RED SEA AND GULF OF ADEN STRATEGIC ECOSYSTEM MANAGEMENT PROJECT(SEM PROJECT)

Report on the Final Evaluation of the Project

Anthony (Tony) Rouphael (Consultant)

Report prepared for the Regional Organization for Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA)

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Front cover photograph: Beneficiaries, partners and Project team members in front of solar panels installed at Qula'an, Wadi El-Gemal-Hamata National Park.

EXECUTIVE SUMMARY

In November 2013, the Regional Organization for Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) commenced the Project 'Strategic Ecosystem Based Management of the Red Sea and Gulf of Aden'. The Project ended December 2018. The objective of the Project was to "*improve management of selected marine protected areas by local communities and strengthen information sharing between PERSGA member countries*". The Project was executed by PERSGA with funding and technical support from the World Bank and Global Environmental Facility. The Project had concurrent activities occurring in Djibouti, Sudan, Egypt and Jordan, and Project coordination activities in Saudi Arabia. PERSGA fundedan independent final evaluation of the Project. The objective of the final evaluationwas to gain an independent assessment of the Project for PERSGA and to provide input towards the Implementation Completion and Results Report. The final evaluation covered the entire implementation period, and was designed to identify lessons learned and provide information on the nature, extent, impacts and sustainability of the activities instigated during the Project. This report is the outcome of that evaluation.

In evaluating the Project, the following categories were examined and rated: efficacy; relevance; effectiveness; efficiency and sustainability. The rating approach was consistent with the World Bank's Implementation Completion and Results Report. This approach uses a four-point score framework: High (e.g. no shortcomings); Substantial (e.g. moderate shortcomings); Modest (significant shortcomings); and Negligible (severe shortcomings). For the overall Project Outcome Rating, a six-point score framework is used. A variety of data were sought to examine and rate these categories. Three methods were used to source data for this evaluation: review Project literature; field visits to meet beneficiaries and to visit Project sites; and questionnaires.

Efficacy was rated **High** based on the following findings:

- The Project Development Objective (PDO) was achieved (based on indicators and other evidence).
- All indicators met or exceeded end targets.
- Improved management and community participation (verified by stakeholders during the field trips).

Relevance was rated **High** based on the following findings:

- The PDO was highly relevant to local and national priorities.
- The success of sub-projects has contributed to poverty reduction.
- The outcomes contribute to PERSGA member countries meeting their obligations in regards to the UN Sustainable Development Goals.
- Local beneficiaries associated with the sub-projects were very satisfied.

Effectiveness was rated **High** based on the following findings:

- Participants were satisfied with the effectiveness of management during the Project.

- Management was characterised by: having a clear goal; timely decision making; and that members of the Project Coordination Unit were willing to listen to the National Coordinators.
- Clear lines of communication among the Project Coordination Unit, National Steering Committees and National Coordinators.
- The management team clearly expressed expectations.
- The management team was sufficiently flexible to modify the Project when necessary and to take advantage of opportunities.
- The management team maintained strong oversight over budget and allocation of funds.

Efficiency was rated **High** based on the following findings:

- With a relatively modest monetary contribution from Global Environment Facility, the Project team delivered numerous success stories including improving the livelihood of communities in Wadi El-Gemal Hamata National Park and Dungonab Bay and Mukkawar Island National Parks.
- The Project team did not use the GEF funds for administrative purposes or for project management. The funds were directed for on ground activities. PERSGA covered administrative cost using its own budget.
- The Project team was able to leverage co-financing and synergies with other donors to improve outcomes.
- The Project finances were regularly audited by independent auditors.

Sustainability was rated **High** based on the following findings:

- There is strong potential for sustainability among most sub-projects.
- Project beneficiaries associated with the Mohammed Gol bakery concluded that it was profitable.
- The vessel maintenance centre at Mohammed Gol probably has the greatest potential for long-term financial sustainability given the current level of demand.
- Similarly, the traditional handcraft centreat Abu Ghosson and Qula'an Eco-village, Egypt, are also generating profit.

Some key success stories:

- World Heritage nomination of the combined Dungonab Bay and Sanganeb National Parks, Sudan.
  Empowerment of women and marginalised fishermen.
- Triggering process of revision of national fisheries legislation in member countries.
  Development of a regional protocol concerning management of fisheries and aquaculture in the Red Sea and Gulf of Aden.
- Qula'an Eco-village at Wadi El-Gemal Hamata National Park, Egypt.
- Moucha-Maskali Island Fisher Centre, Djibouti.
- Strengthened MPA awareness and management.
- Strengthened the Regional Monitoring Network of PERSGA.

Overall Project Outcome Rating:

The Overall Project Outcome Rating was '**Satisfactory**' for the following reasons:

- PDO achieved and in an efficient manner.

- PDO relevant to local and national priorities.
- Indicators achieved or exceeded end targets.
- Numerous success stories.
- Most sub-projects showed strong potential for sustainability.
- GEF budget not exceeded.
- Satisfied beneficiaries (all concluded that they would welcome future involvement of PERSGA).
- Strong relationships with local government institutions (all favoured future PERSGA involvement).
- Incorporated co-finance partnerships with Non-Government Organisations and government departments to increase the financial effectiveness of the Project.
- Fostered synergies with funding agencies to continue training and capacity building relating to activities started by the Project.

Why not 'Highly Satisfactory'?

- The PDO and some indicators had to be modified half-way through the Project.
- Project exceeded original timeframe.

ACRONYMS

Acronym	Expanded
ASEZA	Aqaba Special Economic Zone Authority
DMNP	Dungonab Bay and Mukkawar Island National Park
FE	Final Evaluation
GEF	Global Environmental Facility
Ha	Hectares
HEPCA	Hurghada Environmental Protection and Conservation Association
ICR	Implementation Completion and Results Report
IW	International Waters
JREDS	Royal Society for Environment Conservation in Jordan
M&E	Monitoring and Evaluation
MMA	Marine Managed Area
MPA	Marine Protect Area
MtR	Mid-term Review
NC	National Coordinator
NSC	National Steering Committee
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PDO	Project Development Objective
PERSGA	Regional Organization for Conservation of the Environment of the Red Sea and Gulf of Aden
SAP	Strategic Action Program of the Red Sea and Gulf of Aden
SEM	Strategic Ecosystem Management Project of the Red Sea and Gulf of Aden
SDG	Sudanese Pound
ToR	Terms of Reference
UNDP	United Nations Development Program
WB	World Bank
WGHNP	Wadi El-Gemal Hamata National Park

INTRODUCTION

Background

In November 2013, the Regional Organization for Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) commenced the Project 'Strategic Ecosystem Based Management of the Red Sea and Gulf of Aden' (hereafter the 'Project'). The Project ended December 2018.The broad goals of the Project were to: improve management of marine resources in the Red Sea and Gulf of Aden in selected Marine Protected Areas(MPAs);encourage community participation in the management of resources in MPAs; and facilitate the harmonization of methods to monitor marine resources among PERSGA member countries.

The Project was executed by PERSGA with funding and technical support from the World Bank (WB) and Global Environmental Facility (GEF). The Project had concurrent activities occurring in Djibouti, Sudan, Egypt and Jordan, and Project coordination activities in Saudi Arabia.

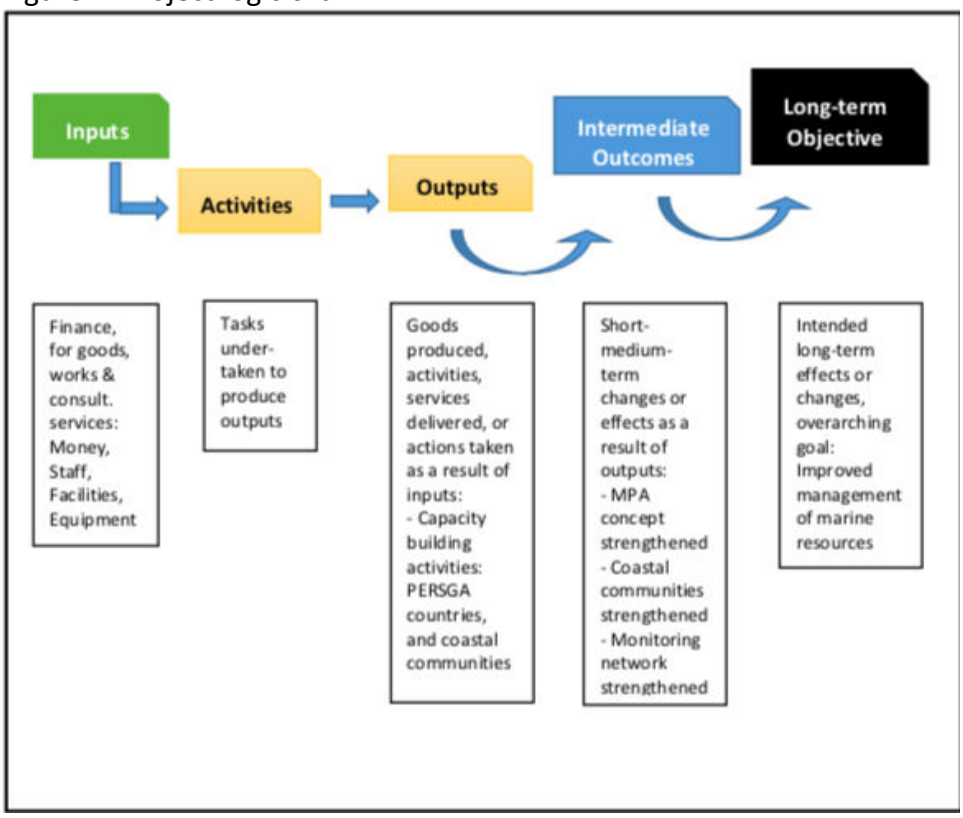
In accordance with the procedures of the WB and GEF, a Final Evaluation (FE) of the Project was required. The objective of the FE was to gain an independent assessment of the Project for PERSGA and to provide input towards the Implementation Completion and Results Report (ICR). The FEcovered the entire implementation period, and was designed to identify lessons learned and provide information on the nature, extent, impacts and sustainability of the activities instigated during the Project.

A consultant, Dr. Anthony (Tony) Rouphael, was hired by PERSGA to undertake the FE. This evaluationapproach was developed in collaboration with PERSGA staff. This Report presents the results of the FE.

Project Logic Chain

Figure 1 shows the Project logic chain and shows the links between the main elements designed to achieve the Project objective. The logic chain contained five broad elements: inputs; activities; outputs; outcomes and Project objective.

Figure 1: Project logic chain



(Source: Mid-term Review Report)

Scope of the Evaluation

The scope of the FE was to examine four broad aspects of the Project:achievements, design (i.e. objectives and methods) and implementation. Where appropriate, these aspects wereevaluated in context of the categories of:efficacy; relevance; effectiveness; efficiency and sustainability (as per stipulatedin the Terms of Reference (ToR) (Annex 1). The FE also identified the strengths and weaknesses of the Project and listed lessons learned.

Structure of the Report

The structure of this reportlargely follows that proposed in the ToR. After the introduction,thereport begins with background to the Project, followed by a description of the evaluation methodology. Next is the evaluation findings, Project achievements, lessons learned and success stories.

BACKGROUND OF THE PROJECT

This section provides an overview of the Project, including important modifications that occurred following the Mid-term Review (MtR)[1].

Context at Appraisal

The Projectcommenced 5 November 2013 andwas originally planned to cease31 January 2018 (this was later extended to 31 December 2018).Day-to-day implementation and oversight of the Project was undertaken by the Project Coordination Unit (PCU) based in PERSGA. National Steering Committees (NSC) were formed in each participating country to coordinate activities with the PCU at the national level. Under each NSC was a National Coordinator (NC), a senior specialist in each country, who coordinated Project activities at the local level.

The Project was built on lessons learned and investment recommendations of the regional project for the implementation of Strategic Action Program (SAP) for the Red Sea and Gulf of Aden that closed in 2005.

Original Project Development Objective

The Original Project Development Objective (PDO) was: "*To improve management of marine resources in the Red Sea and Gulf of Aden in selected MPAs, building on resource protection and incentive systems for communities and the harmonization of the knowledge base of marine resources among PERSGA member countries*."

Original PDO Indicators

The original PDO indicators and their proposed end targets are listed in Table 1. The purpose of the PDO indicators was to help measure success in achieving the PDO[2].

[1] The MtR was undertaken for PERSGA by an independent consultant Dr. Angelo Bonfiglioli (Bonfiglioli, 2016).
[2]For purposes of this document, an indicator is defined as "*a unit of information measured over time that allows you to document changes in specific attributes of your MPA. It helps you to understand where you are, where you are going and how far you are from the goal*" (Pomeroy et al. 2007; page 214).

Table 1: Original PDO Indicators

Activity	End Target
Indicator 1. Marine areas brought under biodiversity protection (ha) (Core)	40,000 ha
Indicator 2. Direct project beneficiaries (Number) (Core)	3,000
Indicator 3: Number of alternative livelihood projects realized by communities	4
Indicator 4: Availability of harmonized parameters and database for PERSGA member countries (Yes/No)	Yes
Indicator 5: Female beneficiaries (%, Core)	30%

Original Intermediate Indicators

In addition to the PDO indicators there were intermediate indicators. These indicators were used to help measuresuccess in achieving the PDO and in terms of the four components. The original intermediate indicators and their end targets are listed in Table 2.

Table 2: Original Intermediate Indicators

Activity	End Target
Participants in consultation activities during project implementation (number)	400
Participants in consultation activities during project implementation - female	120
Number of MPA plans updated with community input and with assigned rights for user groups (Number)	2
Number of stakeholders trained and participating in developing/updating MPA master plans with a rights-based approach (number)	100
Rights based management system established in two pilot MPA sites for community user groups (Yes/No)	
Number of institutional MPA staff trained to work with local communities and in rights-based approach (Number)	10
Number of participants from five PERSGA member countries in regional meetings/exchanges for MPA counterparts on community-based MMA management (Number)	45
Availability of documentation of lessons learned from regional meetings/exchanges for MPA counterparts (number, types, and dissemination sites) (Number)	Given as 'Yes' in the PAD[3]
Percentage of community members involved in MPA plan and updating and management who are women (Percentage)	20
Percentage of fishermen involved in fisheries monitoring, control and surveillance activities (Percentage)	70
Spawning sites for grouper (i.e. nagil(*Plectropomus* sp.), snapper (*Lutjanus* spp.) and other commercially relevant species under protection with community compliance (Yes/No)	Given as 'Yes' in the PAD
Percentage variance in groupers (Percentage)	15
Percentage variance in corals (Percentage)	15
Percentage female beneficiaries of alternative livelihood projects (Percentage)	30
Number of PERSGA member Project report; country staff trained in common monitoring parameters and methods	40

[3]Project Appraisal Document (World Bank, 2013)

Number of member country routinely employing the monitoring methods developed by PERSGA	5
Number of regional exchanges on data collection and findings from new parameters	3
Reporting on GEF IW indicators and participation in workshops	Given as 'Yes' in the PAD
Functionality of project management including FM, procurement and environmental and social impact monitoring	Given as 'Yes' in the PAD

Components

There were the four components associated with the Project. Each is listed below along with their main interventions.

Component 1: Strengthening Marine Management Concept in Marine Protected Areas (GEF US$750,000; Parallel Financing US$4.47 million)

This component was executed in two selected Marine Protected Areas as pilots to serve as Marine Managed Areas (MMA), including zoning planning and multiple uses consistent with local community needs and benefits, following a participatory, community-based process. The main interventions of Component 1 included:

- Update MPAs management plans with community and other stakeholder input and support the management plans implementation.
- Build capacity of the community stakeholders and institutions involved in MPA management and MMA zoning.
- Develop a series of engagements/exchanges between MPA authority staff among PERSGA member countries. These will include lessons, both successes and challenges, that one jurisdiction can share with another.
- Develop education and public awareness materials that highlight the challenges and success of community-based management of MMAs.

Component 2: Strengthening Coastal Communities (GEF US$800,000; Parallel Financing US$2.72 million)

This component was aimed at strengthening local communities' capacity to identify, develop and implement sub-projects aimed at: (i) reducing pressure on marine resources and (ii) the provision of alternative livelihood income in such areas as fish processing, recreational fishing, eco-tourism and small - scale aquaculture.The main interventions of Component 2 included:

- Review of living marine resources legislation, policies and management practices to identify entry points and provide recommendations for supporting co-management approaches.
- Building organizational capacity of local user groups including fisheries cooperatives, and local community societies; building their capacities for co-management, monitoring their resource uses and impacts; establish a community monitoring procedure and follow up.
- Support identification and planning of sustainable economic activities of marine resources and demonstrate small scale, low impact alternative livelihood sub-projects that are compliant with all environmental and social safeguards and upon which the community has reached consensus.

- Strengthen regional community participation through education and knowledge sharing pilots on roles and responsibilities to improve community compliance and build ownership for resource protection and sustainability.
- Promote institutional capacities and legal framework for regional collaboration in sustainable fishery management.

Component 3: Regional Environmental and Socioeconomic Monitoring Network (GEF US$1.2 million; Parallel Financing US$7.45 million)

This component built on ongoing monitoring activities and helps in standardizing monitoring variables and approach between the participating countries, making data comparable and sharable through the strengthening of a regional network and database. It supported the expansion of monitoring to include socio-economic data, especially for fishery and MPA communities. The main interventions of Component 3 included:

- Conducting a gap analysis of coastal environmental monitoring capacity in each country, update standard survey methods and other relevant manuals with reviewing variables applied to monitoring at regional, national and local levels.
- Provide training to raise capacities of national specialists, MPAs managers and community participants in national monitoring teams.
- Provide institutional and equipment support to set up and promote sustainable monitoring of coastal and marine environments in the region.
- Conduct workshops and meetings to facilitate regionally harmonized monitoring methods through community members' and agencies' monitoring activities, discuss lessons, inter-calibration of monitoring methods and sharing experience among countries, focusing for example on specific monitoring needs at hot spots.
- Support establishment of a standardized integrated database of socioeconomic, ecological, biological, chemical and physical variables, and enhance collaboration with the countries for collection of available data from current monitoring activities for enriching the regional database.
- Identification of anthropogenic threats from land and marine sources and update mapping of significant habitats and including sensitivity mapping for oil spills and other pollution hazards.
- Strengthen outreach concerning monitoring by raising the profile of stakeholder engagement at the country and community level, informing decision making mechanisms, and wider stakeholder community of the monitoring results and scientifically based management outputs through different outreach means including hard and electronic publications and public displays.

Component 4:Project Management (GEF US$250,000; Parallel Financing US$1.25 million)

This component supported the Project execution with technical, administration, procurement, financial management, fiduciary fulfilment, and Project monitoring and evaluation. It involved establishing the Project Regional Steering Committee "RSC", establishing and running of the PCU, coordinating with the countries for nominating NCs and establishing NSC. The component also included training of PERSGA and the local project management level on the administrative aspects.

Significant Changes During Implementation

Following the MtR in 2016, and as requested by PERSGA, the Project was modified in a number of ways (World Bank, 2018a). The PDO was revised, as was the PDO indicators and intermediate indicators. Independent of the MtR, there was also a change in the location of a pilot site. Originally one of the pilot sites was to be in Yemen, but this was subsequently changed to Egypt[4]. Although the end date of the Project and the location of the second pilot site changed, the total amount of funding from GEF remainedunchanged.

Revised PDO

The revised PDO was "*To improve management of selected marine protected areas by local communities and strengthen information sharing between PERSGA member countries*."

Revised PDO and IntermediateIndicators

The revised indicators, their units of measurement and end targets are illustrated in Table 3.

Table 3: PDO and Intermediate Indicators and End Targets

Indicator	End Targets
PDO Indicators	
Area in selected marine protected areas under improved management (ha)	40,000 ha
Direct project beneficiaries (number)	1000
Sub-indicator female (%)	30%
Agreed upon common Red Sea monitoring variables of water quality, fisheries and coral reef habitats accessible for PERSGA member countries on a regional database	Yes
Intermediate Indicators	
Number of alternative livelihood projects realized by communities (Number)	4
Participants in consultation activities during Project implementation (number)	600
Participants in consultation activities during Project implementation - female	180
Number of MPA plans updated with community input and with assigned rights for user groups (Number)	2
Reporting on GEF IW indicators and participation in workshops	Yes
Protected Areas with updated management plans that brought coral reefs under regular monitoring and surveillance with community participation.'(Number)	3
Fishermen in selected marine protected areas using mesh size as per management plan' (Number)	500
Fishermen observing closed season for major species as per management plan' (Number)	100
PERSGA member country staff trained on methods of monitoring agreed upon common variables' (Number)	40
'PERSGA member countries that use common monitoring methods developed by PERSGA' (Number)	4
Regional exchanges on data collection and sharing of monitoring results of water quality, fisheries and coral reef habitats' (Number)	3

[4]Based on the original proposal, WadiEl Hamata-Gemal NP was to be one of the pilot sites but did not proceed because Egypt withdrew not long after the start of the Project. Soon after Egypt returned to the Project, Wadi El-Hamata Gemal NP became the second pilot site after the site in Yemen was dropped.

