthropogenic impacts, such as uncontrolled urbanization and coastal development, but also other uses such as those posed by marine resource exploitation (e.g., oil and natural gas extraction or deep-sea mining) might cause as of yet unknown impacts to a part of the Red Sea ecosystem that is least well understood. RSGA region is experiencing a lag between the rapid pace of coastal development and the introduction of effective environmental management. Thus, for example, hard corals of the Red Sea have evolved in very stable environmental conditions and are, consequently, highly vulnerable to pollution from coastal development and the elevated sea water temperatures and ocean acidification resulting from climate change.[11]
- Climate change: RSGA region is at a risk of climate impacts like increasing temperatures, sea level rise, coastal erosion, salt-water intrusion, and increased frequency of extreme weather events. These impacts are exacerbated by their low-lying geographies. In particular, sea level rise is predicted to result in coastal inundation, habitat loss, and coastal flooding jeopardizing livelihoods of coastal communities. In addition, ocean acidification, resulting from anthropogenic climate change, is projected to become a significant environmental stressor in regional marine system. Climate change is putting pressure on living marine resources with a lag in the delivery of the social, economic and environmental infrastructure needed to manage these pressures. There is ongoing and potentially irreversible damage to certain living marine resources, most particularly to coral reefs and associated fisheries, and increased risk to human wellbeing, from this lag. Negative climate change impacts are projected to be both incremental and of increasing frequency in the coming decades, if no actions will be taken.

Barriers preventing effective management

- Outdated Strategic Action Programme, which has not integrated emerging issues and relevant long-term actions;
- Limited institutional and organisational capacities for coastal and marine management at national levels;
- Institutional and sectoral fragmentation and insufficient intersectoral coordination;
- Lack of technical capacity to perform national Blue Economy stock take assessments (status, trends, marine resource valuation, etc.) needed to inform policy formulation and to develop and implement integrated strategies;
- Limited capacity to develop projects for financing, and limited domestic private sector capacity to attract investment into blue economy sectors;
- Limited access to, and exchange of, ocean knowledge and innovative technologies and associated ocean-based economic opportunities.

The project aims to address the root causes and barriers to accelerate an inclusive Sustainable Blue Economy transformation in RSGA region as to turn their most pressing challenges into development opportunities. This requires improving existing Blue Economy sectors, identifying and pilot-testing new activities that can foster diversification while consolidating the Blue Economy enabling environment.

Baseline Scenario

In the baseline scenario, a range of policy, legal and technical measures, and financial investments, are being undertaken by key partners and institutions to support the sustainable and effective management of RSGA. The Regional Organization for Conservation of the Marine Environment of the Red Sea and Gulf of Aden (PERSGA) is a well-established intergovernmental organization that runs regional programs and projects since 1995. PERSGA was initiated in 1974 in collaboration with the Arab League Educational, Cultural and Scientific Organization and with the support of United Nations Environment Programme as one of its Regional Seas Programs. In 1982 the Program was underpinned by signing the Jeddah Convention, formally titled "Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment". The Jeddah Convention expresses the commitment and the political will of the countries of the region to tackle the challenges in the marine and coastal environments of the RSGA through joint and coordinated efforts. The provisions of the Jeddah Convention aim at protection of coastal and marine environment from pollution and the rational management of living marine resources including fisheries. They came synchronized with the Articles of the United Nations Convention on the Law of Seas (1982), where Article 123 of this Convention called for cooperation among coastal countries, and to coordinate their efforts regarding rights and duties concerning marine environment and its uses. In accordance with Article III of the Jeddah Convention, the PERSGA was established in 1995.

Protection of the RSGA environments from pollution, and the rational management of their living natural resources are the focal objectives of the PERSGA mission and work. It is an intergovernmental organization governed by a council of ministers responsible for environmental affairs in the seven PERSGA member states. The Ministerial Council meets every two years to approve technical and financial policies. While fisheries have been part of the mandate of PERSGA, the Protocol concerning Cooperation in Management of Fisheries and Mariculture in the Red Sea and Gulf of Aden (referred as Regional Fisheries Protocol hereafter) has been updated in consultation with the member countries and its signing and ratification are yet to take place. There is currently no regional fisheries management organization or fishery commission covering the RSGA. However, the 28th session of the Committee on Fisheries held in March 2009, subsequently endorsed by the 30th FAO regional conference for the near East and North Africa (2010), proposed the establishment of the Red Sea and Gulf of Aden Aquaculture and Fisheries Organization (RAAFO). The proposed organisation should be a platform to achieve greater synergy between fisheries relevant initiatives and projects in the region, including the proposed project.

However, while there has been significant progress in protection and utilisation of the RSGA region's marine and coastal resources, in particular through PERSGA's activities, current levels of engagement and investments are not sufficient to secure the long-term and efficient management of the coastal and marine areas and in particular the transformation of current coastal and marine economic practices towards a more sustainable blue economy in the region. While coral reef ecosystems are currently experiencing rapid decline on a global scale, those in the Red Sea appear to be in relatively better shape. That said, they are certainly not immune to the stressors that cause degradation, such as increasing ocean temperature, acidification and pollution. In many regions, ecosystems are already severely deteriorating and are further threatened by increasing population pressure and large coastal development projects. If no action will be taken, degradation of these marine habitats will lead to environmental costs, as well as significant economic losses. Therefore, it will result in a missed opportunity for the bordering countries to develop a sustainable blue economy and integrate innovative nature-based solutions.

Baseline Projects

Implementation of the Sustainable Blue Economy (SBE) requires a strong enabling environment of science-based knowledge, innovative finance, nature-based solutions and strategic ocean governance. In this context, UNEP brings to the project a series of relevant science products providing e.g. information on [status and trends for mangrove ecosystems](#) or the impact of [wastewater pollution on coral reef](#) and [relevant policy briefs](#). UNEP also plays a pioneering role in: (a)

operationalizing practical blue carbon (blue forest) methodologies and solutions at the country level ([Protecting Seagrass through PES](#) and [access to carbon market](#)), (b) effective Marine Protected Areas design and implementation through strategic marine spatial planning using an evolving [MPA Toolbox and Learning Platform](#) with case studies integrating governance between national governments, local communities, and market schemes to enhance the effectiveness of marine protected areas and equitable sharing of costs and benefits, enhancing MPA design and performance with thematic focus on MPAs as nature-based solution to climate change, MPA business planning and benefit-sharing, (c) innovative coral reef restoration approaches identifying and [protecting coral reef refugia](#), (d) regional/national strategic ocean governance systems, (e) taking steps towards marine and coastal [ecosystem-based management](#) and (f) practical guidance on sustainable blue economy financing in close collaboration with [UNEP Finance Initiative](#) (UNEP FI) and partners.

49. Natural capital assessment and accounting is a key pillar of sustainable blue economy and is key for SBE policy reforms. Through the initiative “Beyond GDP: National Accounting for the Ocean and Ocean Economy” UNEP supports countries on ecosystem accounts. UNEP’s Economics of Ecosystems Team – TEEB/TEEB4Coast – works with national statistics offices to develop Ecosystem Accounts as part of the System of Environmental Economic Accounting (SEEA) framework. The team has developed guidance document on methods and examples of the use of ecosystem accounts in policy scenario analysis, guidance document on ecosystem valuation and valuation-based policy applications, regional training programmes. UNEP is also a partner of UNESCAP on ocean accounting through the Global Ocean Accounts Partnership (GOAP) which supports coordination and communication among member institutions on ocean accounting and provides a shared technical framework for ocean accounting, as well as capacity-building. GOAP supports two regional Community of Practices in Africa and Asia-Pacific. Finally, UNEP through a GEF Biodiversity project has been supporting Natural Capital Assessment and Accounting for SBE in PNG.

Marine and coastal Ecosystem-based Adaptation (EbA) and Disaster Risk Reduction (Eco-DRR) are relevant approaches to SBE. In that respect, UNEP has an Ecosystem-based Adaptation programme which supports countries in adopting and implementing EBA approach that uses ecosystem services as part of a holistic adaptation strategy. Often through win-win outcomes, EBA protects vulnerable communities from extreme weather while simultaneously providing a variety of ecological benefits so crucial for human well-being, such as clean water and food. With its [Options for Ecosystem-Based Adaptation in Coastal Environments – A Guide for Environmental Managers](#), UNEP supports environmental decision-makers in government departments and agencies, but also in businesses and civil society organizations in choosing, implementing, monitoring, evaluating and, over time, adaptively managing coastal EBA. Through its initiative [Ecosystem-based disaster risk reduction knowledge and capacity building](#), UNEP works to prevent and reduce impacts of disasters on vulnerable communities and countries through improved ecosystem management or Nature-based Solutions (NbS), UNEP is core founder of [Partnership for Environment and Disaster Risk Reduction \(PEDRR\)](#), a global partnership of 24 organizations that promotes ecosystem management as a key strategy to enable vulnerable communities and countries to reduce disaster risk and build resilience to disasters and climate change.

As an essential element of SBE, UNEP has been spearheading green economy approaches for Oceans and has developed a green economy a [Green Economy Toolkit for Policymakers](#) with a guidance manual for green economy policy assessment, a guidance manual for green economy indicators and guidance for using models for green economy policymaking. With its [Integrated Green Economy Modelling \(IGEM\) framework](#) it provides a methodology for green economy policy assessment to refine impact analysis of green policies and investments in the economy while its [Green Economy Progress \(GEP\) Measurement Framework](#) helps countries evaluate their overall progress towards an Inclusive Green Economy (IGE) and enables a cross-country comparison of progress. Those tools help assess green fiscal policies and public expenditures in an IGE context to help countries analyse and enhance integration of blue economy considerations into national economic planning processes and budgetary design. Green fiscal policy instruments can help create the needed fiscal space in countries by making environmentally harmful actors pay, thereby creating revenues and incentivising more sustainable activities and investment. UNEP’ work on

environmentally harmful subsidy reform (fossil fuel subsidy reform and agricultural subsidy reform) is also relevant for SBE. Enabling environment for Private Sector Green Finance, looking at how public finance can be leveraged to create conditions for scaled up private investment for SBE is also a key element of UNEP's Green Economy approaches for Oceans.

The proposed project will also build on the experience of a number of important programs and projects, which are mentioned below:

- Red Sea and Gulf of Aden Strategic Ecosystem Management Project
- Program on Sustainable Fishery Development in Red Sea and Gulf of Aden (SFISH)
- Building institutional capacities for an eco-system approach to management of the marine fishery in the Red Sea State (Phase II)
- Somali Sustainable Fisheries and Blue Economy Development Project
- Maritime Governance to Promote Security and Safety in Yemen (Phases I and II)

This project will not target fisheries specifically as this will be addressed in a separate project for the region. Emphasis will be given within the HEBSBERGA project on developing coordination and cooperation mechanisms to ensure synergies with ongoing fisheries related projects such as those already developed with the World Bank SFISH project to be implemented by PERSGA during 2022-2026 as well as future initiatives by partners such as FAO and the EU. Through its mission and operational programs in the region, PERSGA has established regional platforms, networks and partnerships with relevant national agencies, academic institutes and NGOs. PERSGA has also established collaborations with regional development bodies, such as the Islamic Development Bank and international organizations. This foundation was significantly strengthened through the outcomes and experience gained from previous regional GEF interventions executed by PERSGA, particularly the Strategic Action Program (RSGA-SAP, 1999-2003) and the Strategic Ecosystem Management (RSGA-SEM, 2014-2018) projects. Furthermore, it provides the appropriate regional framework and platform to join collaborative efforts addressing 2030 sustainable development agenda, in particular to help accelerate SDG14 objectives, in addition to crafting an inclusive regional approach that coherently supports transforming to Sustainable Blue Economy, and contribute to several other relevant SDGs, mainly SDG1, SDG2, SDG8, SDG12 and SDG13 in the region.

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[2] Giomi, F. et al. (2019). Oxygen supersaturation protects coastal marine fauna from ocean warming. *Sci. Adv.* 2019;5.