Revised End Date

31 December 2018.

Chronology of Important Project Dates

Table 4 provides a chronology of the important events during the Project.

Table 4: Important Project Events

Date	Event
July 2012	Preparation of GEF IW Tracking Tool
January 2013	Completion of the ESMF Dungonab Bay Mukawwar Island (Sudan)
29 August 2013	WB Board Approval
5 November 2013	Official start of theProject
26-27 March 2014	Inception workshop (with training on procurement, safeguards, and monitoring and evaluation) and 1st Supervision Mission
February and November 2015	2nd an 3rdSupervision Missions
February 2016	Mid-term Review (MtR)
14 March 2016	4th Supervision Mission
September 2016	5thSupervision Mission
May 2017	6thSupervision Mission
January 2018	Original end date of Project
27-29 March 2018	Implementation Support Mission
31 July 2018	Initiated ICR process
October 2018	Implementation Support Mission
October/Nov 2018	Final project evaluation mission and reporting
December 2018	Final project evaluation workshop
31 December 2018	Revised end date of Project
January 2019	ICR completion

(Updated from MtR)

Summary of Mid-term ReviewFebruary 2016

The MtRevaluated the performance of the Project approximately mid-way during its implementation. The MtR was important in triggering the revision of the PDO and indicators. The main findings of the MtR were:

- The PDO was still fully relevant with respect to national conditions and current governments' sectoral strategies.
- The Project design was still pertinent and the planned activities and outputs were still appropriate.
- The Project had already recorded important achievements: (i) contributing to identifying gaps in national marine and coastal legislation, polices and management practices at regional and national levels; (ii) underlining elements of reform for more effective forms of management of coastal and marine biological resources; and (iii) formulating adequate methods to monitor marine resources.
- Implementation of the sub-projectsand the disbursement rate were reported as slow, and

- Recommendation to move more rapidly on the implementation of the sub-projects and to include activities focusing on climate change impacts to marine environments.

Summary of Aides Memoires March and October 2018

The main objectives of the WB missions in March and October 2018were to review progress of the Project, to assess project achievements, financial management, procurement and safeguard compliances. The main findings of the missions were:

- All indicators had been achieved or exceeded.
- An improvement in the disbursement rate, from 67% during May 2017 to 89% in March 2018 and 94% in October 2018.
- All components completed and predicted 100% exhaustion of Grant proceeds before the closing date in December 2018.
- There were several success stories and that PERSGA should disseminate these successes.
- The Project responded to the recommendations of the MtR by incorporating training and knowledge sharing in relation to climate change impacts to coral reefs.
- That sub-projects in the two pilot sites were fully operational and hadcontributed to improving livelihood options and participation of local communities in four MPAs, and
- That the integrated M&E system, which was developed by the PCU,was being effectively used to plan activities.

DESCRIPTIONOF THE EVALUATION METHODOLOGY

Evaluating the Project by Categories

In evaluating the Project, the following categories were examined and rated: efficacy; relevance;effectiveness; efficiency and sustainability. The definitions of each category used in this Reportis consistent with the MtR or theICRguidelines (World Bank 2018b).To help direct the evaluation,focus questions for each category were specified in the ToR.These are shown below under their respective category.

Efficacy

A key focus of the FE was to evaluate the efficacy of the Project. For purposes of this evaluation, efficacy is defined as the extent to which the Project's objectives were achieved. Arguably, achievement of the PDO and within the GEF budget is the ultimate arbiter of Project success[5]. To objectively evaluate the PDO, it needed to be quantitatively defined using PDO indicators (n = 4)[6]. Each indicator had an end target. An end target represented an a-priori defined quantitative (numerical) or qualitative (e.g. yes/no) outcome that the Project was aiming to achieve. For instance, one PDO indicator was '*Area in selected marine protected areas under improved management*' measured in hectares (ha). The end target

[5] Obviously, this is dependent on how well the indicators match the PDO and how precisely they are defined and measured (please refer to 'Lessons Learned' for Project specific comments on these issues).

[6] I also usedsome of the intermediate indicators (n= 11) to verify achievement with the PDO.

for this specific indicator was 40,000 ha. The achieved target (measured at the end of the Project) was compared to the end target. If the indicator matched or exceeded itsendtarget, this provided evidence that the PDO was successfully achieved. Additional verification of achievement of the PDO included reviewing Project documents, site visits and interviews with stakeholders and beneficiaries. Thus, in evaluating achievement of the PDO, both quantitative and qualitative data were used.

Relevance

In the MtR, the concept of relevance is defined in terms of the extent to which the activities of the Project were suited to local and national environmental priorities and to global environmental benefits. Focus questions relating to the concept of relevance are presented in Table 5.Focus questions are further elaborated on (refer to Table 5) to provide additional context. Answers to these questions are presented in the result's section.

Table 5: Project Relevance Focus Questions.

Focus questions	Elaboration
Was the project design[7] and focus relevant to the needs and objectives?	Was the PDO relevant to local and national priorities? Was the project design relevant (adequate) to achieve the PDO?
Were the inputs, strategies and interventions realistic / appropriate?	Were the inputs/actions undertaken during the Project realistic in terms of achieving the PDO and within the project timeframe?
Were the project impacts and outputs adequate for the overall objective?	Can it be concluded that the PDO was successfully achieved based on the number and quality of Project outcomes?

Effectiveness

Effectiveness can be defined in terms of the degree to which something is successful in producing a desired result. Focus questions relating to the concept of Project effectiveness are presented in Table 6. Answers to these questions are presented in the result's section.

Table 6: Project Effectiveness Focus Questions.

Focus question	Elaboration
Was the Project effective in management processes and appropriateness in supporting implementation and delivering desired / planned results?	Were the management processes effective? Management processes aid the structuring, investigation, analysis, decision-making and communication of Project issues. Examples include the strategic planning process, expense and capital budgeting, performance management systems, product planning and management cost accounting.
Was the Project M&E mechanism effective in contributing to meeting project results?	Was the Monitoring and Evaluation (M&E) mechanism effective?
Was the Project effective in its implementation strategies?	Did PCU, NSC and NC work effectively together?

[7] Project design is an early phase of a project where a project's key features (e.g. objectives), structure, criteria for success, and major deliverables are planned out.

Was the Project effective in responding to the needs of the beneficiaries?	Was the Project flexible to accommodate the needs of beneficiaries?
Was the Project effective in involving stakeholders?	Did stakeholders contribute to decision making?
Was the Project effective in adaptive management and execution to overcome obstacles/challenges, or grasping opportunity to up-scale/ expand results?	Was the Project able to make changes based on early lessons learned (e.g. based on the MtR)?

Efficiency

Efficiency is a measure of how economically resources and inputs were converted to results. It assesses whether the costs involved in achieving project objectives are reasonable in comparison with both the benefits and demonstrated value for money.Focus questions relating to the concept of Project efficiency are presented in Table 7. Answers to these questions are presented in the result's section.

Table 7: Project Efficiency Focus Questions.

Focus question	Elaboration
When utilizing the fund resources, did the actual/ expected results justify costs incurred?	Left blank intentionally
Was there synergy and coordination with other overlapping and similar interventions (fundednationally and /or by other donors)?	Left blank intentionally
Considering collaboration with the national institutions, development partners, and NGOs(co-finance)	Left blank intentionally
Was efficiency evident in the management structures, procedure and accountability?	Left blank intentionally
Was efficiency evident in procurement and financial management processes and procedures?	Left blank intentionally

Sustainability

Sustainability is defined as the ability to be maintained at a certain rate; or the avoidance of the depletion of natural resources in order to maintain an ecological balance[8]. In context to this Project, both definitions apply. This is because the Project aimed to put in place alternative livelihood interventions that wouldpersist after the Project ceased. If these

[8] There was no definition of sustainability offered in any Project document so the definition given in the Oxford Dictionary was used https://en.oxforddictionaries.com/definition/sustainability

interventions continuedtheyshould, in theory,reduce the affected communities' dependency onlocal marine resources. Focus questions relating to the concept of sustainability are presented in Table 8. Answers to these questions are presented in the result's section.

Table 8: Project Sustainability Focus Questions.

Focus question	Elaboration
Was the project design and focus relevant to the needs and objectives?	In this context, relevant to the long-term sustainability of the PDO?
Were the inputs, strategies and interventions realistic / appropriate?	Appropriate in terms of sustainability?
Did the [Project] success stories show potential for their replication/ scaling up of the approaches and outcomes?	Left blank intentionally.
Was their evidence for the sustainability of capacities built at the individual and organizational level?	Individual = fishers; protected area managers. Organizational = Departments.
Main lessons and recommendations for harmonizing or comparable/ extensive interventions in future, e.g. comprehensive proposals for future interventions based on the current evaluation findings	Lessons learned are presented in a following section.

Approach to Scoring

Each categorywas rated using a four-point score framework based on that proposed inthe ICR guidelines (World Bank, 2018b)The four-point scores are: High; Substantial; Modest; and Negligible. The ICR guidelines provides definitions for the four scores, but only for the categories: relevance; efficacy; and efficiency. For the Overall Project Outcome, there was a 6-point scale (Table 9). The scoring approach used in the Report is largely aligned with that proposed in the ICR.

Table 9:Rating scale for Overall Project Outcome

Score	Definition
Highly Satisfactory (HS)	There were no shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance
Satisfactory (S)	There were minor shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance.
Moderately Satisfactory (MS)	There were moderate shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance.
Moderately Unsatisfactory (MU)	There were significant shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance.
Unsatisfactory (U)	There were major shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance.

Highly Unsatisfactory (HU)	There were severe shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance.

A similar ranking approach was proposed for Project management (Table 10).

Table 10: Rating scale for Project Management

Score	Definition
Highly Satisfactory (HS)	The project has no shortcomings and can be presented as "good practice".
Satisfactory (S)	The project has minor shortcomings.
Moderately Satisfactory (MS)	The project has moderate shortcomings.
Moderately Unsatisfactory (MU)	The project has significant shortcomings.
Unsatisfactory (U)	The project has major shortcomings.
Highly Unsatisfactory (HU)	The project has severe shortcomings.

Data Collection

During the FE, a variety of data were sought to support the evaluation. Threemethods were used to obtain data; review of Project documents; field visits; and questionnaires.

Review of Project Documents: Key Project documents were reviewed with the aim of evaluatingachievement of the PDO, outcomes and indicators (Table 11). This review was also used to understand the reasons for changes that occurred during the implementation period.

Table 11: Key Project documents reviewed for the FE

Document title	Date produced	Description / use in evaluation
Project Implementation Manual	April (2013)	Describes, justifies and identifies the risks to the Project.
Project Appraisal Document (PAD)	August 8, (2013)	For use in verifying the operation's originalobjectives and components, results frameworks and indicators, planned M&E and the presence of baseline information, safeguard category.
Mid-Term Review Report	February (2016)	This Report was intended to provide a complete and systematic account of the performance and results of the Project, by monitoring and assessing: (i) implementation and adaptive management to improve outcomes; (ii) project performances (progress towards results) since effectiveness; and (iii) pertinence of objectives and adequacy of the different activities and modalities of intervention.
World Bank Aide-Memoire and Review Letter	March and April (2018)	A review by the Word Bank of the Project's achievement, financial management, procurement and safeguards compliance of the project.
Restructuring Paper	October 7, (2018)	Describes and justifies changes to the Project's PDO, PDOindicators and intermediate indicators.
SEM Progress Report	October (2018)	The latest progress report designed to summarise achievements of the Project.
World Bank Aide-Memoire - latest	October (2018)	A review by the WB of the Project's achievement, financial management, procurement and safeguards compliance of the

		project.

Activity or location specific documents examined included: Management plans for Dungonab Bay and Mukkawar Island National Park(DMNP) and Wadi El-Gemal Hamata National Park, Egypt (WGHNP); the PERSGA Standardised Monitoring Manual; and Social and Environmental Management Plans (ESMP) for the pilot sites.

Field Visits: These were designed to interviewa range of stakeholders (e.g. NC, beneficiaries, government department staff)and observe sub-project sites. Field trips were to Port Sudan, Sudan from29October and 2November 2018; Djibouti from 3 and 6November 2018; Aqaba, Jordan from 10 and 12November 2018; Hurghada, Egypt from 13 and 16November 2018; and7 to 9 November and 17 to 21 November, in Jeddah, Kingdom of Saudi Arabia.

Questionnaire: Stakeholders were also asked structured questions using questionnaires. There were two questionnaires: one designed for NCs and Project consultants (Annex 2); and one for beneficiaries (Annex 4). The questionnaires allowed the consultant to quantify and compare perceptions and levels of satisfaction of stakeholders on matters relating to different aspects of the Project. People have their own individual perceptions of what 'success' is, which is influenced by their own experience, understanding and beliefs. These questionnaireswere designed to capture those perceptions. Responses to the questionnairesare given in Annex 3 for the NC/consultants and Annex 5 for the beneficiaries. A list of people who responded to the questionnaires or who were met during the site visits are found in Annex 6.

ANALYSIS REGARDING THE ACHIEVEMENTS OF THE OBJECTIVES, OUTPUTS AND OUTCOMES

Efficacy

Achievement of PDO

The PDO was to:"*To improve management of selected MPAs by local communities and strengthen information sharing between PERSGA member countries*."

The PDO can be divided into two parts for more detailed evaluation:
Part 1) To improve management of selected marine protected areas by local communities, and
Part 2) strengthen information sharing between PERSGA member countries.

Each part needs to be linked to the most appropriate indicators in order to provide evidence of achievement. In context of this Project, both PDO indicators and intermediate indicators are relevant to helping evaluate achievement of the PDO. Table 12shows the Results Framework. Itlists the indicators, their end targets, the actual final target and supporting notes. The colour scheme in the Results Framework is used to highlight which indicatorsare used to provide evidence supportingeither Part 1 or Part 2 of the PDO.Thegreen highlighted indicators support the evaluation of Part 1 of the PDO and yellow highlighted indicators support Part 2.

Table12:Results Framework showing the PDO and intermediate indicators and their endtargets and what they achieved[9] (see text for explanation relating to the colour coding).

Indicator	End Target	Achieved	Supporting notes
PDO Indicators			
Area in selected marine protected areas under improved management[10]	40,000 ha	>200,000 ha)	-Realised. -Two MPAs were selected as pilot sites to improve management. The two MPAs were DMNP and WGHNP. -Combined, marine waters in thesetwo MPAs amount to greater than the target of 40,000 ha (DMNP, Sudan, about 20,000 ha and WGHNP, Egypt, ~200,000 ha of marine waters). The original end target was only 40,000 ha because WGHNP was a late inclusion when the Kamran Island MPA in Yemen was dropped as a pilot site. -Both MPAs have management plans stipulating rules governing the use of netsand fishing restrictions relating to spawning periods. -Management rules, including zoning, for both MPAs went through a consultative process involving local communities and other stakeholders. -There are full-time staff members who enforce MPA rules.

[9]Aligned with the October 2018 Aide Memoire.
[10] 'Improved management' was defined, in part, when users of these MPAs comply with rules governing net mesh size use and access restrictions during fish spawning periods (see Restructuring Report). However, other criteria are also used in this evaluation to demonstrate improved management of these MPAs.

Direct project beneficiaries (number)	1000	2000	-Realised The definition for direct project beneficiaries was very broad and included all people involved in workshops, training programs and sub-projects. [Note: the realised 2000 beneficiaries areprobably an underestimate because Mohammed Gol and Dungonab have a combined population of approximately 3,000 people. Most, if not all people living in these villageshave benefitted from the solar energy systems at the school, mosque and bakery].
Sub-indicator female (%)	30	50	-Realised -Numbers were tallied by the PERSGA team during consultation activities.
Agreed upon common Red Sea monitoring variables of water quality, fisheries and coral reef habitats accessible for PERSGA member countries on a regional database	Yes	Yes	-Realised -PERSGA approved 'Standardised Monitoring Protocol Manual. -Protocols being adopted by member countries (PERSGA database). -Workshops to explain the standardised protocols were undertaken in Egypt, Sudan, Jourdan,Djibouti and Saudi Arabia[11].
Intermediate Indicators			
Number of alternative livelihood projects realized by communities (Number)	4	12	Realised. At least 12 livelihood sub-projects are fully (n=10)or close to being fully (n=2)operational: 1. Qula'aneco-village in the WGHNP (solar energy unit to power lights and desalination unit; and community run tourism venture) (Egypt). 2. Solar energy units at Dungonab and Mohammed Gol in DMNP(Sudan). 3. Solar energy operated water desalination unit at Qula'anin WGHNP (Egypt). 4. Women association at Mohammed Gol (DMNP) where they operate a bakery to produce pastries and other items for sale (Sudan) [Note that dairy goats were also supplied to the villagers to provide a source of milk for personal consumption and potential commercial gains] 5. Women association at Dungonab (DMNP) where they also bakepastries and other food items for sale (Sudan) [Note that dairy goats were also supplied to the villagers to provide a source of milk for personal consumption and potential commercial gains] 6. Women centre a. tAbu Ghosson,WGHNP, producing traditional handicraft and textiles(Egypt) 7. Fishing boat maintenance centre at Mohammed Gol, DMNP (Sudan) 8. Fishing boat maintenance centre atDungonab, DMNP(Sudan) 9. Fishermen centre at Moucha-Maskali Islands MPA (Djibouti) 10. Trial and development of a pelagic fishery(Jordan) 11. Glass-bottom tourist boats supplied to communities in

[11]Note that participation by Saudi Arabians in Project activities were not paid from the GEF fund.

			WGHNP[not fully operational during the evaluation period. Waiting on Government licences]. 12. Glass-bottom tourist boats supplied to communities atDMNP (Sudan) [not fully operational during the evaluation period. Waiting on Government licences].
Participants in consultation activities during Project implementation (number)	600	1000	-Realised -Numbers were tallied by the PERSGA team during consultation activities.
Participants in consultation activities during Project implementation - female	180	380	-Realised -Numbers were tallied by the PERSGA team during consultation activities.
Number of MPA plans updated with community input and with assigned rights for user groups (Number)	2	3	-Realised -Three management plans were prepared and or updatedduring the Project. These were for DMNP, SanganebNP and WGHNP. -Community input into the management plans was gained via workshops. -'Assigned rights' of different user groups were identified in the management plans. This was operationalised in terms of where people could harvest resources based on an agreed zoning scheme. -It is also worth noting that anintegrated management plan was developed for the DMNP and the Sanganeb NP in order to better manage the World Heritage Site, which incorporates both sites.
Reporting on GEF IW indicators and participation in workshops	Yes	Yes	Realised -The reporting of GEF IW indicators have been done using a variety of forums: success stories disseminated on the SEM website and IW-Learn Newsletter; at the IW&MPAs event (Dakar, September 2018); and at the 8th and 9th IW Conferences (Sri Lanka, May 2016 and Morocco, November 2018, respectively).
Protected Areas with updated management plans that brought coral reefs under regular monitoring and surveillance with community participation.(Number)	2	3	Realised The three protected areas are:DMNP; WGHNP; and Sanganeb NP.
Fishermen in selected marine protected areas using mesh size as per management plan' (Number)	150	600	-Realised -Sources included fishery reports and a stakeholders meeting reports compiled when negotiating on zoning for WGHNP and DMNP.
Fishermen observing closed season for major species as per management plan' (Number)	100	125	-Realised - Sources included fishery reports and a stakeholders meeting reports compiled when negotiating on zoning for WGHNP and DMNP.
PERSGA member country staff trained on	40	66	-Realised -Numbers were tallied by the PERSGA team during training

methods of monitoring agreed upon common variables' (Number)			activities.
'PERSGA member countries that use common monitoring methods developed by PERSGA' (Number)	4	5	-Realised -The five-member countries currently using the common monitoring methods developed by PERSGA are: Egypt; Sudan; Jordan; Saudi Arabia and Djibouti.
Regional exchanges on data collection and sharing of monitoring results of water quality, fisheries and coral reef habitats' (Number)	3	4	-Realised: -Four regional workshops focusing on data sharing.

The results shown in Table 12 have been updated from those reported in the October 2018 Aide Memoire. Table 12 shows that indicators used to measure achievement of the PDO often greatly exceeded their end targets.

Box 1: Mr. Ahmed Ghallab, Red Sea Protectorate, Egypt, discusses the zoning scheme for Wadi El-Gemal Hamata National Park with colleagues and Project team members. The zoning scheme, developed in consultation with local communities, has contributed to improved management of the NP.