[3] PERSGA. (2004). Regional Action Plan for the Conservation of Mangroves in the Red Sea and Gulf of Aden

[4] Ellison, J.C. (2015) Vulnerability Assessment of Mangroves to Climate Change and Sea-Level Rise Impacts. *Wetlands Ecology and Management*, 23, 115-137

[5] DONATO, D.C. ET AL. (2011). MANGROVES AMONG THE MOST CARBON-RICH FORESTS IN THE TROPICS. *Nature Geoscience* 4.

[6] Mcleod, E. et al. (2011). A Blueprint for Blue Carbon: Toward an Improved Understanding of the Role of Vegetated Coastal Habitats in Sequestering CO₂.

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[11] Cziesielski MJ, Duarte CM, Aalismail N, Al-Hafedh Y, Anton A, Baalkhuyur F, Baker AC, Balke T, Baums IB, Berumen M, Chalastani VI, Cornwell B, Daffonchio D, Diele K, Farooq E, Gattuso J-P, He S, Lovelock CE, Mcleod E, Macreadie PI, Marba N, Martin C, Muniz-Barreto M, Kadinjappali KP, Prihartato P, Rabaoui L, Saderne V, Schmidt-Roach S, Suggett DJ, Sweet M, Statton J, Teicher S, Trevathan-Tackett SM, Joydas TV, Yahya R and Aranda M (2021) Investing in Blue Natural Capital to Secure a Future for the Red Sea Ecosystems. *Front. Mar. Sci.* 7:603722. doi: 10.3389/fmars.2020.603722

B. PROJECT DESCRIPTION

Project Description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

A sustainable and inclusive Blue Economy should ensure that respective investments deliver long-term social and economic benefits while protecting and restoring the diversity, productivity and resilience of marine ecosystems. It should be based on participatory and effective governance that is inclusive, accountable and transparent and promote sustainable use in marine areas through far-sighted, anticipatory and preventive marine spatial planning and implementation of an ecosystem-based approach. Furthermore, it should be based on clean technologies, renewable energy and circular material flows and promote innovation and research in all Blue Economy sectors, enabling the creation of employment opportunities for blue jobs in the marine and maritime sectors.

Recognizing the rich potential of SBE opportunities in the Red Sea and Gulf of Aden, countries of the region are projecting SBE growth as strategic option to support economic development in their national visions. Among PERSGA countries, several are LDCs (including Djibouti, Somalia, Sudan and Yemen), which also pursue to undertake SBE in their essential endeavours to tackle poverty and improve livelihood options. Other goals shared by all national visions in the region are to establish tangible SBE investments as part of their plans to support economic diversification and reforms, along with achieving marine environmental conservation and governance objectives.

Based on PERSGA platform, the proposed regional project will thus build on the existing SAP taking into consideration: (i) need to update the TDA that will be leading to the updated SAP, endorsed and adopted by the countries of the region, and with the new emerging issues such as circularity, SDGs, climate change and SBE concepts, (ii) update the SAP priorities to include hot spot priorities also in the NAPs, and (iii) map out the capacity building needs for PERSGA to successfully fulfil its commitments to monitor the implementation of the updated SAP. The regional mechanisms can thus act to implement new important principles, such as building circularity in blue economy sectors, providing for tailored guidelines, governance reforms, enhancing visibility, engaging regional partners, building capacity and developing models adapted to the regional scale and needs.

Involving a complex set of issues and conditions, however, the enabling transformational interventions will aim at overcoming several current constraints and challenges, such as those related to fitting strategies, policies, capacities and access to technology adapting to new developments, and satisfying the evolving needs for effective governance to address environmental concerns, which influence the productivity and sustainability of existing and envisioned blue economy investments that rely on, and also affect marine ecosystem services.

The proposed intervention Theory of Change is presented in Figure 2 and the different components of the project are detailed below.