Other Evidence Supporting Achievement of the PDO

In this section I presentother evidence that could be used to demonstratethat management of DMNP and WGHNP has been improved and that there is greater information sharing among member countries.However, caution needs to be exercised when attempting to choose criteria to measure Project success after the Project has ceased because it can easily lead to confirmatory bias. Confirmatory bias is the inclination to search for, or interpret, data in a way that confirms pre-existing beliefs (Mahoney, 1977). Consequently, I not only sought evidence that concurred with the results of the PDO indicators (i.e. concurred that

the PDO was successfully achieved) but I also sought evidence that may indicate that achievement of the PDO was not as clear-cut as suggested by the indicators.

Additional evidence supporting '*To improve management of selected marine protected areas by local communities*' included:

- The Project team prepared a report titled: 'Guidelines for the Management of Marine Protected Areas'[12]. The guidelines place strong emphasis on consultation with stakeholders.
- Fostering stewardship of the Moucha-Maskali MPA among local fishers through the provision of a shelter on Maskali Island. As a consequence of this intervention, fishers are now reporting poaching and other violations within the MPA and removing solid waste from Maskali Island.
- Fostering relationships between fishers using Moucha-Maskali MPA and the Djibouti Department of Environment.
- Fostering relationships between communities at Mohammed Gol and the MPA management and enforcement.

Additional evidence supporting '*To improve management of selected marine protected areas….(irrespective of community support).*' included:

- The Project prepared a report titled: 'Guidelines for the Planning of Marine Protected Areas Using Mapping Techniques'[13].
- Promoting enforcement capability in the DMNP by providing the MPA management and enforcement agencywith a patrol vessel.

Additional evidence supporting sharing of information among PERSGA member countries included:

- PERSGA is preparing a 'State of the Marine Environment Report' using data sourced from all PERSGA member countries.

I found no compelling evidence that was contrary to the outcome suggested by the indicators.

As noted earlier, efficacy relates to whether the PDO was achieved. The overall efficacy rating was 'High'and justification for the rating is shown in Table 13. This rating relates to the post-restructuring period of the Project. The ICR definition of 'High' for efficacy is "*The operation exceeded or fully achieved its objectives (intended outcomes) or is likely to do so*."

Table 13: Efficacy Rating and Justification

Rating	**Justification**
High✔ Substantial Modest Negligible	• The PDO was achieved (based on indicators and other evidence). • All indicators met or exceeded end targets. • Improved management and community participation (verified by park management staff and beneficiaries duringmy field trip toDMNP and WGHNP).

[12]http://sem.persga.org/Documents/C1/03_Guidelines_for_MPA_Management.pdf
[13]http://sem.persga.org/Documents/C1/01_Guideline_for_Planning_MPA_using_Mapping.pdf

Relevance

As noted earlier, the concept of relevance is defined in terms of the extent to which the activities of the Project were suited to local and national environmental priorities and policies. Conclusions relating to Project relevance are presented in Table 14 and the rating of Project relevance presented in Table 15. The relevance rating for this Project was 'High'. The ICR definition of 'High' for relevance is "*There were no shortcomings or at most minor shortcomings in the relevance to the current Bank CPF/CPS. The operation provided clear evidence of the alignment of the PDOs to the current CPF/CPS objectives. Or, if circumstances changed, the PDOs were changed accordingly to keep objectives fully relevant*."

Table 14: Project Relevance

Focus questions	Response
Was the project design[14] and focus relevant to the needs and objectives?	The Project design was relevant to achieving the PDO. This included the strong emphasis on stakeholder consultation and capacity building. Despite the PDO being modified, it remained relevant to local and national priorities. National priorities are, in part, reflected in the Jeddah Convention and associated protocols[15]. Many participants interviewed during the field visits, including Mr. Eisa Kabashi Eisa, the Environment Minister for the Red Sea State in Sudan, made it clear that local and national priorities included poverty alleviation (pers. comm. 30 October, 2018). Project activities at the two pilot sites contributed to reducing poverty and improving the livelihoods of the communities at Dungonab, Mohammed Gol (DMNP) and Qula'an (WGHNP). The PDO remained relevant to member countries commitment to the UN Sustainable Development Goals (e.g. Goal 14: 'Careful management of this essential global resource is a key feature of a sustainable future').
Were the inputs, strategies and interventions realistic / appropriate?	Most interventions were realistic in terms of ambition and cost. This is evident in the fact most appear to be economically viable and fully supported by the local communities and government agencies. Many interventions now represent Project success stories.However, at the time of the FE it was unclear if the glass bottom boats were a realistic intervention for communities in the DMNP.
Were the project impacts and outputs adequate for the overall objective?	The Project resulted in numerous and notable outcomes. These included solar energy systems in WGHNP and DMNP; supporting a bakeryat Mohammed Gol; traditional handcrafts and textile production at Abu Ghosson, WGHNP; and installing a desalination unit (powered by solar energy) at Qula'an, Egypt. All were important in contributing to the achievement of the PDO.

Table 15: Relevance Rating and Justification

Rating	**Justification**
High✔ Substantial Modest Negligible	• The PDO was highly relevant to localand national priorities. • The success of sub-projects hascontributed to poverty reduction. • The outcomes contribute to PERSGA member countries meeting their obligations in regards to the UN Sustainable Development Goals. • Local beneficiaries associated with the sub-projects were very satisfied.

[14] Project design is an early phase of a project where a project's key features, structure, criteria for success, and major deliverables are all planned out.

[15] http://sem.persga.org/page-jeddah-convention.php

Effectiveness

Conclusions relating to Project effectiveness are presented in Table 16 and the rating of Project effectiveness presented in Table 17.

Table 16: Project Effectiveness

Focus question	Response
Was the Project effective in management processes and appropriateness in supporting implementation and delivering desired / planned results?	Based on interviews with Project participants, the general consensus was that the management processes were effective at delivering Project outcomes. One of the most effective management processes was clear communication between the different arms of the implementation framework (i.e. among the PCU, the NSCs and the NCs). This prevented bottlenecks occurring in the decision-making process. Another important management strategy was the involvement of beneficiaries in much of the decision-making process relating to sub-projects. Another crucial management strategy was having on the ground personnel (e.g. NC) to consultant directly with local stakeholders at regular intervals. Other evidence of effective management was the achievement of the PDO (withoutexceeding the original GEF funds). Evidence of ineffective management could relate to the fact that the PDO and indicators were not adequately reviewed before the start of the Project. Another management weakness at the start of the Project related to the overly optimistic timeframes in relation to completing sub-projects.
Was the Project M&E mechanism effective in contributing to meeting project results?	Based on the findings from the MtR, the M&E was slow to be implemented. However, by the time of the March 2018 Implementation Support Mission, the M&E was being "effectively used to plan activities, and regularly collect and analyse information…." (Source: Aide Memoire March 2018). Please also refer to comments under 'Project Weaknesses'.
Was the Project effective in its implementation strategies?	Based on interviews with NCs and members of the PCU, Project participants cooperated effectively together. This was facilitated through regular meetings or phone calls.
Was the Project effective in responding to the needs of the beneficiaries?	The primary Project beneficiaries are those people whose incomes are dependent on the quality of the Red Sea and the Gulf of Aden (World Bank, 2013). This included individuals from communities dependent on fisheries and tourism. Most of the Project's sub-projects were based on the needs identified by the beneficiaries themselves. This was corroborated by the beneficiaries during the field visit.
Was the Project effective in involving stakeholders?	Yes, a range of stakeholders were involved in decisions made during the Project planning and implementation. For instance, the NSCs, which were formed at the beginning of the Project in each participating country, included a range of stakeholders such as community leaders, local administrators, and representatives from NGOs and from the scientific community. Environment and Social Management Plans were developed in collaboration with stakeholders. Stakeholders were also involved in monitoring the outcome of these Plans. There were also community consultation field trips to DMNP and WGHNP before and after the start of the Project (Source: October 2018 Project Progress Report).
Was the Project effective in adaptive management and execution to overcome obstacles/challenges, or grasping opportunity to up-scale/ expand results?	Yes; the Project was effective in adaptive management. This was evidence following the MtR when the PDO and indicators were modified with minimal disruption to the Project outputs. Another successful example of Project adaptability was when it became apparent that Kamaran Island MPA, one of the pilot study sites, was no-longer suitable. The Project team was able to rapidly reach consensus on WGHNP as an alternative site. The Project was also sufficiently adaptive to incorporate important issues not mentioned in the PAD but identified in the MtR. One such issue was climate

	change and its predicted impacts to hard coral communities. Workshops were conducted to provide managers with insights on how they can manage to improve the resilience of coral communities to climate change.

Table 17: Project Effectiveness Rating and Justification

Rating	Justification
High✔ Substantial Modest Negligible	• Consensus amongst participants was that they were largely satisfied withthe effectiveness of managementduring the Project. Most agreed that management was characterised by: having a clear goal; timely decision making; and that members of the PCU were willing to listen to the NCs. • Clear lines of communication among PCU, NSC and NC. • Management clearly expressed expectations. • Management was sufficiently flexible to modify Project activities when necessary and to take advantage of opportunities (i.e. increase participant numbers in workshops). • Management maintained strong oversight over budget and allocation of funds.

Efficiency

The GEF contribution to this Project was US$3M with in-kind contributions from PERSGA member countries. In regards to the PERSGA contribution, member countries contributed all funds committed to the Project (Dr. Mohammed Satti, Project financial manager, pers comm. 17 November, 2018).The GEF fund did not contribute towards administration or management costs. Instead, all GEF funds were directed to on-ground activities. Management cost were covered by PERSGA or the participating countries. Figure 2 shows a break-down in the expenditure of the GEF fund up to the last quarter 2018.

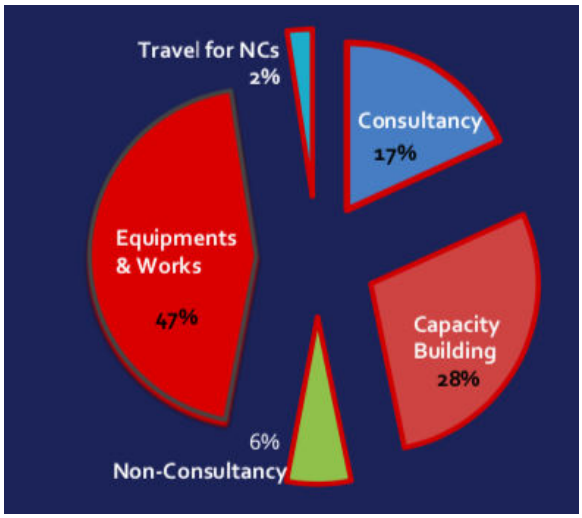


Figure 2: Break-down in GEF fund expenditure at time of final quarter 2018.

At the time of the MtR, the disbursement ratefor the GEF funds was18% (Bonfiglioli, 2018). The rate had increased to67% during the Aide Memoire in May 2017, and to 89% during the Aide Memoire in March 2018. This rapid increase in the disbursement rate was attributed to

the enhanced implementation ofProject activities following the MtR. At the time of writing this report, the Project was closeto completing all component initiatives, achieving 100% exhaustion of the Grant (Source: Aide Memoire October 2018).Finances were managed by PERSGA and PERSGA submitted Interim Financial Reports (IFRs) to the WB quarterly. The author of the October 2018 Aide Memoire noted that the last IFR was found to be satisfactory. The final audit report for 2018 will be prepared by May 31, 2019[16]. A detailed report on the Project finances will be addressed in a separate study.

Box 2: Co-financing vs synergies

To maximise the financial benefits of the Project, the Project team used two mechanisms: co-financing and encouraging synergies with partners. In context of this Project, co-financing involved sharing the cost of individual sub-projects with partners who had their own funds. The second mechanism involved encouraging other funding agencies to continue training and capacity building on activities started by the Project. Examples of both are given below and in the section titled 'Success Stories'. Annex 7 provides a list of co-finance and parallel projects with associated monetary contributions.

Conclusions relating to Project efficiency are presented in Table 18 and the rating of Project efficiency presented in Table 19.The efficiency rating for the Project was 'High'. The ICR definition of 'High' for efficiency is "*The operation exceeded or fully achieved its objectives (intended outcomes) or is likely to do so*."

Table 18: Project Efficiency

Focus question	Response
When utilizing the fund resources, did the actual/ expected results justify costs incurred?	The general consensus among Project participants was that the outcomes (including fully operational sub-projects) were achieved cost-effectively. The Project outputs were extremely cost effective because the GEF funds were only used to support beneficiaries, not to cover administrative costs[17].
Was there synergy and coordination with other overlapping and similar interventions (funded nationally and /or by other donors)?	There are a number of examples where PERSGA or Project partners cooperated with other donors to foster synergies. At Mohammed Gol, Sudan, UNESCO funded training workshops for women at the women's centre establishedby the Project. Also, in Sudan, a Norwegian funding agency in collaboration with the United Nations Industrial Development Organization (UNIDO) used Project funded infrastructure in DMNP to implement additional alternative livelihood projects as well as projects addressing marine litter (funding $5M Euros) (Mr. Ashbo Ohag, Department of Environment, pers. comm., 30 October 2018).
Considering collaboration with the national institutions, development partners, and NGOs (co-finance)	The Project team collaborated with national partners like the Ministry of Environment the Institute of Fisheries, in Egypt and Sudan. Collaboration was undertaken with universities and research centres who helped in the execution of the monitoring programs. This included the Ministry of Tourism,the coastguard and NGOs like HEPCA[18] in Egypt and Cousteau Society in Sudan.

[16] Reported in the October 2018 Aide Memoire.

[17]The benefits of not using external funds to help support Project management/administration costs need to be balanced against the additional management/administration burden placed on PERSGA and local Project participants who must also carry out their 'normal' day to day duties at their respective organisation.

[18]Hurghada Environmental Protection and Conservation Association (HEPCA)

	At Qula'an, the intervention was co-financed by PERSGA, and two NGOs HEYA [19]and HEPCA. PERSGA provided the solar system (panels, cables and batteries); HAYE provided the new houses and HEPCA provided the 'tent' that serves as the café for tourists using the beach. At Mohammed Gol, PERSGA provided the solar system to operate the vessel maintenance centre. The maintenance centre is in a sea container that was provided by the Sudanese Department of Wildlife Protection, while the jetty at the landing site was provided by UNIDO. At Abu Ghosson, the handicraft centre was installed by PERSGA in a building provided by the local government. PERSGA also provided the furniture, sewing machines and weaving/loom equipment. HEPCA funded floor tiles to be placed inside the centre. At Moucha-Maskali Island MPA, PERSGA provided the material to build the fishers centre and also provided the solar system. The fisher's association funded the construction of the centre and transport of material to MaskaliIsland. The Djibouti Department of Tourism provided the licence for the centre on the Island.
Was efficiency evident in the management structures, procedure and accountability?	The Project finances were audited regularly by the WB Procurement Office in Cairo, the internal audit of the WB office in Zagreb and an audit of internal control system and general audit by PERSGA's external certified accountants Al-Sabban and Partners (Dr. Mohammed Satti, Project financial manager, pers. comm. 17 November, 2018)
Was efficiency evident in procurement and financial management processes and procedures?	As above; Project finances have been regularly audited by WB specialists(in both procurement and finance) in addition to the external auditors. During the Project execution period, all the review and audit reports were positive and indicated that PERSGA followed processes and procedures of both the WB and PERSGA.

Table 19: Project Efficiency Rating and Justification

Rating	**Justification**
High✔ Substantial Modest Negligible	• With a relatively modest monetary contribution from GEF, the Project team delivered numerous success stories including improving the livelihood of communities in WGHNP and DMNP. • The Project team did not use the GEF funds for administrative purposes or for project management. The funds were directed towardson ground activities. PERSGA covered administrative cost using its own budget. • The Project team was able to leverage co-financing and synergies with other donors to improve outcomes. • The Project finances were regularly audited by WB and other auditors.

Sustainability

In terms of this Project, successful examples of livelihood interventions are those that are self-sustaining and which eventually lead to coastal communitiesbecoming less dependent on local marine resources. Conclusions relating to Project sustainability are presented in Table 20 and the rating of Project sustainability presented in Table 21.

[19]Not an acronym. HEYA means 'she' in Arabic. NGO based in Cairo

Table 20: Project Sustainability

Focus question	Response
Was the project design and focus relevant to the needs and objectives?	The Project focused on implementing actions that had potential to continue beyond the end date of the Project. One design component that should foster sustainability was the facilitation of community involvement in the choice of sub-projects. Thus, sub-project choice was a bottom-up processes rather than top-down. Another design component aimed at fostering sustainability was via site selection. For instance, Qula'an was selected to host a tourism related sub-project because of the volume of tourists passing along the adjacent Shalateen-Hurghada highway.
Were the inputs, strategies and interventions realistic / appropriate?	Project inputs and interventions were appropriate to help foster sustainability. For instance, intensive training and capacity building programs (listed in Section 'Project Achievements by Outcomes') should ensure local capabilities to continue environmental monitoring once PERSGA's direct support ceases. As an example, nine environmental inspectors working at the Red Sea State Ministry of Environment, Tourism and Wildlife in Sudan received training to monitor progress of the ESMPs prepared by the Project team. Another action that will contribute to the long-term sustainability of marine resources is the proposed 'Regional Protocol Concerning Management of Fisheries and Aquaculture in the Red Sea and Gulf of Aden' (to be signed in March 2019).
Did the [Project] success stories show potential for their replication/ scaling up of the approaches and outcomes?	Yes; many of the sub-projects show great potential for replication and scaling-up. This was because sub-projects were not complex and could be expanded using the existing skill set of community members. Also, the sub-projects do not require large maintenance costs. Consequently, it would not be difficult for other communities to replicate some of these sub-projects. A good example of this was identified by Dr. Nedal M. Al-Ouran (UNDP), who designed the marine biological monitoring program in Jordan. He said he will adopt some of the PERSGA monitoring protocols into Jordan's existing national marine monitoring program which has been going for about 20 years (pers. comm. 10 November, 2018). Since the success of the solar system installed at Qula'an, at least one adjacent village has commissioned a similar solar system to be installedto meet their own needs (Mr. Monsour Saleh, Qula'an Community leader, pers. comm. 14 November, 2018)
Was their evidence for the sustainability of capacities built at the individual and organizational level?	There was some evidence. For instance, Dr. Mohammed Al-Tawaha, from the Royal Marine Conservation Society of Jordan, has committed to continuing the biological monitoring even once the Project ceases (pers. comm. 10 November, 2018).Further, numerous individuals received training in skills needed to continue Project activities, such as monitoring. However, it is difficult to conclude if this training has provided participants with the confidence to continue some of the more technical monitoring activities without supervision. At Mohammed Gol, the vessel maintenance sub-project showed great potential for sustainability at the individual level. According to Mr. Mahmoud M. Hussein (vessel maintenance Mechanic, Mohammed Gol, pers. comm.29 October, 2018), the monthly returns is on average of 19,000 SDG (around US$600).
Main lessons and recommendations for harmonizing or comparable/ extensive interventions in future, e.g. comprehensive proposals for future interventions based on the current evaluation findings.	Lessons learned are presented in a following section. This focus question relates specifically to lesson learned in relation to sustainability. The main lesson for future interventions is to ensure sub-projects are fully supported by local communities. Without such support, sub-projects are unlikely to be sustainable.

Table 21: Project Sustainability Rating and Justification

Rating	Justification
High✔ Substantial Modest Negligible	• There is strong potential for sustainability among most sub-projects[20]. • Project beneficiaries associated with food production (baking at the women's centres at Mohammed Gol and Donganab) concluded that this activity was profitable. • The vessel maintenance centre at Mohammed Gol probably has the greatest potential for long-term financial sustainability given the current level of demand. • Similarly, the traditional handcraft centre at Abu Ghosson, Egypt, isalso generating profit despite limited marketingto date.

Box 3: A woman from Abu Ghosson, Egypt, producing handicraftusing a loom provided by the Project. The traditional handicraft centre, established with support from the Project and partners, is now generating income.

Project Achievements by Outcomes

Table 22listsome of the keyProject achievements for each of the four Project components. More details on achievements are reported in the latest Project Report (PERSGA, 2018).

Table 22: Project achievements by components

Outcomes	Achievements
Strengthening Marine Management Concept in Marine Protected Areas	*First national workshop on MPA planning, Port Sudan, 6-9 October, 2015 (25 specialists) (introducing participants to the process of management planning). Followed by community consultation field trip to Dungonab. *Second national workshop on MPA planning, Port Sudan, 17 December, 2015. *Field training workshop on survey and data collection methods for planning and

[20] Sustainability cannot be conclusively demonstrated until after the cessation of the Project.

	management of MPAs in the Red Sea andGulf of Aden (5-7 January, 2015, Port Sudan, Sudan). *Regional training workshop on ecosystem-based management approach for the conservation of marine mammals andseagrass habitats, Jeddah, 23-25 November, 2015 (22 participants from six countries (Djibouti, Egypt, Jordan, Saudi Arabia, Sudan and Yemen). * Contribution to inscribing Sanganeb and Dungonab as a UNESCO World Heritage Site (21 March, 2016). * Regional workshop on MPA management and on the job training at WGHNP, Egypt, 22-24 March, 2016 (17 participants). * Final draft of the management plan forDMNP (March 2016); *Field missions toDBINP and WGHNP, 19-27 May, 2016. * Training program on MPAgovernance in the PERSGA region, 9-13 October, 2016. * Consultation field missions to Sudan for the integrated management plan of the Sanganeb and DungonabUNESCO World Heritage Site, 19-27 February and 24-29 April, 2017. * Coordination meeting for the Sanganeb and Dungonab UNESCO World Heritage Site (meeting in Bahrain), 9-10 May, 2017. * Regional training workshop on reef resilience and responding to climate change in the Red Sea and Gulf of Aden, Hurghada, Egypt, 15-17 May, 2017. *Coordination mission to Hurghada and WGHNP to follow up on Project activities; 18-22 June, 2017. *Consultation field missions and data gathering for the zoning plan of WGHNP, 3-8 November, 2017. * Regional training workshop on "IUCN Red List Assessment in the Red Sea and Gulf of Aden" 4-7 December, 2017. * Final draft of the zoning plan for WGHNP, October, 2018.
Strengthening Coastal Communities	*Technical workshop toreview LMR laws, policies and management (Port Sudan, February, 2014). *Regional workshop to review legislations, strategies, policies andmanagement plans for the fishery sectors in the Red Sea and Gulf of Aden, 10-12 November 2014, PERSGA, Jeddah. *National workshop to review legislations, strategies, policies and management plans for living marine resources, February 2015, Port-Sudan, Sudan. *National workshop on mainstreaming ecosystem approach and co-management principles in living marine resourceslegislation and policies, November 2015, Jordan. *National workshop on mainstreaming ecosystem approach,principles in legislation and policies for living marine resources and development of livelihood options for coastal communities(45 participants), December, 2015 in Port Sudan. *Regional workshop: Guidelines for Ecosystem Approach, Co-management and Livelihoods of Coastal Communities in MPAs,8-11 June, 2015, Jeddah, Saudi Arabia. *Capacity building workshop on application of ecosystem approach and co-management principles in selection andimplementation of livelihoods sub-projects, 14-16 December, 2015 in Port Sudan. *National workshop on legislation and policies for living marine resources and awareness of coastal communities, May 2016, Djibouti. *First Focus Group Meeting for Recommendations Concerning Alternative Livelihoods Subprojects (ALS) for Fishers ofDMNP, Sudan (30 key experts and informants from stakeholder community), 26 November 2016 in Port Sudan. *Regional workshop on guidelines for ecosystem approach, co-management and livelihoods of coastal communities in MPAs(about 20 regional specialists); 8-11 June, 2015, Jeddah, Saudi Arabia. * Consultation Mission in DMNP Meeting with stakeholders(22 participants), 23 – 25 January, 2016. *Legislation and policies for living marine resources, and awareness of coastal communities in Djibouti, 29-30 May, 2016.

	*Installation of solar energy system at Qula'an,WGHNP, February – March 2017. *Installation of solar decentralized units at Dungonab and Mohammed Gol, DMNP, January 2017. *Provision of glass-bottom boats to support income from ecotourism at WGHNP and DMNP pilot sites, 2017. * Supporting women's income diversification from pastry production and dairy goat rearing at DMNP, 2017. * Fishing gear maintenance workshops to support integrated services of fish landing sites at Mohammed Gol and Dongonab, 2017. * Assessment of Nagel fish spawning aggregations, 2017 (Drat final report in January, 2018). * Regional workshop for demonstration of the ESMP cases of the SEM sub-projects during 16-18 April, 2018 in Hurghada, Egypt.
Regional Environmental and Socioeconomic Monitoring Network	*Regional workshop: Harmonization of Environmental and Socioeconomic Monitoring in the Red Sea and Gulf of Aden Countries and Updating a Regional Habitats Survey and Monitoring Manual.25-26 February, 2015, Jeddah, Saudi Arabia. *Participation in the meeting of the ecosystem approach integrated monitoring correspondence group of UNEP MAP (Integrated CORMON); 30 March to 1 April 2015, Athens, Greece. *Regional workshop on exchange of environmental and socioeconomic monitoring results attended by 55 specialists from participating countries, 3-5 November, 2015 in Aqaba, Jordan. *National workshop on environmental and socioeconomic monitoring for stakeholder awareness and outreach (organized in collaboration between Djiboutian Ministry of Housing, Urbanism and Environment (MHUE) and PERSGA (attended by about 40 participants), in Djibouti; 15 November, 2015. *Signing of monitoring contracts in Jordan (with the International Research Centre for Water, Environment, and Energy (IRCWEE), Balqa Applied University, April 2015) and Sudan (with the Faculty of Marine Sciences and Fisheries of the Red Sea University, June 2015). *Regional workshop on survey and measurement of common indicators in environmental and socioeconomic monitoring, Aqaba, Jordan, 9-11 January, 2017. *Completion of first year monitoring activities in Jordan, Sudan and Egypt and renewal of contracts, 2017. *Coordination mission and monitoring in Djibouti, 2017. *Studying degraded overfished habitats and suggesting appropriate rehabilitation and restocking measures in Jordan, 2017. *National workshop in relation to Moucha and Maskali Islands: ecological importance and requested conservation actions in MPAs, April 2017. *Assessing fish aggregates at artificial reefs in Aqaba, Jordan, 7-11 May, 2017. *Review of the revised ESMP monitoring checklist and transmission to PERSGA. * National workshop on environmental monitoring and assessment of rehabilitation and restocking of fishing habitats on the Jordanian coast of the Gulf of Aqaba, 11-12 September, 2017. * National training workshop: monitoring the health of the coral reefs using the Reef Check Method, 16-20 October, 2017. * National workshop on presenting environmental and socioeconomic monitoring results and management effectiveness evaluation (MEE) of MPAs, 18-20 December, 2017.
Project Management	*PCU in place2013 soon after signing Project agreement. *The firstNSCoccurred in September 2014. *National Project Management assistants provided on a part–time basis to follow up on implementation progress and disseminate information in each country. *Since Project inception, the PCU has contracted 22 individual consulting contracts, one firm for the financial auditing and two sole sourcednational institutions for monitoring.

Social and Environmental Safeguards

A requirement of the WB was to evaluate the potential social and environmental impacts associated with the sub-projects. Consequently, PERSGA prepared an Environmental and Social Management Framework (ESMF) for each pilot study site and Environment and Social Management Plan (ESMP) for sub-projects in the pilot study sites.In addition, PERSGA carried out monitoring to evaluate if the social and environmental objectives for the sub-projects were being met. The last monitoring reports were submitted in late 2017 (as illustrated in the SEM webpage). PERSGA also applied the same social and environmental safeguards to activities outside the pilot sites. For instance, activities in Djibouti and Jordan were required to be undertaken in a way to minimise environmental impacts. PERSGA either stipulated environmental targets to be met for such activities and or provided guidance during workshops. For instance, the trial of the deep-water fishery in Jordan was not implemented until fishers had participated in a workshop that identified ways to minimise by-catch and potential ghost fishingassociated with loss of gear (Dr. Ahmed S. M. Khalil, PERSGA, pers. comm. 18 November, 2018).

Counterfactual Argument

The counterfactual is defined as what would have happened in the absence of the operation supported by the WB. Based on feedback from Project participants, the overall consensusis that withoutthe GEF grant, the activities implemented during the Project would not have eventuated. Below is the question asked to Project participantsin order to determine if they thought the Project activities would have occurred without GEF funding. Two responses from non-PERSGA staff are presented below.

Do you think that GEF funds were used to finance activities that ***would not have taken place without GEF funding***?
Yes / No / Unsure (please briefly justify your response)

"*Yes. Alternative resources would probably not have been forthcoming since: (a) this is a regional project; (b) the SEM Project would probably not be eligible for other sources of international funding; and (c) PERSGA does not have sufficient other sources of revenue to implement SEM Project activities*." (Dr. Sheppard, Project consultant)

"*Yes. The SEM Project has definitely financed activities that would otherwise not have been achieved. National budget allocations for biodiversity and marine protected areas management in the countries in this region tends be low given there are many other more urgent priorities. Some examples of investments the project has supported that otherwise would not have happened include: the installation of new infrastructure in the parks, including solar panels, signage, as well as renovation works to upgrade park buildings, the livelihood programmes and the ecological monitoring programmes and the preparation of management plans. All of these activities would not have happened without the technical support and investment made by PERSGA SEM project."* (Dr. Rebecca Klaus, Project Consultant)

Adequacy of the M&E approach

A Monitoring and Evaluation (M&E) matrix was developed by the PCU to systematically assess Project progress towards achieving end targets of indicators, and to document and disseminate lessons learned. The M&E matrix can be found on the PERSGA website (http://sem.persga.org/page-monitoring-and-evaluation-forms.php). The matrix is a spreadsheet (similar in structure to the Results Framework), which is used to record the current status of each indicator in relation to their end targets. Consistent with the ICRguidelines (World Bank, 2018b), this assessment of the M&E focuses on three main elements: the quality of the M&E design; the quality of the M&E implementation; and the quality of the M&E utilization. The rating for the M&E is shown in Table 23.

Quality of the M&E matrix

The ICR identifies a number of the criteria used to evaluate the quality of the M&E. One criterion relates to whether adequate indicators were identified to monitor progress toward the PDOs using effective M&E arrangements. At least 11 indicators were used to monitor progress in achieving Part 1 of the PDO, while the remaining four indicators provide evidence supporting achievement of Part 2 of the PDO. Arguably, there could have been scope for additional indicators (refer to 'Lessons Learned').

One of the challenges with assessing the M&E was that there was no single Project document succinctly defining each indicator. For instance, in the PAD, Indicator 1 was defined in terms of 'Updated management plan'. But a management plan, on its own, is not sufficient evidence to confirm MPAs are being adequately managed. Instead, there should also be evidence that the actions listed in a management plan are being implemented to support improved management. Similarly, the indicator 'Direct project beneficiaries (number)' was also not adequately defined. The author of the MtR believed this indicator should relate only to people directly involved with the sub-projects, while the Project team interpreted this indicator more broadly by also including people who participated in training programs and workshops.

Implementation of the M&E

This sub-section assesses whether M&E data were collected and analysed in a methodologically sound manner. The author of the March 2018 Aide Memoire had concluded "*The inclusive and integrated M&E system, which was developed by the PCU is being effectively used to plan activities, and regularly collect and analyse information*". But, as noted earlier, there areno details describing the methods for measuring indicators or how data were verified. For instance, in the PAD, the section titled 'Data Source/Methodology' only provides limited guidance on the data sources and or the methodologies used to collect data. Therefore, it is not easy to make an objective assessment on the implementation of the M&E matrix.

Utilization of the M&E

This sub-section assesses whether M&E data on performance and results progress were used to inform project management and decision-making. The M&E did allow the Project team to track the status of achievement of the indicators in relation to their end targets. A

concern with the use of the M&E during the Project was that it wasn't regularly kept up to date, at least as shown in the Project website.

Table 23: Adequacy of the M&E

Rating	Justification
High Substantial✔ Modest Negligible	• The M&E matrix was useful at planning and tracking activities. • The M&E matrix is designed well and user friendly. Why not 'High'? • There was no supporting document explaining and justifying the various components of the M&E. This made it challenging to evaluate the methods used tocollect data and to determine the quality of the data. • Some indicators could have been more precise to aid interpretation. • The M&E was not kept up-to-date on the SEM webpage.

Overall Project Outcome Rating

The Overall Project Outcome Rating is based largely on three categories: relevance, efficacyand efficiency (World Bank 2018b). Also, because the PDO was formally revised approximately mid-way, the Project can be divided into two periods: pre-restructuring of the PDO and indicators and post-restructuring. Consequently, categories noted above can be rated for both periods. This necessitatedtheuse of the ICR split rating approach (World Bank 2018b). With this approach, an efficacy rating is given for both periodsto derive separate Overall Project Ratings for each period (World Bank 2018b, page 39). Each Overall Project Rating is weighted in proportion of the Project budget spent during that Period. The two Overall Project weights are then summed to derived the final rating. A worked example is given in the ICR (World Bank, 2018b) and a simplify worked example presented below in context to this Project.

The pre-restructuring period had an Overall Project Outcome Rating of 'Moderately Unsatisfactory' (=3)[21] and the proportion of budget spent for that period was approximately 0.32 (or 32%). For the post-restructuring period, the Overall Project Rating was 'Highly Satisfactory' (=6)[22] and the proportion of budget spent was 0.68. To derive the final Overall Project Rating, the following calculation was done: 3*0.32 + 6*0.68 = 5.04; which was rounded down to 5 (Satisfactory). Table 24 presents the overall Project (or Outcome) rating and a summary of the justification.

Table 24: Overall Project Outcome Rating and Justification

Project outcome rating	Justification
Highly Satisfactory	• PDO achieved and in an efficient manner.

[21] At the MtR (Bonfiglioli, 2016), the overall project outcome rating was 'moderately unsatisfactory'. The listed shortcomings related to the limited number of outcomes that had been achieved by that time and low disbursement rate.

[22] Highly Satisfactory is defined as "*There were no shortcomings in the operation's achievement of its objectives, in its efficiency, or in its relevance*". I feel this rating is valid because by the post-restructuring period there was strong evidence the PDO had been achieved cost effectively (the original GEF fund was not increased), and that the PDO was still highly relevant to local and national priorities. Further, the end targets were greatly exceeded in some instances maximising the benefits of the Project.

Satisfactory✔ Moderately Satisfactory Moderately Unsatisfactory Unsatisfactory Highly Unsatisfactory	• PDO relevant to local and national needs. • Indicators met end targets (even exceeded). • Numerous success stories (based on feedback from beneficiaries). • Most sub-projects showed strong potential for sustainability. • GEF budget not exceeded. • Satisfied beneficiaries (all concluded that they would welcome future involvement of PERSGA). • Strong relationships with local government institutions (all favoured future PERSGA involvement). • Incorporated co-finance partnerships with NGOs and government departments to increase the financial effectiveness of the Project. • Fostered synergies with funding agencies to continue training and capacity building relating to activities started by the Project. Why not 'Highly Satisfactory'? • The PDO and some indicators had to be modified half-way through the Project. • Project exceeded original timeframe.

Box 4: Mr. Salih Elmi Borale, head of the fisher's association Moucha-Maskali Island MPA, Djibouti. The Project assisted the fishers (shown with Mr Salih) to expand their activities into tourism.

Overall Project ManagementRating

Table 25 presents the overall Project management rating. It relates to issues concerning management performance, arrangement and adaptive capacity.The ICR does not require an overall project management rating but is included here for completeness and to help PERSGA plan for future Projects. The observations listed in Table 25 relate primarily to the post-restructuring period of the Project.

Table 25: Overall Project Management Rating and Justification

Project rating	Justification
Highly Satisfactory ✔ Satisfactory	• A general consensus among the PERSGAteam members, NC and SC members was that the management process was effective.

Moderately Satisfactory Moderately Unsatisfactory Unsatisfactory Highly Unsatisfactory	• The management team was clear in its expectations. • The management team was flexible to the needs of beneficiaries. • Management was transparent and involved participation in decision making. • By the end of the Project, the management team was trusted by beneficiaries. • The management team was thorough in its planning (which contributed to the initial low disbursement rate) but decisive once agreements were made on the sub-projects. • The management team made regular visits to Project sites to evaluate progress and listen to the needs on the NCs. • Regular communications between PERSGA team and permanent country members (NCs and NSCs). • The management approach was adaptive, allowing the management team to take advantage of opportunities as well as to make changes to address flaws in the Project design (e.g. to change the PDO). • [Note that the PERSGA team gave considerable credit to the WB team for the successful execution and management of this Project. This relates to the WB's guidanceand support to the PERSGA team during all aspects of the Project, including the initial planning and when the Project's PDO, indicators and timeframe required modifications].

STRENGTH AND WEAKNESSES, LESSONS LEARNED AND SUCCESS STORIES

Strengths and Weaknesses

Some of the strengths and weaknesses associated with the Project are described below.

Strengths

The strengths noted here were important to the success of the Project.

Experienced Project team

A considerable amount of the Project success can be attributed to the experience of the PERSGA and local (NC) team which planned and executed the Project (with considerable administrative and technical support from the WB). The team focused heavily on:building relationships with supporting agencies; participatory consultation with beneficiaries; and thorough planning prior to the commencement of sub-projects. The Project team was flexible and strategic. The low disbursement rate mentioned in the MtR can, in part, be attributable to the thorough planning undertaken before starting sub-projects (this undoubtedly saved Project resources in the long run). The Project team members were well versed with the challenges of executing projects in the PERSGA region because they already had considerable project experience in Sudan, Egypt, Djibouti and Jordan. Indeed, all members of the Project team are from the region and thus were aware of the cultural nuances when executing projects in the participating countries.The Project team also demonstrated considerable 'political' acumen in being able to ensure competing government departments worked together collaboratively. A less experienced and less culturally aware team is unlikely to have achieved the same number of success stories with such limited budget and diverse suite of stakeholders. Following the earlier SAP Project, the Project team was also well versed in the requirements of the World Bank and GEF.

Project outcomes aligned with local and national priorities

The PDO was aligned with local and national priorities. Local priorities were poverty reduction while national priorities includedimproving the livelihood of local communities while ensuring sustainable use of natural resources.National priorities relating to marine and coastal resources are expressed in PERSGA's objectives: "*To improve the sustainable management and use of the RSGA's coastal and marine resources. Sustainable management and use will be reflected in reduced threats to the environment, improved livelihoods of participating coastal communities and improved institutional, legal and financial arrangements*". The Project outcomes contributed to achieving PERSGA's objectives.The Project outcomes also contributed to member countries meeting their obligations under the United Nations Sustainable Development Goals[23]. For instance, Goal 14 is to 'Conserve and sustainably use the oceans, seas and marine resources for sustainable development'.

[23]https://www.un.org/sustainabledevelopment/

Grass-roots approach

The Project team took a grass-roots (or bottom-up), rather than top-down approach when choosing sub-projects. This included spending a considerable amount of time in consultation with local communities to identify the most appropriate sub-projects and well before committing Project funds. By getting the local communities to choose the sub-project activities, it forced the local communities to take ownership of the activities. Without local stewardship of the sub-projects, activities were unlikely to be sustainable.

Building strong local partnerships

The PERSGA team recognised the need for strong on-the-ground partnerships not just with beneficiaries but other Project partners, such as government agencies. This was formalised by selecting experienced NCs among government departments and includinggovernment officialsin the PSCs. Without strong partnership at the government level, sub-projects would have stalled or not even proceeded. The partnerships built during the SEM will hold PERSGA in good stead for future projects in the same participating countries.

Uncomplicated and realistic activities

The Project team recognised that expenditure on large capital assets, such as majorinfrastructure and cars, do not necessarily translate into positive and sustainable outcomes. Instead, they encouraged the adoption of low maintenance technologies and/or infrastructure that local people could maintain and or replace at their own cost. Where appropriate, the Project team sourced technologies developed locally or in the PERSGA region.

Box 5: Mr. Mahmoud Mohammed Hussein, vessel mechanic, at the vessel maint Since the Project helped estab overwhelmed with work a

Women empowerment

A strength of this Project was a strong emphasis on getting women to lead some of the sub-projects. This was manifested in the success of at least two sub-projects lead by women: the bakery at Mohammed Gol and the traditional handicraft centre at Abu Ghosson.

Taking advantage of co-financing opportunities

To maximise the financial effectiveness of the Project, the Project team encouraged other organisations to co-finance some components relating to the sub-projects. Co-finance partners included NGOs and government departments (examples mentionedearlier). Contributions from these partners greatly increased the outputs of the Project in terms of tangible assets for communities and helped foster relationships for future interventions in the region. I believe the successful co-financing collaboration witnessed in this Project has greatly increased the profile of PERSGA, the WB and GEF in the region.

Fostering synergies

The Project team went to great lengths to encourage synergies associated with the sub-project. This included assisting community leaders to collaborate with other donors to fund training opportunities or to collaborate on mutually beneficial enterprises. As mentioned earlier, some donors have taken advantage of the intervention of this Project by using assets constructed by the Project to provide training opportunities for community members. Fostering synergies in this way has strengthen the sustainability of the sub-projects.

Weaknesses

The weaknesses noted here did not greatly compromise the outcome of the Project (i.e. the Project was still very successful). But by highlighting these issues may help the Project teamget even better outcomes from future interventions.

The PDO and indicators had to be modified mid-way during the Project

Approximately halfway through the Project, the PDO and indicators had to be modified. The change in the PDO had probably limited material difference as the components and activities largely remained the same. However, the change in indicators was more significant as it meant that the M&E framework was not as effective as it could have beenup to that stage.