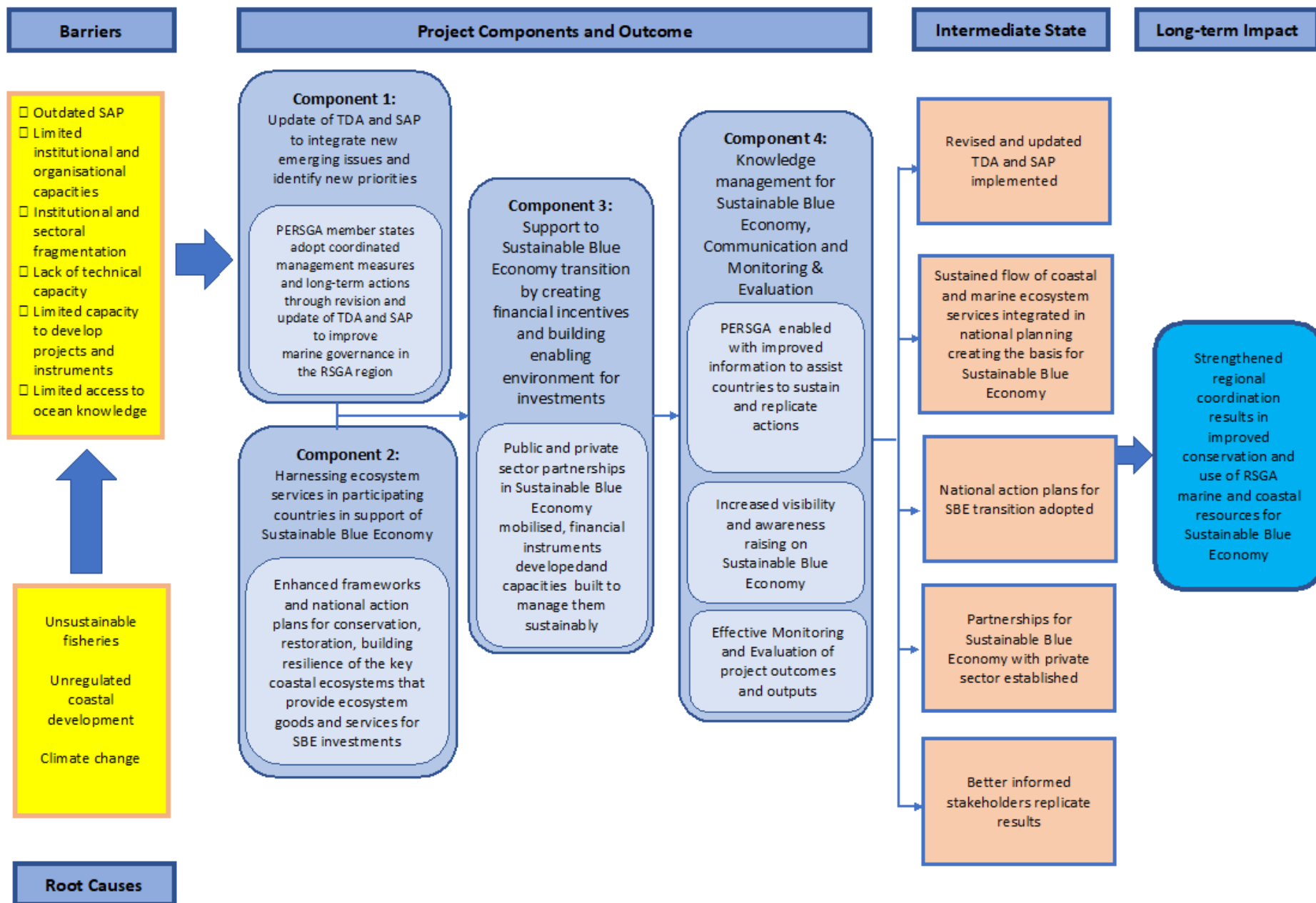


Figure 2: Theory of Change

The project “**An Inclusive Approach for Harnessing Marine Ecosystem Services and Transforming to Sustainable Blue Economy in the Red Sea and Gulf of Aden**” (HESBERSGA Project) will have the following components:

Component 1: Update of SAP to integrate new emerging issues and identify new priorities

This component is focused on creating basis for the transformation of ocean economy to the Sustainable Blue Economy at the regional level, primarily through update of foundational documents: TDA and SAP, which have guided the environmental management efforts in the RSGA region for almost two decades. The TDA will be updated based not only on the analysis of ecological but also of the economic, social and governance situation in countries of the RSGA region. It will include mapping and economic valuation of ecosystems services benefiting from the scientific assessment of opportunities and barriers utilising the existing and new knowledge on shared threats in the RSGA transboundary ecosystem generated by the relevant regional organisations and national institutions. SAP will integrate priority emerging issues that have since become prominent in the region, such as circularity, implementation of the Sustainable Development Goals (SDGs), climate change, gender mainstreaming, SBE, as well as hot spot priorities in NAPs and capacity building needs. Updated Strategic Action Programme, defining the management measures and associated priority and long-term actions focused on the transition towards SBE, will be signed by at least one relevant minister in RSGA countries and endorsed by other relevant partners.

Component 2: Harnessing ecosystem services in support of Sustainable Blue Economy

This component will strengthen national level management of interconnected ecosystem services and lead to the achievement of joint conservation/restoration targets (agreed at the regional level through SAP – Component 1 above) aimed at harnessing the sustainability of ecosystem goods and services that support the blue economy sectors, including through enhancing frameworks and action plans for conservation, restoration, and building resilience of the key coastal ecosystem that provide ecosystem services and goods for SBE investments. It is primarily aimed at developing national frameworks and action plans targeted towards conservation and restoration of coastal and marine habitats (coral reefs, seagrass, mangroves, coastal wetlands, etc.) enhancing the basis that is generating goods and services for the SBE. In addition, the component will deliver measures that will contribute to the mitigation of and adaptation to impacts of climate change, primarily through implementation of ICZM and MSP. The activities within this component will result in an assessment of the readiness of the participating countries for SBE, taking in consideration wider ecological, economic, sociocultural and governance aspects. On the basis of that assessment, a set of relevant measures (sectoral and cross-sectoral) will be developed to allow the transition towards SBE.

ICZM and MSP schemes (development and management plans for land and marine areas in countries) will be developed as a critical step towards establishing new SBE capacities in countries. MPAs management effectiveness will be strengthened through other effective area-based conservation measures (OECMs). These measures will also include development of coastal adaptation plans that will increase their resilience and, ultimately, enhance countries' capacity for a successful implementation of the SBE. Finally, the project will assist countries in building capacities for monitoring ecosystem indicators to be used for ecosystem services valuation with a view to their integration in national accounting systems. The Output 2.1.6 will establish appropriate intersectoral coordination mechanisms within country to secure consistent planning and implementation of SBE.

Component 3: Support to Sustainable Blue Economy transition by creating financial incentives and building enabling environment for investments

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A critical activity in this component is development of set of incentives to stimulate investments in SBEs. Output 3.1.1 provides RSGA countries and the business sector with an opportunity to gain hands-on experience in coordinating, guiding and overseeing the development and implementation of real-life national SBE pilot projects that are acceptable, affordable and sustainable. The best available scientific information and professional project preparation and advice to develop solutions within the context of the sector, as well as the social, economic and environmental conditions of the respective country will be considered. Available options and their respective socio-economic and environmental implications, as well as potential sustainable financing mechanisms and partnership arrangements, will be developed with the national and local governments, communities, business/private sector and other stakeholder groups, including women's organizations, for feedback and consensus building. It should be noted that the required capital for financing the identified national SBE pilot projects will be beyond the available budget of this project.

One of the major challenges that this component is tasked with is to develop the financing structures, business models, partnership arrangements, and sustainable operating mechanisms for the SBE investment projects to be successfully implemented. To address this matter, sustainable financing mechanisms and financing models that are being used for investment in a sustainable blue economy will developed and customized in the context of RSGA countries and their national blue economy frameworks and implementation plans. Ultimately, the final decision on the implementation of a national SBE pilot project will entail approval and endorsement of financing and partnership arrangements and agreements by concerned national and local governments following a fully transparent and participatory planning and development process. In order to create effective environment for the implementation of the stated component's objectives, the capacity strengthening activity will be implemented (Output 3.1.2), in the context of the demo projects envisaged within this output.

Component 4: Knowledge management for Sustainable Blue Economy, Communication and Monitoring & Evaluation

This component will support the preparation and dissemination of SBE knowledge products, tools and support services that are based on the outcomes, impacts, benefits and experiences of the national SBE pilot projects (Component 3), for use in upscaling SBE development and growth within and among RSGA countries. Innovative SBE practices, value-added partnerships, successful financing and operating templates, and other relevant knowledge products and technologies from the national SBE pilot projects will be prepared, shared, and upscaled via an online SBE Decision Support Framework and Regional Knowledge Platform. The Platform will be integrated into existing regional and national KM platforms for easy access and application.