Objective evidence for success was not available for all Project aims

One of the aims of Component 2 was to give local people alternative income generating opportunities in order to reduce their dependency on marine resources. This Project has certainly provided some local communities in both DMNP and WGHNP with opportunities to diversify income.Some of these opportunities appear successful in terms of profitability and sustainability. However, it is difficult to conclusively determine whether these new income generating activities have (or will) translate into reduced pressure on marine resources. To conclusively determine the influence of sub-projects on peoples use of marine resources

would require an experimental approach (see 'Recommendations'). This would include the need for quantitative baseline data on the use of marine resources(e.g. fishing effort for a given unit of time). To improve the inferential strength of the Project, similar data could be collected from communities without sub-projects (spatial controls). Without these data it would be very difficult to objectively conclude that the sub-projects had contributed toreduced pressure on marine resources.

Project extended beyond the original end-date

The original timeframe of four years to execute the Project and complete the sub-projects may, in hindsight, have been too ambitious.Consequently, the Project timeframe was extended to five years. The need for an extra year to complete the Project would have led to delays in other PERSGA activities originally planned for that year.

Lack of supporting documents describing the Results Framework and M&E

As described in the PAD, the Results Framework and M&E system was put in place to assess project results and to document and disseminate lessons learned. Although the Results Framework and M&E spreadsheets was constructed in a user-friendlyway, there is no supporting documents to describe and justify the elements in both. There should have been a document that included definitions of each indicator and how they were to be measured and methods for data quality assurance and quality control (QAQC). Without this supporting documentation it is not easy to evaluate the Results Framework and M&E.

Project webpage was not regularly updated

The PCU developed a webpage (sem.persga.org) to provide background to the Project, and allow access to Project documents and Project monitoring results. This web site was important for communicating Project progress and to share information among participating countries. Because the webpage was not regularly updated it may have left some stakeholders with the impression that the communication aspect of the Project was not taken as seriously as other aspects. Also, the Project missed out on a good opportunity to inform stakeholders of the many success stories.

Success Stories

There were numerous Project success stories. Examples are described below.

World Heritage Nomination of Dungonab Bay- Sanganeb National Parks

The combined DMNP and Sanganeb National Park was inscribed as a UNESCO World Heritage Site in 2016. This World Heritage Site was inscribed based onnatural values. It consists of two separate areas: Sanganeb about 25 km off Sudan. The second component is Dungonab Bay and Mukkawar Island. It is hoped that this World Heritage Site will encourage greater management as well as foster further business opportunities for local communities (Mr.Eisa Kabashi Eisa, Minister of Environment, Red Sea State, Sudan, pers. comm. 30 October, 2018).

Empowerment of women and marginalised fishermen

A primary focus of this Project was to increase the participation of women in management of resources as well as to provide them with alternative livelihood strategies. Women

associations at Mohammed Gol, Dungonab and Abu Ghosson took ownership of some of the livelihood sub-projects in the MPA pilot sites (e.g. Mrs. Eisha Ahmed, Mohammed Gol Bakery, pers. comm., 29 October, 2018).

Women's focused sub-projects related to foodservices (catering) at Dungonab and Mohammed Gol and to traditional handicrafts and textile production at Abu Ghosson. The Mohammed Gol bakery has proved profitable (Mr. Osman Hussein, community leader, pers. comm. 29 October, 2018). According to Mrs. Eisha Ahmed, Bakery, (Mohammed Gol, pers. comm. 29 October 2018)each woman earns approximately 100-200 pounds (US$2-4)per month. Th actual amount of income per person isdetermined by how much they work in the bakery. Similarly, the production of handicraftsatthe women's centre is generating profit (Dr.Mahmoud Hanafy, NC, pers. comm.,15 November, 2018).These initiatives have raised the status of women in their respective communities and provide their families with added sources of income.

The Project has also improved the outlook and condition of marginalised fishers. With the assistance of the Project team, fishers in Djibouti formed a fishing association and were given assistance to obtain materials to build a shelter and storage facility on Muskali Island. The fishers are using the centre to generate additional income from tourism (Mr. Salih Elmi Borale, Head of Fishers Association, pers. comm. 5November, 2018). Fishers are also removing litter from the Island and reporting MPA violations to the Department of Environment (Mr Aden Hassan Elmi, NC, pers. comm. 5 November, 2018).In Sudan, revised fishery legislation and by-lawshave been prepared and will be submitted to the State Legislative Council for approval (Mr. Hamad Takuliya, Director of Marine Fishery Administration, pers. comm., 5 November, 2018).

Triggering process of revision of national legislation concerning marine environment and fisheries in the member countries

The Project triggered the process for revising fishery legislation in PERSGA member countries. This culminated in the review of fisheries related legislation, strategies and policies in all member countries. The reviews can be found http://sem.persga.org/page-reports-and-guidelines.php

These reviews will form the basis for updating of fishery legislation and policies in member countries. Indeed, the process of updating fisheries legislation based on thesereviews is already taking place in Jordan (Mr. Abdullah Abu Awali, Director, Aqaba Marine Park, pers. comm. 10 November, 2018). Mr. Abdullah Abu Awali showed me a copy of the proposed workshop agenda to engage fishers to provide feedback on the revisedlegislation.

Development of Regional Protocol Concerning Management of Fisheries and Aquaculture

A final draft of the Regional Protocol Concerning Management of Fisheries and Aquaculture in the Red Sea and Gulf of Aden is ready for signing by the appropriate Ministersfrom each PERSGA member state (Dr. Ahmed S. M. Khalil, PERSGA, pers. comm., 8 November, 2018). This Protocol will provide a legal framework[24] to foster sustainable management of fisheries

[24] In accordance with Article III of the Jeddah Convention.

resources in the Red Sea and Gulf of Aden. Signing of the Protocol is proposed for the next Ministerial Meeting in March 2019.

Qula'anEco-village at WGHNP, Egypt

The Project team, in collaboration with two NGOs, HEYA and HEPCA, have assisted the Qula'an community to become self-sufficient in energy and fresh water using a renewable source. The Project team installed a solar system (solar panels, batteries and network) to power lights and a small desalination unit. The power generated by the solar system is sufficient to run refrigerators, which now allows fishers to store their fish catch. This has economic benefits because fisherscan take their timeto seek the best market price or to store more catch before going to distant markets (Mr. Mansur Saleh, community leader, pers. comm. 14 November, 2018). The solar system also permits children to continue their learning after sunset because the lights last longer compared with when the villagers used generators. The solar systemhas also liberated funds that were previously spent on diesel fuel to power generators and to truck fresh water from the Marsa Alam desalination plant, which cost about 10,000 Egyptian Pounds (approximately US$550) per month (Mr. Mansur Saleh, community leader, pers. comm. 14 November, 2018). Dr. Mahmoud Hanafy (NC, pers. comm. 14 November 2018) believes these interventions will reduce pressures on local marine resourcesby the Qula'an community. Some of the Project interventions at this location have probably already contributed to the villagers removing large amounts of solid waste that once characterised the beach and mangrove environment fringing the village (pers. obs.).Further, according to Mr. Monsur Saleh (community leader, pers. comm. 14 November, 2018), members of a village in the mountains inland from Qula'an have commissioned the company installing the Qula'an solar system to provide a system for their own needs. This is direct evidence of Project interventions being replicated.

The Qula'an eco-village has been a success stories from a number of viewpoints. In summary, it: created the first community-based tourism venture in Egypt; contributed topositive environmental outcomes such as reduced pressure on mangroves for fuel; raised community stewardship in relation to local natural resources;reinforced community rights; reduced conflict between the local community and the tourism industry; has alleviate poverty and improved livelihoods (Dr. Mahmoud Hanafy, pers. comm., 2 December, 2018).

Moucha-Maskali Island MPA FishersCentre– empowerment and participation in MPA management, Djibouti

In addition to tourists, local fishers are frequent visitors to Moucha-Maskali Island MPA. Before the Project, local fishers had felt marginalised due to a lack infrastructure on Maskali Island for them to rest and store equipment. In contrast, there was infrastructure on the Islandfor exclusive use by tourists. The Project team provided the fishers with resources to build a centre (i.e. small shelter and storage facility) on Maskali Island. This was done with permission and approval of the Djibouti Department of Environment. According to Mr. Salih Elmi Borale (Head of fisher association, pers. comm. 4 November, 2018) the association members are using the infrastructure in a tourism venture and is generating about US$600-$800 net profit per month. The fishers use their vessels to transport tourist groups to the Maskali Island about 3 to 4 times per month.

Anenvironmental benefit of this intervention is that it has fostered stewardship towards the MPA among fishers. For instance, fishers now collectsolid waste (theirs and visitors) from Maskali Island for disposal on the mainland (Mr. Salih Elmi Borale, Head of Fishers Association, pers. comm. 5 November, 2018). They also report MPA violations to the Department of Environment. Examples include the reporting of illegal aquarium fish collectors from Sri Lanka and the disturbance of mangroves on Maskali Island by tourists. Another benefit of the intervention is the close relationship that has developed between the fishers and the Department of Environment (Mr. Aden Hassan Elmi, NC, pers. comm. 5 November, 2018).

Strengthened MPA awareness and management
An important achievement of this Project has been increased awareness among local communities of the potential for MPAs to provide alternative income generating activities. The previous section described an example from Djibouti, where local fishers are expanding into tourism. A similar example was evident at Qula'an, WGHNP (pers. observation, 14 November, 2018). At the time of my visit, about 20 tourists were visiting the beach near Qula'an and paying a small fee for the privilege. The tourists were also spending at the café. As a result of the income generated from tourists visiting Qula'an, local people regularly remove solid waste from the beach and adjoining mangrovestand (Mr. Monsur Saleh, community leader, pers. comm., 14 November, 2018). The villagers have also erected signs and bollards to reduce disturbance to mangroves by the tourists (pers. obs. 14 November, 2018).

Strengthened the Regional Monitoring Network of PERSGA member countries
The Project was successful in strengthening regional monitoring cooperation by aligning onstandardised monitoring protocols. Standardised protocols included environmental and socio-economic monitoring indicators and methods to collect data. This has increased the monitoring capacity of member countries and has also allowed PERSGA to track and compare the status of marine resources among member countries. The protocols are now contained in a standardised monitoring manual and the results reported in a State of the Marine Environment Report, which isperiodically published by PERSGA.

Strengthen Project Management Skills
The SEM Project has provided valuable lessons learned that will improve PERSGA's already considerable capacity to manage donor funded projects. Lessons learned included new ideas tostreamline Project management, and to monitor and evaluate project progress and success. Guidelines provided by World Bank has also exposed PERSGA staff to new ways of structuring and evaluating donor related projects.

Lessons Learned

Key lessons learned from this Project are presented below.

PDO needs to be adequately defined before the start of a Project
Soon after the MtR, the PDO was modified. Justification for the change was:

"*The original GEO formulation includes both means (resource protection, incentive systems) and ends (improve management of marine resources, harmonization of knowledge base). Furthermore, it does not specify target beneficiaries for the improved management. The GEO has been revised for clarity and to focus on outcomes for which the project can be reasonably held accountable*." (World Bank 2018a, page 4)

Given the importance of the PDO in influencing all subsequent decisions relating to the implementation and evaluation of a project, it is critical that a PDO is definedprecisely at the start.If the PDO is imprecise it will be impossible to identify appropriate indicators to measure its success and equally challenging to identify the correct interventions to achieve the PDO. An obvious lesson to be learned is to make sure the PDO is correctly defined before the commencement of aproject. This could be facilitated through an independent review of the PDO well before the start of aproject.

Indicatorsneed to beprecise, measurable and realistic

Soon after the MtR,some of the PDO and intermediate indicators were modified or dropped.The justification for these changes is described in the Restructuring Report (World Bank, 2018a). Three examples of the dropped indicators are shown in Table 26.

Table 26: Three examples of the original indicators and why they were dropped from the Project.

Original Indicator	Revision	Explanation
Number of stakeholders trained and participating in developing/updating MPA master plans with a rights-based approach (number)	Dropped	The indicator has been dropped as it is deemed redundant: outcomes on training and participation are captured by other indicators.
Percentage of fishermen involved in fisheries monitoring, control and surveillance activities (Percentage)	Dropped	The indicator has been dropped since fishermen will not be involved in monitoring, control and surveillance activities.
Percentage variance in groupers (Percentage)	Dropped	This indicator has been dropped as it is unclear as regards the link to the revised GEO and the definition of variance.

(Source: Restructuring Paper)

In addition to the lack of clarity for some indicators, the biological/ecological related indicators may have been improved or their deficiencies identified sooner if these indicators had been reviewed by a biologist. For example, the third indicator listed above may have been better phrased in terms of change in the densityof groupers. In addition, a biologist would have also recognised that it would be unrealistic to measure change in grouper densitiesover the original Project period of four years.The choice of appropriate indicators is crucial to be able to measure project success. Indicators should be reviewed by an independent subject matter expert prior to the start of a project.

Data are required to makeobjective conclusions

A key goal of Component 2 was to strengthen local communities' capacities for alternative income generation aimed at reducing pressure on marine resources. Theoretically this is plausible, because fisher families gaining income from alternative sources should be less reliant on income generated from fishing. Mr Osman Hussein, a community leader at Mohammed Gol, concurred with this belief and suggested that in future some families

associated with the bakery at Mohammed Gol might be less reliant on local marine resources (pers. comm. 31 October, 2018). But without quantitative data on fishing effort, both before and after the start of sub-projects,it is difficult to objectively verify if the bakery and other sub-projects did result in reduced pressure on marine resources.

Balance between output and outcome-based indicators

Successful management of MPAs is measured in terms of the outputs (what was done to produce successful ecological outcomes) and the resulting outcomes (what was actually achieved) (Hocking et al. 2000). To illustrate, an output could be a community agreed fishing regulation to reduce catch of grouper, while the outcome would be measured in the density of grouper in the fishing grounds. According to Hocking et al. (2000; page14) "*In the final analysis, outcome evaluation is the true test of management effectiveness*". In other words, the true test of whether management of a MPA (or other management intervention) is successful or not can only really be evaluated by measuring outcome based indicators. In this Project there were no outcome-based indicators, only output type indicators. However, some of the Project interventions were designed to build capacity among government departments to collect biological data.

Not easy to measure success of sub-projects over the usual project period

Conclusively determining that activities initiated under the Project are sustainable or that the activities had a positive environmental impact (e.g. recovery of fish populations) wouldnormally take longer than 4 or 5 years. Thus, a potential lesson learned for future projects is to factor into the project design a mechanism whereby the status of interventionsor their environmental consequences are monitored for up to at least 12 months after the cessation of a 4-yearproject.

A first-year review should be considered

The MtR was helpful in triggering important changes to the Project. For instance,the findings of the MtR led to changes in the PDO, the indicators and to a change in the end date of the Project. Arguably, a first-year review may have identified these concerns much earlier, potentially allowing these issues to be corrected much sooner without the need to extend the Project.

Unpredicted benefits or negative consequences

It was apparent after the start of the Project that there were unpredicted consequences of sub-projects. Some of these consequences were positive while others might potentially be negative. For instance, the use of solar systems to generate reliable and longerperiods of lightinghad unpredicted positive educational benefits. Extended periods of lightingatMohammed Gol have allowed children to read after sun set, thus potentially improving education outcomes (Mr. Osman Hussein, community leader, pers. comm., 31 October, 2018). A similar finding was reported by people at Qula'an. Another positive benefitfrom reliable energy is thatcommunities can now run freezers to store fish catches for saleand to store vaccines. The later has meant that community membersof Mohammed Gol need not suspend work to go to the cities for vaccinations. The adoption of freezers now allows people to catch and retain more fish for market (reported from Mohammed Gol, Sudan, and Qula'an, Egypt). Although this will undoubtedly improve the income potential for fishers, the negative effects on populations of target species remains unknown.For

instance, the freezers could encourage greater fishing effort.An unpredicted negative consequence of the deep-water fishery trial off Jordan was the loss of fish traps[25]. Mr. Abdulla Abu el Hasi (head of the local fishing association, pers. comm. 11 November, 2018) reported that he periodically loses traps as a result of ship propellers cutting the surface lines. The traps and ropes fall to the seafloor and cannot be retrieved by fishers due to the depth of the water (>100 m). It is likely the traps will continue to capture marine fauna until the traps deteriorate. These issues need to be considered when planning similar interventions. According to Mr. Abduallah Abu Awali, the NC for Jordan (pers. comm. 14 November 2018), a project is being proposed by the Royal Diwan to remove traps and rope from the seafloor.

Importance of managing expectations

During the site visit,many of sub-project participants and community leaders pleaded for more assistance, includingfor health care and educational assistance. It was obvious during my visit that somepeople participating in sub-projectsmisunderstood the role of PERSGA.

Senior public servant turn-over

One of the challenges faced by the Project team was the rapid turnover of very senior public servants leading government departments relating to the environment. This lack of institutional consistency meant that Project team members had to regularly explain the Project objectives to newly appointed heads of department (as was the case in Sudan during my visit). Fortunately, the strategy of making lower level, yet senior government officials as the NC helped alleviate this challenge.

[25]These traps are not placed on the seafloor, but are suspended in the water column by floats and ropes.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Achievement of the PDO
Based on the indicators and other evidence, the PDO was achieved. This was achievedwithout need to increase the GEF grant, but did lead to a longer timeframe then originally proposed in the PAD. Achievement of the PDO was manifested in at least three ways: improved MPA management; increased stakeholder involvement in MPA management; and strengthening information sharing among PERSGA members.

The Project contributed significantly to improving the management of several MPAs, which have potential as models of good practice for future replication throughout the PERSGA region. These MPAs are the DMNP and WGHNP. Management improvement at these two MPAs include: up-to-date management plans with zoning schemes; on-going monitoring of resources within the MPAs;fostering relations between local resource users and management agencies; and increase resources (e.g. solar system, patrol vessels etc) for management agencies to help enforce regulations.

Management was also improved at two additional MPAs: Moucha-Maskali Islands MPA and Aqaba MPA. Sub-projects were implemented in both, leading to improved community participation in the management of natural resources. Monitoring of corals and other resources in both MPAs have been standardised based on PERSGA's standardised methods.

The Project was successful in fostering stakeholder participation in management of DMNP and WGHNP. This began with stakeholder representation in the NSCs, which were established in all participating countries at the start of the Project. Stakeholder participation occurred when developing the management plan and zoning scheme for the DMNP as well as when implemented the sub-projects in DBINP and WGHNP.

All indicators achieved
All indicators were achieved and even exceeded their end targets in many instances (> 70% of indicators exceeded their end targets). As an example, the end target for the indicator '*Area in selected marine protected areas under improved management*' was 40,000 ha, but the actual achievement was >200,000 ha. The circumstances behind this greater than expected result was mainly due to the proposed pilot site in Yemen (Kamaran Island MPA) being replaced by the much larger WGHNP. In other instances, the Project exceeded the end targets of indicators because of the flexibility of the Project team to take advantage of opportunities to increase the number of participants in workshops and training programs when there was additional stakeholder interest.

Numerous project successes
The Project was successful in delivering numerous success stories. This was acknowledged in the March 2018 Aide Memoire. Some of the Project successes are described in a following section.

Considerable potential for sustainability

Although sustainability of sub-projects cannot conclusively be determined at the time of writing the FE, there was strong potential for sub-projects to continue beyond December 2018. This conclusion was supported by feedback from participants of the sub-projects. For instance, Mr. Osman Hussein, a community leader at Mohammed Gol, said that the bakery at Mohammed Gol was making a profit from selling pastries and leasing cooking equipment to wedding parties, and gave every indication that the bakery would continue into 2019 (pers. comm. 14 November 2018). He even noted that profits would be used to eventually replace the batteries. Similarly, Mr. Mahmoud Mohammed Hussein, the mechanic at the vessel maintenance centre at Mohammed Gol indicated that he was being overwhelmed with work and would require apprentices (pers. comm. 31 October, 2018).

According to Dr. Mahmoud Hanafy (NC Egypt, pers. comm. 14 November, 2018), the traditional handicraftcentre at Abu Ghosson is profitable and exhibits signs of long-term sustainability. A current limitation identified by Dr. Hanafy is the limited amount of marketing that may have hampered sales.

There is less certainty about the economic sustainability of the glass bottom boats delivered to Dungonab. The main reasons for this are:at the time of writing this report the boats had not been formally released to the communities (Dr. Ahmed Khalis, pers. comm. 15 November, 2018); the tourism season for the Red Sea of Sudan is short;and number of visitors arriving at Dungonab during the tourism season is modest and difficult to predict.

Effective model of intervention

PERSGA successfully executed a challenging and complex Project. The Project was challenging and complex because it covered multiple national jurisdictions among four countries (Sudan, Djibouti, Egypt and Jordan) with coordination activities in Saudi Arabia. Within each country, the Project team had to deal with different levels of government with competing interests. At the institutional level were individuals with different capabilities and expectations in relation to the Project. This aspect alone required building close and trusting relationships between PERSGA and agencies. Another reason why the Project was complex was due to its multi-disciplinary nature. To effectively plan and execute the Project required subject matter experts in the social and biological sciences, as well as people with accountancy and strong project management skills. The experience of the PERSGA management team allowed it to navigate numerous obstacles that could have derailed the Project. Further, management was sufficiently flexible to accommodate necessary changes to the Project when the pilot site in Yemen had to be abandoned and when it was discovered that the PDO and some indicators needed modification. Changes were generally done with minimal disruptions and without increasing the GEF budget.

Recommendations

Thoroughly review PDO and indicators before start of a project

It is critical to get the PDO right at the start of a Project as it influences all subsequent Project decisions and activities. Consequently, it is important that the PDO is reviewed

thoroughly by all partners involved in the implementation of a Project. It would be desirable to get an independent expert to review the PDO prior to the start of a Project.

Similarly, it is critical that indicators are chosen that will clearly demonstrate achievement with the PDO. Indicators need to be precise and quantifiable. A useful starting point for drafting indicators is to review Pomeroy et al. (2007) and literature cited within.Similar to the PDO, it would be desirable to get an independent expert to review indicators before the start of a project.

Take an experimental approach to evaluating sub-project

A largely untested assumption behindlivelihood interventions, such as the sub-projects implemented during this Project, is that if people's livelihoods are improved they will reduce their dependency on natural resources. Future sub-projects should be treated as large-scale field experiments in order to testquantitatively this assumption[26]. A benefit of this approach is that it will limit wastingfunds on sub-projects that are unlikely to succeed based on past experience. An example of how a sub-project could be structured into an experimental framework is shown in Figure 2. Treating management interventionsas fieldexperimentshas been applied in other disciplines (Walters and Holling, 1990; Jensen et al. 2012).Also, the expertise is available in PERSGA to structure future projects in a way that will allow data to be collected before and after sub-projects in order tomaximises the interpretability of data.

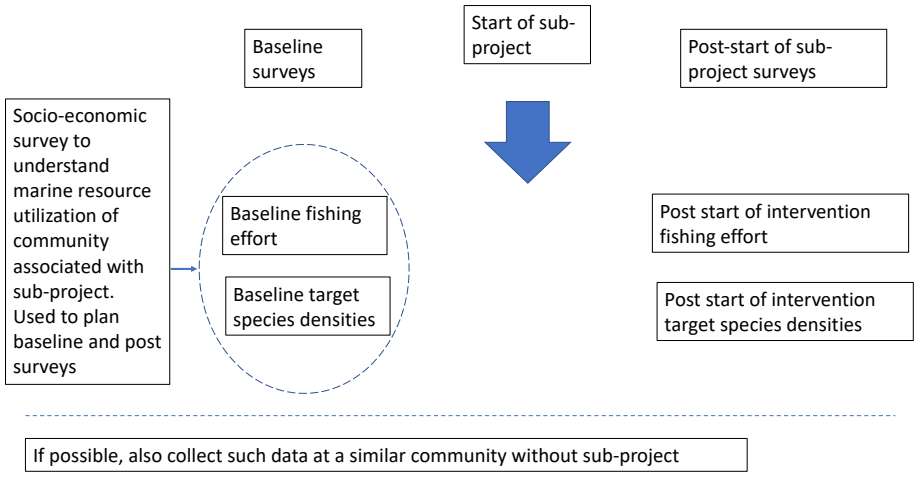


Figure 2:Conceptual diagram showing how an experimental approach could be used to evaluate environmental outcomes associated with sub-projects aimed at reducing fishing pressure

Develop a strategy to demonstrate sustainability beyond the Project end date

Although there was evidence of potential sustainability for most sub-projects (i.e.sub-projects were generating profit at the time of the evaluation), more definitive conclusionsabout the sustainability of individual sub-projects cannot be made until well

[26]This approach was advocated in the SEM Project Implementation Manual April 2013 (page 7).

after the Project had ceased. Future Projects should include strategies aimedat demonstrating long-term sustainability of sub-project beyond the formal end date of the Project. Such strategies could include committing funds for post-Project surveys by donors and PERSGA incorporating post-project surveys into annual workplans.

Consider climate change when choosing sub-projects

The Project included training for MPA managers on how they can foster ecological and social resilience to meet climate change threats. However, even with management, climate change will continue todamage shallow marine habitats, particularly coral reefs (e.g. Hoegh-Guldberg, 1999). UNESCO has predicted that under the present rate of $C0^2$ emissions, corals in Sanganeb and Dungonab Bay – Mukkawar Islands World Heritage Site will experience twice decade bleaching events by 2037 and annual bleaching events by 2046 (Heron et al. 2018). Twice decade bleaching events will result in coral reefs that no longer function in the same way we know and depend on today. Even if the optimistic threshold of 1.5 C°is met under the Paris Agreement, it still commits corals reefs to bleaching until the climate stabilises. For thesereasons, it may be inappropriate to promote alternative income generating activities, such as glass bottom boats, that will rely on healthy shallow water coral reefs.

Clearly define concepts

Project appraisal documents should clearly articulate definitions for key concepts to help with future Project planning and evaluations. Key concepts associated with the SEM Project that would have benefitted from precise definitions are 'improved management' and sustainability.

Consider the UN Sustainable Development Goals

PERSGA member countries have committed to the UN SDGs and the SDGs are commonly cited goals of donor organisations. At least three SDGs aligned closely with the SEM. These are: Goals 1 'No Poverty'; Goal 8 'Decent Work and Economic Growth; and Goal 14 'Life Below Water'. For future projects, consider showing how activities and outputs will contribute to member countries meeting the SDGs.

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ANNEXES

Annex 1: Terms of Reference

Terms of Reference
Individual Consultant
Final Evaluation of the Red Sea and Gulf of Aden Strategic Ecosystem Management (SEM) Project

PERSGA, Jeddah KSA, July 2018

1. Background

In accordance with the M&E policies and procedures of World Bank (WB) and Global Environmental Facilities (GEF), a Final Evaluation of the "Red Sea and Gulf of Aden Strategic Ecosystem Management" Project (hereafter referred to as SEM Project) is required. The project is executed by the Regional Organization for Conservation of Environment of the Red Sea and Gulf of Aden (PERSGA), and implemented by the WB with support from GEF. The project started on January 1st 2014 and is approaching its closing by 31st December 2018. This TOR sets out the prospect for the project Final Evaluation.

1.1 Project Development Objective

The project development objective is "To improve management of selected marine protected areas by local communities' participation and strengthen information sharing between PERSGA member countries". The project has designed and implemented a set of inked interventions to achieve its PDO involving institutional and community technical assistance, capacity building and support of on- ground activities. It contains four components, which were tailored to the most urgent needs and preparedness at different local, country and regional levels. Components (1) and (2) focus on MPAs and living marine resources management, respectively, and are mainly executed at two selected MPAs pilot sites (Wadi el Gemal National Park in Egypt and Dungonab Bay-Mukkawar Island National Park in Sudan) but open as demos for knowledge and experience sharing among other MPAs in the regional network of project member states, which include Djibouti, Jordan, Egypt, Saudi Arabia, Sudan, and Yemen. Component (3) is executed in all project member states and focuses on promotion and harmonizing regional coastal environmental and related socioeconomic monitoring. Component (4) is a management component that supports the Project execution with administration, procurement, financial and fiduciary management, and Project monitoring and evaluation. A brief description of the four components and their main interventions is given below.

1.2 Project Components

1.2.1 Component 1: Strengthening the principles of marine managed areas through stakeholder driven MPA implementation

This component worked at two Marine Protected Areas as pilots to strengthen capacities of MPAs management and to serve as Marine Managed Areas. The component was focused on the following main interventions:

- Update MPAs management plans with community and other stakeholder input and support the management plans implementation.
- Build capacity of the community stakeholders and institutions involved in MPA management and MMA zoning
- Develop a series of engagements/exchanges between MPA authority staff among PERSGA member countries including lessons that one jurisdiction can share with another, and education/ awareness materials that highlight the challenges and success of community-based management of MMAs.

1.2.2 Component 2: Strengthening coastal communities using incentives approach to improve fisheries management and achieve other marine resource benefits

This component supported institutional and technical capacity for MPAs communities to use and protect living marine resources, increase net benefits derived from the resources in a sustainable manner, understand trade-offs associated with development and the costs and benefits to the community, organize as user groups around these uses, and develop alternative livelihood options through a community-driven process. The component was focused on the following main interventions:

- Review of relevant legislation, policies and management practices to identify entry points and provide recommendations for supporting co-management approaches, and build capacity of local user groups including local community for co-management and monitoring their resource uses and impacts;
- Support identification, planning and implementing sustainable economic activities to demonstrate small scale, low impact alternative livelihood sub-projects that are compliant with environmental and social safeguards.
- Strengthen community participation, improve community compliance and build ownership for resource protection and sustainability.
- Promote institutional capacities and legal framework for regional collaboration in sustainable fishery management

1.2.3 Component 3: Regional Environmental and Socioeconomic Monitoring Supporting Ecosystem Based Management (EBM) and Community Benefits

This component built on ongoing monitoring activities to strengthen capacities and help standardizing monitoring variables and approach between the participating countries. It also supported expansion of monitoring scope to include socio-economic data, and promote knowledge exchanges, data comparability and sharing through regional networking and database. Specific MPAs within the regional network were monitored during the project geared to enhance the monitoring capacity of member countries. The component was focused on the following main interventions:

- Conduct a gap analysis of coastal environmental monitoring capacity in each country and update standard survey methods and other relevant manuals.
- Build capacities of specialists in national monitoring teams and provide institutional and equipment support to promote sustainable monitoring of coastal and marine environments in the countries.

- Facilitate workshops to harmonize monitoring methods, discuss lessons and share experience among countries.
- Support establishment of a standardized integrated monitoring database for the region.
- Strengthen outreach concerning monitoring by raising the profile of stakeholder engagement, and informing them and the decision makers of the monitoring results.

1.4.4 Component (4) Project Management

This component supported the Project execution with technical, administration, procurement, financial management, fiduciary fulfilment, and project monitoring and evaluation. It involved establishing the Project Regional Steering Committee "RSC", establishing and running of the Project Coordination Unit "PCU", coordinating with the countries for nominating National Coordinators "NCs" and establishing National Steering Committees "NSCs". The component also includes training of PERSGA and the local project management level on the administrative aspects. The project is executed by PERSGA, and complies with GEF IW and World Bank reporting requirements (e.g. providing a GEF-IW webpage consistent with IW LEARN), provides IW Experience Notes, initiating a GEF IW tracking tool, providing routine M&E, external Mid-Term and Final Evaluations, providing lessons learned and other project information to IW-LEARN, and participating in GEF IW Conferences and relevant activities).

2. Consultancy

2.1 Objectives of the Final Evaluation "FE"

The objective of the FE is to gain an independent assessment of the project achievements and impacts. This end of project evaluation focuses on the entire implementation period, and is forward looking to capture effectively lessons learnt and provide information on the nature, extent and where possible, the potential impact and sustainability of the SEM project.

The evaluation will thus assess the project design, scope, implementation and achievements. It will collate and analyze lessons learnt, challenges faced and best practices obtained during implementation, which will inform the next programming strategy in response to its priorities, and make recommendations regarding the specific actions in this regard. These should emphasize, for example issues to be addressed in the future follow up interventions, significant outcomes and success stories for potential expansion and replication.

The FE must provide evidence-based information that is credible, reliable and useful. The consultant is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, PERSGA Focal Points and National Coordinators, and key stakeholders. The review consultant is expected to conduct a field mission to witness project interventions. Interviews will be held with the following organizations and individuals at a minimum:

▪PERSGA staff who have project responsibilities;
▪Project National Coordinators
▪Stakeholders including the National Steering Committees and beneficiary communities

In at least two of the Participating Countries,The consultant will review all relevant sources of information, such as the project documents, project reports, project budget revisions, quarterly financial reports, national strategic and legal documents, and any other material that he / she considers useful for this evidence-based review and evaluation.

2.2 Scope of the FE

The SEM Project evaluation will assess the effectiveness of the implementation strategy and the results. This will include the implementation modalities, co-financing roles and responsibilities, coordination and partnership arrangements, institutional strengthening, beneficiary participation, replication and sustainability of the project outcomes. The evaluation will include review of the project design and assumptions made at the beginning of the project development process; project management including the implementation strategies; project activities, as to assess the extent to which the project results have been achieved, partnerships established, capacities built, and cross cutting issues of mainstreaming development issues. It will also assess whether the project implementation strategy has been optimum and recommend areas for improvement and learning.

In order to achieve FE objectives, the consultant will consider the following categories of project performance. For each category, the consultant is required to rate overall progress using a six- point rating scale exemplified in Annex I:

2.2.1 Relevance

The FE will assess the extent to which:

- The project design and focus are relevant to the identified needs and objectives;
- Inputs, strategies and interventions approached are realistic and appropriate;
- The project objectives and results were achieved, and impacts and outputs are adequate for the overall objective?

2.2.2 Effectiveness

The FE will examine how the project was effective in:

- management processes and appropriateness in supporting implementation and delivering desired/planned results;
- M&E mechanism contributing to meeting project results;
- implementation strategies;
- responding to the needs of the beneficiaries;
- involving stakeholders;
- Adaptive management and execution to overcome obstacles/challenges, or grasping opportunity to upscale/ expand results?

2.2.3 Efficiency

The FE will assess the efficiency of the project implementation with regard to:

- utilizing the fund resources, where actual/ expected results justify costs incurred;
- synergy and coordination with other overlapping and similar interventions (funded nationally and /or by other donors)
- considering collaboration with the national institutions, development partners, and NGOs (co-finance)
- management structures, procedure and accountability
- procurement and financial management processes and procedures

2.2.4 Sustainability

The FE will assess how sustainability issues were considered in the project design, planning and implementation, examining:

- The extent that the benefits of the project are likely to be sustained after the completion of this project; exit strategies, and approaches to phase out assistance provided by the project including contributing factors and constraints
- Key factors that will require attention in order to improve prospects of sustainability of Project outcomes

- Success stories and potential for their replication/ scaling up of the approaches and outcomes
- Sustainability of capacities built at the individual and organizational level
- Main lessons and recommendations for harmonizing or comparable/ extensive interventions in future, e.g. comprehensive proposals for future interventions based on the current evaluation findings.

2.3 Expected Deliverables

The following deliverables are expected (see schedule of deliverables in 2.4 below):

2.3.1 Inception report

The FE consultant will prepare an inception report which details his understanding of the evaluation, the evaluation approach and how the evaluation questions will be addressed. This is to ensure that the evaluator and the stakeholders have a shared view of the assessment. The inception report will include an evaluation matrix summarizing the evaluation design, methodology, questions, data sources, collection and analysis tools, and measures by which questions will be evaluated. The report will include the scope of work, work plan, time frame after starting the evaluation process. The inception report should include a proposed schedule of tasks; activities and deliverables, with clear responsibilities for each task or product. The inception report will be discussed and agreed upon with PERSGA and project stakeholders.

2.3.2 Draft Evaluation report

The FE consultant will prepare a draft SEM Evaluation Report, cognizant of the proposed format of the report and checklist used for the assessment of valuation report (outlined in 2.3.3 below). The draft report will be submitted to PERSGA review and comments by its review panel and stakeholders, and to validate that the evaluation considered all relevant information and meets the required approach and quality criteria. The report will be produced in English. PERSGA is responsible for ensuring timely arrangement for the review and validation of the report involving stakeholders' remarks within the time-frame allocated.

2.3.3 The Final Report

The consultant shall consider above comments on the draft report to develop the final report stakeholders. The content and the structure of the final analytical report with findings, recommendations and lessons learnt should cover the above scope of the evaluation and should meet the requirements of M&E for PERSGA and World Bank. The content is expected to include the following:

- Executive summary (2-4 pages)
- Introduction (1-2 page)
- Description of the evaluation methodology (6-8 pages)
- Background of the project (4-6 pages)
- Analysis regarding the achievements of the objectives, outputs and outcomes; challenges, impacts, etc. (8-10 pages)
- Analysis of opportunities for guidance in future interventions (4-6 pages)
- Key findings, including practices, lessons learned and success stories (6-8 pages)
- Conclusions and recommendations (4-6 pages)
- Appendices (charts, tables, terms of reference, itinerary, people interviewed, documents reviewed, further readings)

2.4 Final Evaluation Deliverables

Deliverable	**Time Frame**
Inception Report	Within one week after signing of contract
Review and agreement on Inception Report	Within one week days after submission of the report
Draft Final Report (including field mission)	Within four weeks after approval of the inception report
Review of Draft Final Report	Within one week after submission of the draft report
Final Report	Within one week of receiving PERSGA comments on draft report
Presentation of the key findings and recommendations in the final review regional workshop	Within a month from clearing the Final Report

2.5 Type of contract, duty station and payment

This contract falls under short-term consultant category system of PERGSA. Payment will be on a lump sum and instalment basis as specified below.

The consultant will work from his home base, where he has access to the relevant technical literature, to prepare for the evaluation. He will undertake a mission to PERSGA region to conduct field assessments at the project sites to establish required arrangement and networking with review team at PERSGA and interview relevant participants/beneficiaries, examine project outputs, and review & update input information/data, and discuss, thematic approach, layout, analysis results, content, etc of the draft document.

The payment instalments will be delivered as follows:

- 25% after adoption of the inception report
- 50% after undertaking the field mission and submission of the draft final report
- 25% after the approval of the final report, participation in the final evaluation workshop and submission of workshop report

2.6 Required qualifications/expertise and application procedure

- Advanced degree (preferable PhD) in environmental policies, coastal zone management, marine sciences, development policies, economic planning, economics, public administration, management or in any other related field.
- Extensive knowledge and expertise in the field of evaluation of development projects and programs, including working with international organizations and donors, relevant technical areas for at least 10 years;

- Recent experience with result-based management evaluation methodologies, applying SMART indicators and reconstructing or validating baseline scenarios;
- Demonstrable analytical skills;
- Excellent English communication skills. Arabic and French are advantages
- Experience with working in the region will be an added value.

Qualified candidates are requested to send their updated CVs, together with expression of interest to PERSGA in Jeddah, Kingdome of Saudi Arabia, at the email address: projects@persga.org.

Annex 2: Consultant Questionnaire

Red Sea and Gulf of Aden Strategic Ecosystem-based Management Project (SEM Project)

KEY QUESTIONS FOR THE FINAL EVALUATION OF THE PROJECT

To support the Final Evaluation of the Project, we kindly ask that you answer these 23 questions. These questions are submitted to individual associated with the following Project organizations/teams: Project *Coordination Unit (PCU), the National coordinators (NC), and members of the National Steering Committees (NSC), Project Consultant (PC) and other stakeholders (OS).*

Name:_____
Country: _____
PCU / NC / NSC / PC / OS (please circle one)

a) PROJECT IMPACT

1.As a consequence of the Project, is there now government approved policies and/or modified regulatory frameworks ***to improve management of marine resources in Dungonab Bay and Mukkawar Island MPA, Wadi el Jemal-Hamata NP, Aqaba MP and Marine Protected Area at Mosai and Maskali Islands***? Yes or No or Unsure. Please give some examples if Yes.

2.In the participating countries, are there now government approved policies to encourage alternative livelihoods of coastal communities in the above MPAs that will reduce pressure on marine resources? Yes or No or Unsure (Please give some examples if Yes).

3. As a consequence of the Project, is there now better information sharing between PERSGA member countries in relation to MPAs, marine resource management and community involvement in MPA management? Yes or No or Unsure (Please give some examples if Yes).

4. Do you believe that the Project ***has effectively contributed*** to strengthening the concept of MPA in the participating countries by fostering local communities' involvement in MPA management and marine resource management?
If YES: How?
If NOT: What were the main obstacles?

5. Do you believe that the Project has effectively contributed to helping member states ***revise their fisheries policies and regulations***?
If YES: Where? What are the specific policies and regulations?
If NOT: What were the main constraints and obstacles faced by the Project to do so?

6.Have ***Project's outcomes*** (such as fostering empowerment of local communities in MP decision making; developing exchange among member countries; community monitoring; standardized monitoring protocols in the PERSGA region and others) been incorporated into national conservation or strategic or long-term sustainability plans (e.g. other protected area management plans)?
If YES: please provide examples.
If NOT: what were the main constraints and obstacles?

7. Did the Project improve ***interactions between resource managers and scientists*** in participating countries to better address specific marine resource management-related issues, share reliable fisheries data, and data management to support effective region-wide habitat assess**s**ments?
If YES: Provide examples, and outcomes.
If NOT: What were the main constraints and obstacles?

8. How would you define ***the level of involvement of officials*** of participating countries in the implementation of the different activities of the Project? Low – Satisfactory – Excellent?
If LOW: what were the main obstacles in each country?
If SATISFACTORY: What could have been done in order to improve this involvement?