This component will also address knowledge gaps and strengthen knowledge management for supporting blue economy decision making, planning, enhancing visibility, access to information, readiness and awareness programs for sustainable blue economy, including also through building and strengthen linkages to and involvement of relevant R & D institutes in the region, within RSGA countries and wider, through IW:LEARN platform. Participation in IW:LEARN activities will be supported by adequate allocations in the project's budget. PERSGA capacity will be enhanced as a regional platform to monitor, backup, coordinate and sustain project outcomes and achievements towards inclusive SBE transformation, including through mainstreaming and sustainability of the outcomes in the established.

Within this component, timely project monitoring and evaluation will be carried out with the aim of informing stakeholders on the progress of the project's implementation as well as to allow for adaptive management resulting in successful delivery of the project's products and services.

Implementation Arrangement

The proposed project implementation institutional arrangements (Figure 3) will be simple and effective, avoiding multi-level committees and complicated administrative procedures. The project will be managed at PERSGA through a Project Coordination Unit (PCU), and the work will be facilitated in the countries by project National Focal Points/Coordinators (NFPs), who are supported by National Steering Committees (NSCs). The PCU will report regular progress and to the Project Steering Committee (PSC), and to UNEP as the GEF Implementing Agency. The PSC will include beneficiaries (National Focal Points), PERSGA as the Project Executive and UNEP. The roles and responsibilities of the PCU, PSC, and the PCU will be clearly elaborated in the Project Document during the PPG phase.

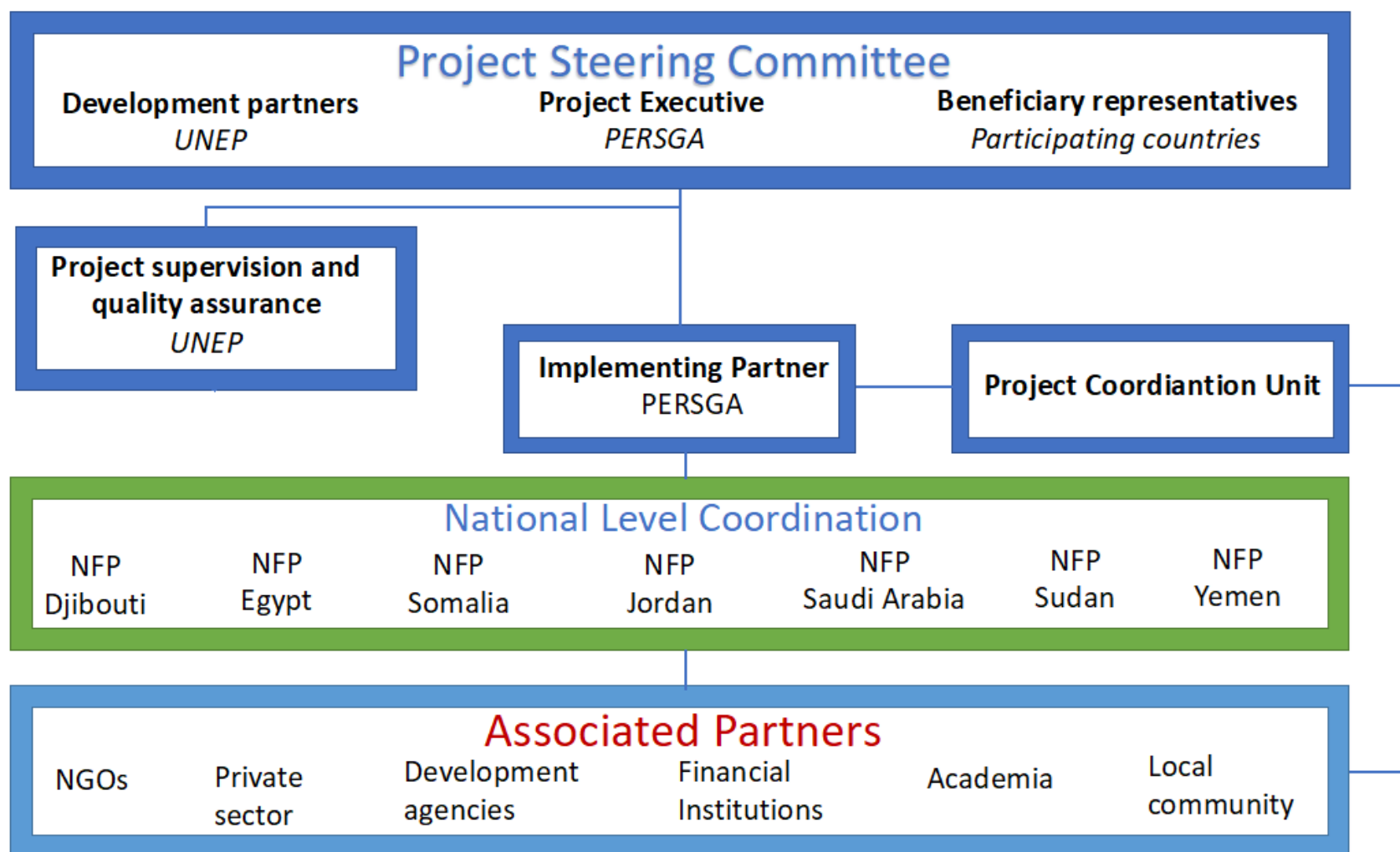


Figure 3: HESBERSGA implementation arrangement

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

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)
3,687,100.00	0.00	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	WDPA 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)
3,687,100.00	0.00	0.00	0.00

Name of the Protected Area	WDPA 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)
			3,687,100.00						

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)
1,500,000.00			

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)
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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 7 Shared water ecosystems under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Red Sea			
Count	1	0	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Red Sea	4			

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Red Sea	4			

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
	4			

Indicator 7.4 Level of engagement in IWLEARN throgth participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
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Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Fishery Details