9. Were lessons and experiences drawn from the Project ***replicated or scaled up*** in the design and implementation of other projects that were occurring at the same time (or since)? Please note that "*replication*" could consist of: (a) lessons and experiences are replicated in different geographic area; and/or (b) scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). If this is the case, please provide some concrete examples.
10. How did the Project supporting ***knowledge transfer***? For instance, through project result documents, training workshops, information exchange, a national and regional forum, etc.) or through use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions. Please explain and provide concrete examples.

b) INFORMATION AND AWARENESS RAISING
11. How would you define ***the level of involvement of the general community (as opposed to Government or business)*** of participating countries in the implementation of the different activities of the Project? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done in order to improve their involvement?

12. How would you define the quality of the ***information and awareness raising initiatives*** of the Project? Low – Satisfactory – Excellent?
If LOW: What were the main constraints in each country?
If SATISFACTORY: What could have been done in order to improve their involvement?

13. How did the Project make ***best use*** of the skills, experiences and knowledge of NGOs, community and local groups, the private and public sectors, and academic institutions in some of the Project activities? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

14.How would you define ***the quality and efficacy (the ability to produce a desired result) of synergy and partnership*** which were established in the context of the implementation of the Project: Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

c) FINANCE PERFORMANCE

15. How would you define ***the quality of financial controls***, including reporting, and planning that allowed the project management to make informed decisions regarding the budget at any time, allows for a proper and timely flow of funds, and for the payment of satisfactory project deliverables? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: Provide examples of good practices. And also: What could have been done for improvements?

16. How would you define t***he diligence*** (i.e. determination and careful effort) in the management of funds and financial audits: Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

17. Do you think that – as a direct result of its initiatives – the Project had effectively mobilized "leveraged resources" or additional resources—beyond those committed to the Project itself at the time of approval? Note that leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.
If this is the case: Please briefly describe the resources the project had leveraged since inception and indicate how these resources have contributed to achieving the project's global objective
If this is not the case: Please explain the causes, obstacles and/or constraints.

d) COST EFFECTIVENESS AND SUSTAINABILITY

18. What is your opinion of the ***cost-effectiveness*** of the Project? In other words, what is your assessment about the achievements and the outputs of the Project in relation to the inputs, costs, and implementing time?

19. Do you think that GEF funds were used to finance activities that ***would not have taken place without GEF funding***?
Yes / No / Unsure (please briefly justify your response)

20. Do you think that PERSGA and its national partners could have achieved the same results even without the Project?
Yes / No /Unsure (please briefly justify your response)

e) ABOUT SUSTAINABILITY

21. The concept of *"sustainability"* measures the extent to which benefits continue at the end of the Project, after completion of GEF assistance. Do you think that the Project outcomes or initiatives are ***sustainable over the long-term?***
Yes / No / Unsure (please briefly justify your response)

22. Has ***a sustainability strategy*** been developed and/or implemented in order to continue and expand the activities started under the Project??
Yes / No / Unsure (please briefly justify your response)
Please explain.

23. Has ***institutional capacity*** (systems, structures, staff, expertise, etc.) been put in place in each participating country to continue and expand the activities started under the Project?
Yes / No /Unsure (please briefly justify your response)
Please explain.

Annex 3: Responses to Consultants Questionnaire Responses

Responses in blue and un-edited from original.

1.As a consequence of the Project, is there now government approved policies and/or modified regulatory frameworks ***to improve management of marine resources in Dungonab Bay and Mukkawar Island MPA, Wadi el Jemal-Hamata NP, Aqaba MP and Marine Protected Area at Mosai and Maskali Islands***? Yes or No or Unsure. Please give some examples if Yes.

"Yes, the most obvious example that the government allowed to establish Qula'an Eco-Village and to be manage by the locals" (Dr. Hanafy, PC, Egypt)

"Yes. Designation of Sanganeb Marine National Park and Dungonab Bay – Mukkawar Island Marine National Park Inscription as a World Heritage Site in 2016. The SEM Project impact on Wadi el Jemal-Hamata NP is not known by this consultant. The SEM Project impact on Muchai and Maskali Island is not known by this consultant including whether boundary coordinates have been provided in the regulation as recommended by the SEM fisheries co-management consultancy." (Dr. Sheppard, Project consultant)

"Yes, University marine environment monitoring program: has planned to include habitats such as mangroves and seagrass and socioeconomic data in the program regular surveys at the monitoring sites. The program which was previously run in vicinity of Port Sudan Harbour will now be spatially extended to include sites at Dungonab Gulf. Research Program: From last year several graduate and postgraduate dissertations were focused on the MPA to address some research gaps raised by the MPA management." (Red Sea University, Sudan)

"Yes. The SEM project supported the preparation of a new management for Dungonab Bay and Mukkawar Island National Park (DMNP) in Sudan and a new zoning plan for Wadi el Gamal Hamata National Park in Egypt. Both of which were prepared in consultation with national stakeholders.

In July 2016, the 41st World Heritage Committee inscribed both Sudanese marine national parks, Sanganeb Marine National Park and Dungonab Bay – Mukkawar Island Marine National Park on the UNESCO World Heritage list. The fact that there was a new management plan and other activities being supported in DMNP at the time may have influenced this decision. The SEM project then went onto support the preparation of a new integrated management plan for the World Heritage site.

The consultant does not know the impact of the SEM project on either Aqaba MP and Musha Maskali Islands." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Plans to continue and sustain some monitoring programs for WQ and fish communities" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes, The MPAs at the Red Sea office has increased staff from 15 to 28 officers and rangers.
The local government provided a new patrolling car, and another patrolling boat.
The DMNP has developed updated management and zoning plan. DMNP and SNP have developed an integrated management plan and inscribed as UNESCO World Natural Heritage Site last year (with significant support from the project for the institutional capacities and community participation)."
(Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes.

- Continuation of the monitoring program, fishery statistics, and deep sea fishing program
- Amendment of legislation concerning fishing and fisheries licensing
- Implementation of a program for fish restocking." (Mr. Abdulla Abu Awali, NC, Jordan)

2.In the participating countries, are there now government approved policies to encourage alternative livelihoods of coastal communities in the above MPAs that will reduce pressure on marine resources? Yes or No or Unsure (Please give some examples if Yes).

"Yes, the government supports such approach but without approved policies" (Dr. Hanafy, PC, Egypt)

"Unsure. This would require documents showing policy approval. I have not had sight of any such documents. I understand that alternative livelihoods have been provided by the SEM Project to stakeholders in Dungonab Bay – Mukkawar Island Marine National Park and Wadi el Jemal-Hamata NP. I have no information as the extent to which the beneficiaries of these alternative livelihoods have reduced their pressure on marine resources." (Dr. Sheppard, Project consultant)

"Yes, we noticed that the Ministry of Environment is attracted to the community-based ALSs. They indicated in our joint meetings that they are working with community to expand activities, e.g. for the glass-bottom boat tours, they will build a reception area with cafeteria and service centre involving local private sector (this was confirmed later on by the survey team in the meeting with the director of environment and tourism)" (Red Sea University, Sudan)

"Yes. The SEM project supported various livelihood related activities in Dungonab Bay and Mukkawar Island Marine National Park (DMNP) in Sudan and Wadi el Gemal-Hamata National Park (WGHNP) in Egypt.

In DMNP Sudan the livelihood activities included (i) renovating the womens cooperative buildings and provision of equipment to establish new bakeries in the two main villages inside DMNP in Dungonab and Mohammed Qol, (ii) provision of goats to provide milk, (iii) the procurement of two glass-bottom boats for the fishermens cooperatives, (iv) renovation and equipping of new workshops to allow the local fishermen to repair boats and engines, (v) installation of solar panels in community facilities (mosque, school etc).

In Egypt, the livelihood activities included establishment of a women's cooperative and provision of training in handicrafts, including bag making, beading, and weaving among others.

It is not known if the glass bottom boats are operational in either park or whether the beneficiaries have stopped fishing as a result of these alternative livelihood programmes. The activities supported through the project do appear to have provided an alternative supplementary source of income. The bakeries are also likely to help support improvement in womens' nutrition. The consultant also does not know if the livelihood activities supported by the SEM resulted in government approved policies." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Plans to develop special port for fishermen societies and fish market near to fisheries marine (on-going)" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes, The local community and stakeholder participation was already in the original plan, but the project provided technical assistance and guidelines to realize it, now we have several subprojects with local community, and this is considered in the updated management plan and practice." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"No for Jordan: Most of the fishers or almost all are actually part-time fishers and they have already other jobs. However, two initiatives were recently started building on the project, including development of the fish market, and encouraging tourist sport fishing to be run by fishers." (Mr. Abdulla Abu Awali, NC, Jordan)

3. As a consequence of the Project, is there now better information sharing between PERSGA member countries in relation to MPAs, marine resource management and community involvement in MPA management? Yes or No or Unsure (Please give some examples if Yes).

"Unsure. The PERSGA website provides some information concerning SEM activities. PERSGA SEM has invested in a number of regional workshops related to capacity building and information sharing. The most recent relates to the SOMER II Process. The SOMER II indicators are higher level. Indicators include those relating to MPAs (location, area etc), MPAs management (METT scores). The indicator relating to fisher associations/members was scored below the threshold in terms of priority whilst the indicator relating to certified coastal/marine nature tourism guides was scored above." (Dr. Sheppard, Project consultant)

"Yes. There has been scientific information sharing in regional workshops and activities. This allowed as to establish contacts with colleagues in other states; we have participated in regional workshops in Jeddah, Aqaba, Hurghada and hosted one in Port Sudan, which were quite useful in this regard." (Red Sea University, Sudan)

"Yes.There were several workshops held during the SEM project to support information sharing in relation to MPAs, marine resource management, monitoring. It is not known if these activities have continued outside of the workshops, although it is thought that the SEM Project is supporting the production of the SOMER II." (Dr. Rebecca Klaus, Project Consultant)

"Yes. This is being done on a continuous basis throughout regular meetings organised by PERSGA" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes. As part of the implementation of project activities, the Ministry of Housing, Urbanism and Environment (MHUE) is committed to the involvement of stakeholders, including fishermen or cooperative associations for fishermen." (Aden Hassan Elmi, NC, Djibouti)

"Yes, through regular meetings with other MPAs staff and managers during the project, which are ongoing" (Mr. Abdulla Abu Awali, NC, Jordan)

4. Do you believe that the Project ***has effectively contributed*** to strengthening the concept of MPA in the participating countries by fostering local communities' involvement in MPA management and marine resource management?
If YES: How?
If NOT: What were the main obstacles?

"Yes, by raising ownership through: sharing benefits, improved local community life style, joined them to the tourism industry (example: Qula'an eco-village and Abu Ghosson Handcraft Centre)" (Dr. Hanafy, PC, Egypt)

"Yes. My experience was that every effort was made to foster local community involvement in MPA and Marine Resources management in Dungonab and Mohamed Qol villages when I visited them in early 2015. I am not aware of the situation in the other SEM Project MPA investment locations. I am

also unaware as to the extent to which the communities are objectively involved in co-management in MPAs (voluntary wardens, guides, committees etc) in any of the SEM Project MPA locations.The main obstacles are: (a) the time needed to build community trust in, and engagement with, a consultative/participatory management approach; (b) the need for clear links between investments in activities and improved MPAs management; and (c) the need for a planned project exit that maximises a sustainable legacy." (Dr. Sheppard, Project consultant)

"Yes. Our university team has conducted the monitoring program for the project over two years, and there has been active participation by the local community in all seven components of the program covering different key habitats and biodiversity and socioeconomic aspects." (Red Sea University, Sudan)

"Yes. Both the MPA authorities in Sudan and Egypt employ rangers from the local area. Under the SEM Project, efforts were made to engage local communities in DMNP and WGHNP in the management planning and zoning processes.

The management plan for DMNP and the World Heritage site includes strategies and actions to support a governance framework that includes structures whereby communities can continue to engage in management."(Dr. Rebecca Klaus, Project Consultant)

"The participation of fishermen societies in the project implementation and their involvement" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Implementation of the project within the Marine Protected Area (MPA) is positive, as project activities have improved the management of the Marine Protected Area (MPA); the involvement of local communities and other stakeholders, including the sector of fishermen, in the conservation efforts of MPAs. The creation of mechanisms for the conservation of natural resources and the implementation of the environmental monitoring program, the creation of income generating activities for fishermen in order to reduce pressure on the environment and the marine resources." (Aden Hassan Elmi, NC, Djibouti)

"Yes. Especially for the local community, who first though that the MPA means a set of prohibition regulations. Now we can see better awareness in this regard. They have positive participation and better relation with our staff, and understanding of the benefits is growing among them, particularly after realizing demo livelihoods subprojects, and after they heard that their MPA became a Natural Heritage site." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes, through participation of fishers and their associations." (Mr. Abdulla Abu Awali, NC, Jordan)

5. Do you believe that the Project has effectively contributed to helping member states ***revise their fisheries policies and regulations***?
If YES: Where? What are the specific policies and regulations?
If NOT: What were the main constraints and obstacles faced by the Project to do so?

"No, the task did not include in the project work plan in the case of Wadi El-Gemal, Egypt, mainly because it is not addressed as one of the park priority" (Dr. Hanafy, PC, Egypt)

"As principal international consultant on "Reviewing legislations, strategies, policies and management plans for fisheries sectors in PERSGA countries" I have no knowledge as to whether member states have revised their fisheries policies and regulations. However, I note that the reports are on the PERSGA website. I would say that the constraints are: (a) lack of understanding in decision

makers of limitations to the exploitative capacity of living marine resources; (b) a lack of social and economic incentives to good fisheries practices and; (c) limited resources to support effective fisheries co-management. In these respects, it should be noted that the lowest scoring indicator of the 41 indicators evaluated in the SOMER II workshop in October 2018 was certified fisheries. The fisheries certification process, principally through the Marine Stewardship Council (MSC) certification process, is a major driver of change to delivering more effective fisheries management in developing counties and some countries in transition. There are currently no MSC certified fisheries in the PERSGA region." (Dr. Sheppard, Project consultant)

"Yes. A number of regional and national workshops has focused on legislation and policy reviews. A study was conducted by a national consultants. We participated in two workshops during this study. We also participated in committee for revision of fishery laws conducted recently, and the draft amended fishery law is now under approval by the state parliament (this has been confirmed by the fishery administration when the survey team met them later on. They also provided the team with a copy of the draft amended law)." (Red Sea University, Sudan)

"No.The consultant does not know if fisheries policies and regulations have been revised as a result of the SEM Project. If not, there are several reasons for this which could include: (i) a general lack of capacity in policy making among the government officials responsible for fisheries and the marine environment, (ii) a lack of knowledge and understanding about the marine environment and current declining status of resources, (iii) political reluctance to make changes that may risk impoverishing already extremely poor and vulnerable coastal communities and (iv) other higher ranking priorities.

While historically, Sudan has made some strong policy decisions about the marine environment (e.g. banning shark fishing), there now appears to be very limited policy making. For example, there is reluctance among the authorities to put in place seasonal closures to help protect grouper stocks, which is among the most valuable catch, because of the high level of dependency of the fishers that fish the spawning aggregations as their main source of income, throughout the year." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Ready to be presented and adopted by the local government" (Dr. Aiman Soleiman, Director of Environment, NSC)

"I think NO, the project organized a workshop on fisheries policies and regulations; but it did not adopt a mechanism for the revision of fisheries policies and regulations." (Aden Hassan Elmi, NC, Djibouti)

"Yes. Some known gaps were identified earlier before the project. The assessment made by the project has confirmed that and identified further gaps, which were all considered in the new amended wildlife law (the previous one did not consider protection of marine habitats and fish under our law which focused on terrestrial national parks). The amended law draft is under revision by legislative higher authority of the Federal Government (Wildlife Administration is Federal Agency)." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes. Amendment of fishery law and bylaws (onging) to revise regulate of gears used that have impacts on the stock." (Mr. Abdulla Abu Awali, NC, Jordan)

6.Have ***Project's outcomes*** (such as fostering empowerment of local communities in MP decision making; developing exchange among member countries; community monitoring; standardized

monitoring protocols in the PERSGA region and others) been incorporated into national conservation or strategic or long-term sustainability plans (e.g. other protected area management plans)?
If YES: please provide examples.
If NOT: what were the main constraints and obstacles?

"Yes: Improved the monitoring performance, shared the community with the park authority to define the subprojects within the protected area" (Dr. Hanafy, PC, Egypt (translation from Arabic))

"I have no objective knowledge of this in respect of the SEM Project" (Dr. Sheppard, Project consultant)

"Yes. We have participated in updating Standard Survey Methods (SSMs) with the regional team and PERSGA. Our Sudanese monitoring team used these updated methods and we have shared data and information with PERSGA. During participation in regional workshops this was very helpful, because we data collection and reporting followed harmonized methods." (Red Sea University, Sudan)

"Yes.Project outcomes listed above were included in the strategies and actions in the management plan for DMNP and the World Heritage site in Sudan.

The inclusion of the project outcomes in other national conservation or strategic long-term sustainability plans in Sudan or other countries is not known." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Sustaining the water quality monitoring. Sustaining the fish counts by JREDS. Development in fishery sector. Involvement and participation in all activities" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes. The MPA management plan now includes this, and to be implemented with participation of the local community committees in monitoring." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes.
Sustainable program for monitoring water quality, fishery and marine litter achieved
- Revision of the CZM legislation (ongoing)
- Updating the habitat map (in preparation national project)" (Mr. Abdulla Abu Awali, NC, Jordan)

7. Did the Project improve ***interactions between resource managers and scientists*** in participating countries to better address specific marine resource management-related issues, share reliable fisheries data, and data management to support effective region-wide habitat assess**s**ments?
If YES: Provide examples, and outcomes.
If NOT: What were the main constraints and obstacles?

"Yes. Workshops, provided the monitoring data" (Dr. Hanafy, PC, Egypt (translation from Arabic))

"I have no objective knowledge of this in respect of the SEM Project. However, there have been many workshops to deliver this. The outcome is still pending in the case of Sem project investment in PERSGA SOMER II." (Dr. Sheppard, Project consultant)

"Yes. We have conducted three national workshops for dissemination of the monitoring results to decision makers and stakeholders during the project. Now we have better interaction and channels

with the MPA management and Environment Directorate. We have established agreement with them to undertake coastal monitoring program, which is now conducted by the Faculty of Marine Sciences and Fisheries, and its Institute of Marine Research. We also provide training and postgraduate scholarships for the MPA and Environment management staff, and help in EIA studies." (Red Sea University, Sudan)

"Yes.The SEM Project supported the collection of monitoring data by national scientists in Sudan (Red Sea University). The methods included participatory monitoring techniques and the national consultants in Sudan have been using these methods for monitoring fisheries in DMNP. Workshops were held where monitoring results were presented and resource managers were present in the meetings. It is not known if the data were used to better address specific marine resource management-related issues. The SEM project is also supporting the preparation of the PERSGA SOMER II." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Local government (ASEZA), NGO (JREDS), and community (fishermen societies) are working as a team" (Dr. Aiman Soleiman, Director of Environment, NSC)

"The project recruited three national scientific experts to carry out various studies and they transferred the results of their studies to the project stakeholders to exchange lessons learned from the studies." (Aden Hassan Elmi, NC, Djibouti)

"Yes. We have now partnership with the Faculty of Marine Science, and the Marine Science Research institute. The conduct environmental monitoring. They also train our officers and rangers, e.g. in reef checks, and provided postgraduate scholarships for our technical staff." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes, Participation by NGOs (e.g. JREDS, Aqaba Diving Society), Universities (Jordanian University, Aqaba Branch) and Fishers Associations (2 scoieties in Aqaba) were very high and active." (Mr. Abdulla Abu Awali, NC, Jordan)

8. How would you define ***the level of involvement of officials*** of participating countries in the implementation of the different activities of the Project? Low – Satisfactory – Excellent?
If LOW: what were the main obstacles in each country?
If SATISFACTORY: What could have been done in order to improve this involvement?

"Satisfactory: the project supported to establish qualified and more proficiently facilitated and equipped monitoring team, but because budget is limited, therefore the participating was restricted to the monitoring team" (Dr. Hanafy, PC, Egypt)

"Excellent. The level of involvement of officials in implementing the activities of the SEM project, that I have consulted on, has been excellent. However, I do not know the extent to which this involvement in activities has led to objective outcomes. Improvement in involvement might have been achieved with an outcome indicator framework set, and agreed, as a condition for country participation. However, even so, it is difficult for any "project" investment to catalyse change management on its own and without other social and political drivers supporting the process. "You can lead a horse to water but you can't make it drink" (Dr. Sheppard, Project consultant)

"Excellent" (Red Sea University, Sudan)

"The officials involved in the marine protected areas management in Sudan and Egypt are highly dedicated individuals who were very involved in the delivery of SEM activities." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. High level (decision makers) meeting to evaluate outcomes of the project and discuss recommendations" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Excellent" (Aden Hassan Elmi, NC, Djibouti)

"Satisfactory. The level of wildlife staff participation in provision of project support to the community (particularly livelihoods subprojects equipment and training) was less than that of the staff of the Environment Department, which make them more visible for the local community than our staff in this regard. Nevertheless, our visibility to the local community was much improved by the project activities in general." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

9. Were lessons and experiences drawn from the Project ***replicated or scaled up*** in the design and implementation of other projects that were occurring at the same time (or since)? Please note that "*replication*" could consist of: (a) lessons and experiences are replicated in different geographic area; and/or (b) scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). If this is the case, please provide some concrete examples.