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)
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Female	5,000			
Male	6,000			
Total	11000	0	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page) Under Indicator #2, the project will assist, at a strategic level, through update of SAP all marine protected areas in two regions. It will also provide more detailed guidelines to integrate sustainable blue economy into their management plans, which will contribute to better management of these areas. The project will also contribute to all marine habitats (Indicator #5) first through updated SAP and through specific guidelines for development of SBE. This will be discussed further and detailed during project preparation. For indicator #5, the amendment is: the area of marine habitat that will be improved for biodiversity outside MPAs is estimated as 1,500,000 Hectares (1.5 million) An extra step in our calculation is reference to only the most endangered areas which would reduce the figure to below 10,000 sqkm, or 1,000,000 ha. This estimate is based on the fact that total area of key habitats (coral reefs, mangrove, seagrass) is around 18,000 km², of which around 15-17% already included in MPAs, leaving around 15,000 Km² outside MPAs. The project covers 2 shared water systems (indicator #7). TDA and SAP already exist, but it is envisaged that they will be updated and revised. There is a large number of regional legal agreements, most of them ratified. National inter-ministerial committees are actively involved in implementation of national and local reforms. The total number of beneficiaries (indicator #11) is an estimate based on the area to be directly covered by demonstration plans.

Risks to Project Preparation and Implementation

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation-such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the "Project description" section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
Climate	Low	Climate change is likely to have an impact on the region's coastal areas and near-shore ecosystems, which may potentially affect provision of ecosystem services. It is assessed that the project support will enhance medium- to long-term climate resilience through the protection, restoration and sustainable utilization of the ecosystem services.
Environment and Social	Low	The objective of the project is to enhance efforts for conservation, restoration, and building resilience of the key coastal ecosystems. By supporting development of an inclusive Blue Economy in the region, the project will contribute to minimizing the environmental and social risks.
Political and Governance	High	The region has several states that have fragile political situation. The executing agency will monitor the political and socio-economic conditions to rapidly respond in case of an increased risk.
Macro-economic	Moderate	Macro-economic risks, considering the fragility of some countries, exist, which may be made more complex as a result of negative macro-economic changes on a world scale. However, the project will monitor the macro-economic situation, in particular in fragile countries, and respond as necessary.
Strategies and Policies	Low	Strategic Actions Programme for the RSGA region offers a strategic framework. Although it is somehow outdated, it still offers the strategic guidance for the countries of the region to effectively manage their coastal and marine ecosystems. One of the project's objectives is to update the SAP and minimize the strategic risk in the future. The project will also offer assistance to countries to develop respective policies, in particular those aimed at Sustainable Blue Economy. However, some countries may not have the adequate capacity to currently develop national policies, but one of the project's objectives is to raise that capacity.
Technical design of project or program	Low	PERSGA has a long history of executing complex regional and sub-regional environmental projects.

Institutional capacity for implementation and sustainability	Moderate	While some national governments in the region have a history of executing environmental projects, some governments have human and technical capacity limitations. Critical gaps will be identified and addressed through dedicated capacity building and technical assistance programs, including building capacity for adaptive, solutions-based ecosystem management and institutional support. Risks will be managed by applying a “learning-by-doing” approach, with provision of advocacy, communication, capacity building, technical assistance provided to leaders, planners, managers and implementers who are directly engaged in the SBE projects.
Fiduciary: Financial Management and Procurement	Low	The financial and fiduciary risks are defined by several factors, including hyper-inflation, fraud, and cash advance management. UNEP’s anti-fraud policy, the annual audits, regular spot-checking by UNEP staff, and other internal procedures to mitigate the risk of fraud, misappropriation and diversion of funds will be utilised.
Stakeholder Engagement	Low	Stakeholders were consulted for the preparation of this PIF. A comprehensive stakeholder mapping will be developed during the PPG phase to identify relevant stakeholders, including local communities, CSOs, and private sector entities, to define their roles, level of influence, level of interest, and means of engagement. Community groups including women, youth and elders, people with disabilities and marginalized communities, will be contacted early in the PPG process to elicit their interest to participate in demonstration projects, policy processes and trainings. The mapping will be further refined during the inception phase of the project when a stakeholder engagement strategy will be developed. Relevant stakeholders will be part of the Steering Committee to buy-in.
Other		N/A
Financial Risks for NGI projects		
Overall Risk Rating	Moderate	Overall risk rating is based on the existence of the regional and, in some countries, national capacities to implement the project. However, the risk is raised because of the existence of political situations in some countries that may be considered as fragile. The project has developed measures to deal with potentially critical situations.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.(max. 500 words, approximately 1 page)

Incorporation of blue economy in the GEF Programming Directions for GEF-8 provides an opportunity to upgrade existing national development plans and regional strategies including the GEF supported Strategic Action Programme (SAP). More explicitly, the HEBSBERGA Project contributes to the GEF IW Focal Area Objective 1 (Accelerate joint action to support a Sustainable Blue Economy) and GEF IW 1-1 Strengthen blue economy opportunities through sustainable healthy coastal and marine ecosystems, IW 1-2 Strengthen blue economy opportunities through catalyzing sustainable fisheries management and IW 1-3 Strengthen blue economy opportunities by addressing pollution reduction in marine environments. Specifically, notable GEF IW-related activities include:

- Contribute to the implementation of Strategic Action Programmes to support a Sustainable Blue Economy by deployment of tools such as MSP, MPA, NbS and PES
- Foster collaboration among LMEs, Regional Seas Conventions and Regional Fisheries Management Organizations (RFMOs) to protect and restore these key habitats
- Develop and update Marine Spatial Plans and Sustainable Blue Economy Plans to inform policy decisions in the EEZ
- Restore degraded key marine and coastal habitats through deployment of Nature-based Solutions and Payment for Ecosystems Services demonstrations;
- Mainstream marine area-based management and spatial tools in regional entities, to delivering towards global targets;
- Stimulate private sector engagement, through relevant industry sectoral roundtables and industry groups

While UNEP's Medium Term Strategy (MTS 2022-2025) does not specifically mention the Sustainable Blue Economy, this project is certainly aligned with its Thematic Sub programme Nature Action, and in particular its Outcome 1: Economically and socially sustainable pathway to halt and reverse the loss of biodiversity and ecosystem integrity established, Outcome 2: Sustainable management of nature is adopted and implemented in development frameworks, and Outcome 3: Nature conservation and restoration are enhanced. The HEBSBERGA Project is also aligned with MTS's foundational sub programmes Science-Policy, and Environmental Governance, as well as Enabling Sub programme Finance and Economic Transformations.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

Stakeholder consultations have taken place over the last 2 years in the context of the regional governance framework of PERSGA with regular focal point meetings with contracting parties and technical focal points on the content of the PIF. The Conference of the Parties held in 2021 was presented with the project proposal and recommendations were made for UNEP to submit the project to the GEF. National consultations took place prior to the COP in 2021. A final consultation of all participating countries took place in August 2022, where UNEP participated with the reconfirmation and recommendation to submit the project proposal with the latest updates to the document. Minutes of the meetings as well as a list of stakeholders consulted will be uploaded onto the portal at submission.

One of the main conclusions of these consultations and motivation by participating countries and partners for the development of the proposed HEBSBERGA project is the critical need for targeted and in-depth assessments of the different SBE sectors and the involvement of end users, such as for the private sector, in them.

The table below informs on the range of stakeholders to be involved in the implementation of the project.

Project Components	Stakeholders	Consultation and engagement plan
Component 1: Update of SAP to integrate new emerging issues and identify new priorities	Government: 1. Line ministries and agencies in the PERSGA member states (Jeddah' Convention and SAP parties), including Djibouti, Egypt, Jordan, Somalia, Sudan and Yemen. Stakeholders include ministries and authorities that are in charge of marine environment, tourism, maritime and ports, agriculture and fisheries. Others included indirectly are finance and planning, marine security, oil and gas, municipalities in coastal areas and national Inter-agency Committees/Commissions, e.g. national SDGs Committees in each member states.	Consultations so far carried out with direct stakeholder ministries, who are well aware of the project and contributed to concept and components.
Component 2: Harnessing ecosystem service		Other government agencies will be consulted and engaged in the PPG phase, and thro

<p>s in participating countries to support Sustainable Blue Economy</p> <p>Component 3: Support to the Sustainable Blue Economy transition, including greening SBE sectors and building enabling environment for effective governance for ocean sustainability</p> <p>Component 4: Knowledge management for Sustainable Blue Economy, Communication and Monitoring & Evaluation</p>	<p>NGOs: several national NGOs, (e.g. HEPCA in Egypt, SECS-Red Sea in Sudan, Djibouti Nature Society, SEDO in Somalia, RSCN in Jordan) are existing and active, and they have often been engaged in PERSGA activities in the region</p> <p>Private Sector/ affected businesses are mainly working in tourism (coastal and diving), and associated service sectors (hotels, resorts, transport); shipping and ports services. Most are represented by business chambers and union. Those that are not being members of such bodies (e.g. small and medium enterprises) will be reached through feasible ways (e.g. key informant persons, relevant community groups, profession societies, etc.)</p> <p>Development Agencies and Finance Institutes: Mainly include the Islamic Development Bank, African Development Bank, and other financial institutions at regional level; and specialized banks, such as agricultural, industrial and commerce banks in the member states. PERSGA has established collaboration with the Islamic Development Bank since SAP1.</p> <p>Universities and Academic Institutes working on marine science in the region: around 12 institutes are already engaged in PERSGA Regional Network for "Marine Academic and Research Institutes in the Red Sea and Gulf of Aden". Three regional meetings were previously held for the Network. These national institutes will be actively engaged in Component 4 activities, as well as other assessments to be carried out under components 1-3.</p> <p>Local Community: through societies, groups and key informants</p>	<p>through project national steering committees throughout the project</p> <p>NGOs, Development Agencies, private sector and society organizations (fishery societies, women societies, and youth) will be consulted in the PPG phase, and engaged in activities for component 2, 3 and 4, as relevant, through national steering committees</p> <p>Development and Financing Institutes, e.g. ISDB, ADP will be approached to engage in component 3 activities. Other national banks will be engaged through national steering committees of the project</p> <p>Contacting stakeholders will be done through various ways; formal letters, as applicable (government sector), email, phone, PERSGA mobile app and social media channels, involving community key persons and informant groups</p> <p>The project SEP to be developed will delineate stakeholders and define engagement, information sharing levels and channels of communication, etc.</p>
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(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF CEO Endorsement/Approval MTR TE

Medium/Moderate

E. OTHER REQUIREMENTS**Knowledge management**

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES**GEF Financing Table****Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing(\$)
UNEP	GET	Regional	International Waters	International Waters: IW-1	Grant	7,350,000	698,250	8,048,250.00
Total GEF Resources(\$)						7,350,000.00	698,250.00	8,048,250.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested? true

PPG Amount (\$)

200,000

PPG Agency Fee (\$)

19,000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNEP	GET	Regional	International Waters	International Waters: IW-1	Grant	200,000	19,000	219,000.00
Total PPG Amount						200,000.00	19,000.00	219,000.00

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
IW-1-1	GET	3,920,000.00	29,500,000.00
IW-3	GET	3,430,000.00	25,500,000.00
Total Project Cost (\$)		7,350,000.00	55,000,000.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Others	PERSGA (executing agency)	In-kind	Recurrent expenditures	11,000,000.00

Donor Agency	IDA/ World Bank regional project	Grant	Investment mobilized	1,420,000.00
Donor Agency	US AID life project (phase 3) Red Sea conservation and community development in Egypt	Grant	Investment mobilized	6,000,000.00
Others	Solid waste management program in Red Sea governorate-Egypt	In-kind	Investment mobilized	1,500,000.00
Donor Agency	Global Coral Reef Fund project in the Gulf of Aqaba (GCF)	In-kind	Investment mobilized	1,500,000.00
Donor Agency	Ecosystem Approach Project, Red Sea State, Sudan (UNIDO supported by Norway)	In-kind	Investment mobilized	1,000,000.00
Others	PERSGA member states	In-kind	Recurrent expenditures	6,000,000.00
Others	Green Middle East Initiative	In-kind	Investment mobilized	26,580,000.00
Total Co-financing(\$)				55,000,000.00

Describe how any "Investment Mobilized" was identified

The "in-kind investment mobilized" is from the following sources: IDA/World Bank project "Program on Sustainable Fishery Development in Red Sea and Gulf of Aden (SFISH)", which will promote regional cooperation for sustainable fishery management in the RSGA region and strengthen the effective fishery production and value chain in RSGA countries and strengthen mechanisms for regional collaborative management of fisheries in the RSGA region and improve the effective fishery production and value chain in Yemen. This project grant amounts to 3,850,000. The amount counted as co-finance to HESBERSGA project is USD1,420,000, allocated to PERSGA institutional capacity to upgrade regional information system (hard and software goods), and activities supporting restoration of critical habitats (mangrove, coral and seagrass) and conservation measures for sharks, marine turtles, seabirds, and marine mammals. The Green Middle East Initiative targets 4 billion USD by 2030. It includes planting 50 billion trees (terrestrial forests and mangroves) in the whole PERSGA region and other Middle Eastern countries. The amount counted as co-finance for HESBERSGA project is 26,580,000 USD, expected to finance mangrove planting in the region. USAID life project (phase 3) Red Sea conservation and community development in Egypt is allocating 50,000,000 USD for conservation and community development project in the Red Sea Governorate. The phase will coincide with HESBERSGA project, which would provide through effective synergy considerable co-finance, estimate around USD 6 million, e.g. as demo and pilot sites in Egypt. Solid waste management program in Red Sea governorate-Egypt, executed by HEPCA for Red Sea Governorate - Hurghadah in Egypt, with annual project budget of 3 million us dollars and with plans to include all urban sites along the Red Sea coast of the country. It also includes recycling facility. HESBERSGA project will synergize with this program, with estimated mobilized investment at USD 1.5 million over the 5 years. Global Coral Reef Fund project in the Gulf of Aqaba (supported by GCF) is a sub regional project developed and implemented by UNDP, including Jordan,

Saudi Arabia and Egypt, while PERSGA is engaged as a regional partner. Through HESBERSGA, PERSGA will mobilize co-finance estimated at USD 1.5 million for supporting partnerships for corals restoration in the region. Ecosystem Approach Project, Red Sea State, Sudan (UNIDO supported by Norway). The current phase of UNIDO Red Sea development project in Sudan (supported by 5.6 million Euro grant from Norwegian government) is focusing on ecosystem approach to fisheries, including components on coral reef conservation and other relevant activities. HESBERSGA will synergy with this project to join efforts, estimated to be equivalent to one million us dollars of mobilized investments.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	UNEP	9/16/2022	Victoria Luque Panadero		victoria.luque@un.org
Project Coordinator	UNEP	9/16/2022	Christine Haffner-Sifakis		christine.haffner-sifakis1@un.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date	
Mr. Dini Abdallah Omar	Secretary General	Ministry of Habitat and Environment Djibouti	9/6/2022	
Eng. Ali Abo Sena	Chief Executive Officer	Egyptian Environmental Affairs Agency	9/9/2022	
Mr. Marwan Al-Refai	Acting Secretary General	Ministry of Planning and International Cooperation	9/18/2022	
H.E. Mahdi Mohammed Gulaid	Deputy Prime Minister	The Federal Government of Somalia, Directorate of Environment	9/10/2022	
Dr. Mona Ahmed	Secretary General	Higher Council for Environment and Natural Resources, Sudan	9/9/2022	
Mr. Faisal S. Obaid Al-thalabi	Acting EPA Chairman	Ministry of Water and Environment, Yemen	9/18/2022	

ANNEX C: PROJECT LOCATION

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

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

211022 SRIF_IW_HEBERSGA PIF FINAL

**ANNEX E: RIO MARKERS**

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	No Contribution 0	No Contribution 0	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
X Influencing models			
	X Transform policy and regulatory environments		
	X Strengthen institutional capacity and decision-making		
	X Convene multi-stakeholder alliances		
	X Demonstrate innovative approaches		
X Stakeholders			
	X Private Sector		

		X Capital providers	
		X Financial intermediaries and market facilitators	
		X Large corporations	
		X SMEs	
		X Individuals/Entrepreneurs	
	X Beneficiaries		
	X Local Communities		
	X Civil Society		
		X Community Based Organization	
		X Non-Governmental Organization	
		X Academia	
	X Type of Engagement		
		X Information Dissemination	
		X Partnership	
		X Consultation	
		X Participation	
	X Communications		
		X Awareness Raising	
		X Education	
		X Public Campaigns	
		X Behavior Change	
X Capacity, Knowledge and Research			

	X Enabling Activities		
	X Capacity Development		
	X Knowledge Generation and Exchange		
	X Learning		
		X Theory of Change	
		X Adaptive Management	
		X Indicators to Measure Change	
	X Innovation		
	X Knowledge and Learning		
		X Knowledge Management	
		X Innovation	
		X Capacity Development	
		X Learning	
	X Stakeholder Engagement Plan		
X Gender Equality			
	X Gender Mainstreaming		
		X Beneficiaries	
		X Women groups	
		X Sex-disaggregated indicators	
		X Gender-sensitive indicators	
	X Gender results areas		
		X Access and control over natural resources	
		X Participation and leadership	
		X Access to benefits and services	

		X Capacity development	
		X Awareness raising	
		X Knowledge generation	
X Focal Areas/Theme			
	X International Waters		
		X Ship	
		X Coastal	
		X Learning	
		X Fisheries	
		X Pollution	
			X Plastics
			X Nutrient pollution from all sectors except wastewater
			X Nutrient pollution from Wastewater
		X Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		X Strategic Action Plan Implementation	
		X Large Marine Ecosystems	
		X Private Sector	
		X Aquaculture	
		X Marine Protected Area	
		X Biomes	
			X Mangrove
			X Coral Reefs
			X Seagrasses

	X Climate Change		
		X Climate Change Adaptation	
			X Least Developed Countries
			X Disaster Risk Management
			X Sea-level rise
			X Climate Resilience
			X Climate information
			X Ecosystem-based Adaptation
			X Mainstreaming Adaptation
			X Private Sector
			X Complementarity
			X Community-based Adaptation
			X Livelihoods