"Yes: the subprojects (Qula'an eco-village and handcraft centre of Abu Ghosson) are very good examples as successful module of co-financing /cofounding, sustainability and applicable to replicate" (Dr. Hanafy, PC, Egypt)

"I have no objective knowledge of this in respect of the SEM Project." (Dr. Sheppard, Project consultant)

"Yes. The UNIDO project in the coastal zone has taken some lessons from SEM project; alternative livelihoods and marine litter component were included in phase 2 plan of the UNIDO project based on SEM achievements and demo subprojects. Dr. Adri, the UNIDO project adviser has confirmed this during the meeting with him for preparation of the project, which will be launched soon. The project is national, focuses in the coastal resources management, financed by EU and Norway government as a grant to the Government of Sudan with budget of 5 million Euro." (Red Sea University, Sudan)

"The SEM project achieved some replication within the project timeframe. Examples may include the the livelihood activities, some of which were replicated between the protected areas in Egypt and Sudan. The installation of solar panels could also be considered an example of scaling up that was achieved within the project timeframe." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Sustainability of project activities by government, NGO and societies" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes. In our collaboration with UNESCO, some national NGOs, e.g. SUDIA, and oversees NGOs, e.g. Cousteau Society and Darwin Initiative, we are trying to sustain and extend the MPA administration support to local community participation and alternative livelihoods subprojects, building on activities and designs introduced by the SEM project." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes, for example through mainstreaming the project activities in the national monitoring program, and the partnership with fishers societies in Aqaba" (Mr. Abdulla Abu Awali, NC, Jordan)

10. How did the Project supporting knowledge transfer? For instance, through project result documents, training workshops, information exchange, a national and regional forum, etc.) or through use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions. Please explain and provide concrete examples.

"Again, the subprojects created to support community (i.e. Qula'an eco-village and handcraft centre of Abu Ghosson) are considered as actual educational/pilot examples for decision makers on the way to encourage the community to be part of the main industry on the Egyptian coast of the Red Sea (tourism). Therefore, converting the community from biodiversity consumption use of the marine resources (mainly fishing) to non-consumption use (tourism)" (Dr. Hanafy, PC, Egypt)

"Materials are available on the PERSGA website. There have been many workshops involving national stakeholders, including efforts to involve women, and consequently some female participation though, perhaps, there could have been more. The emphasis has been on employing region national, rather than non-regional, consultants and these national consultants have been substantively involved in SEM project delivery providing an improved regional capacity legacy." (Dr. Sheppard, Project consultant)

"Excellent" (Red Sea University, Sudan)

"SEM Project materials have been shared through the PERSGA website and regional and national workshops. National consultants were invited to present at these workshops, and shared knowledge and data (e.g. monitoring workshop in Jordan, management planning workshop in Hurghada). The national consultants and national monitoring teams have been substantively involved in SEM project delivery providing an improved regional capacity legacy." (Dr. Rebecca Klaus, Project Consultant)

"It has high impact on knowledge and experience. Enhanced participation and cooperation on common challenges. Raised awareness of local societies in the importance of monitoring/counting…etc" (Dr. Aiman Soleiman, Director of Environment, NSC)

"The project has achieved in some of the activities in improving the knowledge and skills of the managerial staff of different services within the sites." (Aden Hassan Elmi, NC, Djibouti)

"Excellent. For examples, guidelines for MPA management effectiveness, capacity building workshops in MPA management, monitoring, EBM, community based projects, etc." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"- Replication of some project successful activities already started by ASEZA (e.g. extension of the pelagic exploratory fishing activities by including more fishers as stakeholders, which is supported by ASEZA fund.
- Awareness raising on legislation gaps and starting revision efforts
- Increase awareness among fishers on conservation issues"(Mr. Abdulla Abu Awali, NC, Jordan)

b) INFORMATION AND AWARENESS RAISING

11. How would you define ***the level of involvement of the general community (as opposed to Government or business)*** of participating countries in the implementation of the different activities of the Project? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done in order to improve their involvement?

"Excellent" (Dr. Hanafy, PC, Egypt)

"In respect of "on-the-ground" activities my impression is excellent. In respect of "regional" workshops my impression is low. There are a number of possible reasons for this: (a) the limits to the numbers that can attend due to financial constraints; (b) government officials need to drive change and so need to be a focus for change management; (c) it is difficult to justify selection of civil society/private sector stakeholders over government because of point b." (Dr. Sheppard, Project consultant)

"Excellent" (Red Sea University, Sudan)

"It appeared that the SEM project pursued various opportunities to involve the general community in the implementation of project activities.

For example, the management planning processes supported by the SEM project in Egypt and Sudan involved the general community. Media training was also delivered to journalists in order to increase communication capacity about the marine environment in the countries." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. Specific program for inclusion and wider participation" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Excellent" (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Satisfactory. Could be excellent through investing more on community participation program" (Mr. Abdulla Abu Awali, NC, Jordan)

12. How would you define the quality of the ***information and awareness raising initiatives*** of the Project? Low – Satisfactory – Excellent?
If LOW: What were the main constraints in each country?
If SATISFACTORY: What could have been done in order to improve their involvement?

"Low: limited budget" (Dr. Hanafy, PC, Egypt)

"I have no objective knowledge of this in respect of the SEM Project." (Dr. Sheppard, Project consultant)

"Excellent" (Red Sea University, Sudan)

"The consultant does not have any sufficient knowledge about the information and awareness raising initiatives the SEM project supported to be able to define the quality." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. High frequency and sustainability in awareness is needed" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Excellent" (Aden Hassan Elmi, NC, Djibouti)

"Excellent for local community. Low for decision makers. Complexity of the government system (federal, state and local levels); high rate of turnover among decision makers and government staff. We could have more usage of wide broadcasting and TV media (National TV channels). However, in 2017 a great attention was attracted by very high ranked officials when the MPA was inscribed as a UNESCO heritage site." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

13. How did the Project make ***best use*** of the skills, experiences and knowledge of NGOs, community and local groups, the private and public sectors, and academic institutions in some of the Project activities? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

"Satisfactory: involving the NGOs as partners rather than co-financing/cofounding agencies based on personal initiations" (Dr. Hanafy, PC, Egypt)

"See point 11." (Dr. Sheppard, Project consultant)

"Satisfactory> It could be improved by involving more agencies, e.g. finance and planning ministry. Also more involvement of TV channels, broadcasting at wider range" (Red Sea University, Sudan)

"The national consultants retained by the project included academics, community and locals groups in Sudan and Egypt. The participation of NGOs was minimal in Sudan, although this is a national obstacle and not project specific. There was greater participation of NGOs in Egypt." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. More funds to spread knowledge and experience and to provide training on a regular basis" (Dr. Aiman Soleiman, Director of Environment, NSC)

"EXCELLENT, because the SEM involved all stakeholders of the project" (Aden Hassan Elmi, NC, Djibouti)

"Excellent (international and national NGOs)" (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

14.How would you define ***the quality and efficacy (the ability to produce a desired result) of synergy and partnership*** which were established in the context of the implementation of the Project: Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

"Excellent" (Dr. Hanafy, PC, Egypt)

"In respect of "on-the-ground" activities my impression is excellent. In respect of the "regional" workshops I have attended my impression is low. Regional workshops tend to be one-off and short-

term with limited clear objectives and required follow-up activities. However, they have value in regionalizing the process and strengthening the regional ownership of the SEM Project legacy by PERSGA." (Dr. Sheppard, Project consultant)

"Excellent" (Red Sea University, Sudan)

"The consultant does not know about the quality and efficacy of synergy and partnership." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. Repetitive joint programs that enhances cooperation between government, NGO and community." (Dr. Aiman Soleiman, Director of Environment, NSC)

"There is a need to create a mechanism for managing results and basic data to ensure the sustainability of project activities after its closure." (Aden Hassan Elmi, NC, Djibouti)

"Excellent. For example, inscription of the MPA as a UNESCO heritage area was successfully achieved through collaborative work of the project with UNESCO Chair, Wildlife Research, Cousteau Society and other national agencies. We have also joined some other initiatives like those of the CMS convention, Birds International," (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

c) FINANCE PERFORMANCE

15. How would you define ***the quality of financial controls***, including reporting, and planning that allowed the project management to make informed decisions regarding the budget at any time, allows for a proper and timely flow of funds, and for the payment of satisfactory project deliverables? Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: Provide examples of good practices. And also: What could have been done for improvements?

"Satisfactory: Although the response of the project management committee for the partner financial requirement was high, the budget line items and the budget allocated to each country was not clear. This gave the ability to the committee management to transfer money from line item to another to satisfy all of the project partners. Although this unusual approach, but it is understandable to me and I see this as a smart approach to implement such complicated project design properly." (Dr. Hanafy, PC, Egypt)

"I have no objective knowledge of this in respect of the SEM Project. However, in respect of my consultancy work I have found the administrative and financial support to be objective and excellent." (Dr. Sheppard, Project consultant)

"Not applicable question; but for us as consultant, we have received all contract payments timely." (Red Sea University, Sudan)

"The consultant does not know about the quality of financial controls." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory. The successful implementation of the monitoring programs by a two different technical bodies throughout the year" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Excellent" (Aden Hassan Elmi, NC, Djibouti)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

16. How would you define t***he diligence*** (i.e. determination and careful effort) in the management of funds and financial audits: Low – Satisfactory – Excellent?

If LOW: What were the main obstacles in each country?
If SATISFACTORY: What could have been done for improvements?

"Excellent" (Dr. Hanafy, PC, Egypt (translation from Arabic))

"I have no objective knowledge of this in respect of the SEM Project. However, in respect of my consultancy work I have found the administrative and financial support to be objective and excellent." (Dr. Sheppard, Project consultant)

"We have no enough background knowledge, but for the activities we get involved in, the procedure appeared to be very strict and well managed for the case of Sudan" (Red Sea University, Sudan)

"The consultant does not know about the diligence in the management of funds in the SEM Project. The PERSGA SEM staff appeared to be diligent in the management of funds." (Dr. Rebecca Klaus, Project Consultant)

"Satisfactory." (Dr. Aiman Soleiman, Director of Environment, NSC)

"Excellent" (Aden Hassan Elmi, NC, Djibouti)

"Excellent" (Mr. Abdulla Abu Awali, NC, Jordan)

17. Do you think that – as a direct result of its initiatives – the Project had effectively mobilized "leveraged resources" or additional resources—beyond those committed to the Project itself at the time of approval? Note that leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.
If this is the case: Please briefly describe the resources the project had leveraged since inception and indicate how these resources have contributed to achieving the project's global objective
If this is not the case: Please explain the causes, obstacles and/or constraints.

"Yes" (Dr. Hanafy, PC, Egypt)

"I have no objective knowledge of this in respect of the SEM Project." (Dr. Sheppard, Project consultant)

"The consultant does not know whether the SEM Project has mobilized or leveraged additional resources beyond those committed to the project at the time of approval.
The consultant is aware of additional resources that were offered to PERSGA and not accepted." (Dr. Rebecca Klaus, Project Consultant)

"Making additional funds by ASEZA to support project activities (buying additional equipment for fishermen). The different technical expertise furnished on a local level for successful implementation of project activities." (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes, Examples:
- Building on the National Monitoring Program (established since 16 years)
- Cleaning and awareness campaigns, especially underwater, which were implemented in partnership with NGOs projects" (Mr. Abdulla Abu Awali, NC, Jordan)

d) COST EFFECTIVENESS AND SUSTAINABILITY

18. What is your opinion of the ***cost-effectiveness*** of the Project? In other words, what is your assessment about the achievements and the outputs of the Project in relation to the inputs, costs, and implementing time?

"Excellent" (Dr. Hanafy, PC, Egypt)

"Given the challenges faced by the region I would say that the SEM Project has been cost-effective. However, if it might have been more cost-effective had it had a simpler capacity building focus delivering a small number of clear, objective and achievable outcomes to be verified by clear, objective and achievable outcome indicators." (Dr. Sheppard, Project consultant)

"The consultant does not know whether the SEM Project has been cost-effective as the consultant is not aware of the funds spent on the activities." (Dr. Rebecca Klaus, Project Consultant)

"Reasonable due to available budgets" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Very good" (Mr. Abdulla Abu Awali, NC, Jordan)

19. Do you think that GEF funds were used to finance activities that ***would not have taken place without GEF funding***?
Yes / No / Unsure (please briefly justify your response)

"Yes" (Dr. Hanafy, PC, Egypt)

"Yes. Alternative resources would probably not have been forthcoming since: (a) this is a regional project; (b) the SEM Project would probably not be eligible for other sources of international funding; and (c) PERSGA does not have sufficient other sources of revenue to implement SEM Project activities." (Dr. Sheppard, Project consultant)

"Yes" (Red Sea University, Sudan)

"Yes. The SEM Project has definitely financed activities that would otherwise not have been achieved. National budget allocations for biodiversity and marine protected areas management in the countries in this region tends be low given there are many other more urgent priorities. Some examples of investments the project has supported that otherwise would not have happened include: the installation of new infrastructure in the parks, including solar panels, signage, as well as renovation works to upgrade park buildings, the livelihood programmes and the ecological monitoring programmes and the preparation of management plans. All of these activities would not

have happened without the technical support and investment made by PERSGA SEM project." (Dr. Rebecca Klaus, Project Consultant)

"Yes. Some activities are beyond responsibilities of any parties but outcomes benefited all" (Dr. Aiman Soleiman, Director of Environment, NSC)

"Yes" (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes , e.g. establishment of citizen-science initiative (participation of community in monitoring program at Aqaba), Pelagic fishery exploration alternative to reduce pressure on traditional fishing grounds, provision of needed equipment (monitoring and pelagic fishing selected gears)" (Mr. Abdulla Abu Awali, NC, Jordan)

20. Do you think that PERSGA and its national partners could have achieved the same results even without the Project?
Yes / No /Unsure (please briefly justify your response)

"No" (Dr. Hanafy, PC, Egypt)

"No for the reason given under 19." (Dr. Sheppard, Project consultant)

"No" (Red Sea University, Sudan)

"No. As above" (Dr. Rebecca Klaus, Project Consultant)

"No. This is regional cooperation that needs international, regional as well as local support to achieve goals" (Dr. Aiman Soleiman, Director of Environment, NSC)

"No" (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"No, because of the limitations budget and technical capacities" (Mr. Abdulla Abu Awali, NC, Jordan)

e) ABOUT SUSTAINABILITY

21. The concept of *"sustainability"* measures the extent to which benefits continue at the end of the Project, after completion of GEF assistance. Do you think that the Project outcomes or initiatives are ***sustainable over the long-term?***
Yes / No / Unsure (please briefly justify your response)

"Yes" (Dr. Hanafy, PC, Egypt)

"Yes.There will be a legacy to the extent that PERSGA will continue to act as Secretariat to the Jeddah convention which mandates coordination of, and support for, many of the activities implemented under the SEM Project. Any incremental national sustainability will, however, be conditional on national ownership of the SEM Project legacy." (Dr. Sheppard, Project consultant)

"Yes. Framework institutes exist and functioning; however there are still funding problems" (Red Sea University, Sudan)

"Unsure. The concept of sustainability of project activities beyond the lifetime of the project is difficult to judge in the SEM beneficiary countries given the highly volatile political and financial situation in the region. This is exemplified by the need to change the demonstration sites included in the project. For example, in Sudan, during the course of the project, government significantly increased the national budget allocation available to the Wildlife Conservation General Administration (WCGA) Red Sea State, Marine Protected Areas Division, the authority mandated with responsible for the marine protected areas. While the budget allocation was not huge, it was a significant enough contribution as to allow WCGA Red Sea State Marine Protected Areas Division to employ and deploy more rangers. The following year there was a change in the Director for WCGA at the Federal level and the foreign exchange crisis, due to the lifting of the sanctions. The amount of money available was substantially reduced to the extent that the WCGA Red Sea State Marine Protected Areas Division could not longer afford to purchase fuel to visit the parks or make repairs to their patrol vehicles.The preparation of a new management plan for DMNP that was supported by the SEM project, was one of several contributory factors that may have assisted the Sudanese National Committee to UNESCO to secure the inscription of both parks as a World Heritage. The World Heritage site status may help to support the long term sustainability of the parks in Sudan, as this is the highest possible status achievable for a protected area." (Dr. Rebecca Klaus, Project Consultant)

"Yes. ASEZA and JREDS intends to sustain activities with available funds from own sponsors programs" (Dr. Aiman Soleiman, Director of Environment, NSC)

"I do not think so, because of the need to support these activities to ensure their sustainability in the future" (Aden Hassan Elmi, NC, Djibouti)

"Yes. MPA management Plan. UNESCO Heritage Site Integrated Plan. MPA management framework exists, and was strengthened through upgrading the staff number and skills, and some policy reforms. Legislation is also under revision." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

22. Has ***a sustainability strategy*** been developed and/or implemented in order to continue and expand the activities started under the Project??
Yes / No / Unsure (please briefly justify your response)
Please explain.

"Yes" (Dr. Hanafy, PC, Egypt (translation from Arabic))

"Unsure. I have no objective knowledge of this in respect of the SEM Project. However, a sustainability/exit strategy should have been central to the SEM project design and should have been developed and approved by mid-term review (paragraph 51 of the SEM PAD refers) and implemented well before the closing date of the SEM project. I can see no evidence of an exit strategy/sustainability plan in the SEM Project results framework." (Dr. Sheppard, Project consultant)

"Yes. For our case for example, a partnership between the university and the MPA authority was established to undertake sustainable monitoring program and training by the university" (Red Sea University, Sudan)

"Unsure. The consultant is not aware of a sustainability strategy" (Dr. Rebecca Klaus, Project Consultant)

"Yes. ASEZA is looking into supporting the sustainability of the project activities through its own funds" (Dr. Aiman Soleiman, Director of Environment, NSC)

"I think there is a need to implement the initiative to ensure the sustainability of project results but it is necessary to find new funding." (Aden Hassan Elmi, NC, Djibouti)

"Yes. See answer to 21 above" (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes, the project outcomes will be maintained, e.g. the revised monitoring program, fishery statistics, etc. through the partnerships established between ASEZA, JREDS and the community, also could mobilize some funding from donors (e.g. GIZ)" (Mr. Abdulla Abu Awali, NC, Jordan)

23. Has ***institutional capacity*** (systems, structures, staff, expertise, etc.) been put in place in each participating country to continue and expand the activities started under the Project?
Yes / No /Unsure (please briefly justify your response)
Please explain.

"Yes" (Dr. Hanafy, PC, Egypt (translation from Arabic))

"Unsure. I have no objective knowledge of this in respect of the SEM Project." (Dr. Sheppard, Project consultant)

"Yes. The interagency coordination mechanism established by the project include the university, MPA authority, some NGOs, the Marine Research Institute and some other agencies is ongoing and coordinated well by the State government Directorate of the Environment." (Red Sea University, Sudan)

"Yes. The consultant believes that there has been an increase in the institutional capacity in Sudan to manage their marine protected areas as a result of the SEM project. The inscription of both parks as a World Heritage will also likely mean that the Sudanese national parks will attract additional financial and technical support in the future." (Dr. Rebecca Klaus, Project Consultant)

"Yes. The Beaches Management Directorate is well established and is part of the bigger local government in Aqaba. It has both HR and equipment resources to sustain and expand the activities" (Dr. Aiman Soleiman, Director of Environment, NSC)

"The project has really built institutional and personal capacities" (Aden Hassan Elmi, NC, Djibouti)

"In general highly appreciate this project support by PERSGA and the World Bank. We have greatly benefited from the project, particularly we received enormous institutional and equipment support (improving our premises, patrolling boat, and maintenance of patrolling cars, training, diving and monitoring equipment, office equipment, e.g. computers, which were lacking; also building good relations and trust with the local community through these diverse livelihoods improving activities; finally our MPA became internationally known as a UNESCO Natural heritage, which sounds great at both state and federal level, and even at regional level in the Red Sea." (Mr. Nasreldin Alhalangy, Director Red Sea Wildlife Office, Sudan)

"Yes. Excellent framework exists (ASEZA), as well as capable NGOs (e.g. JREDS) and partnership with the grassroots societies (fishers' societies)" (Mr. Abdulla Abu Awali, NC, Jordan)

Annex 4: Beneficiary Questionnaire

Questionnaire for Community Participants and Beneficiaries

Name	Sex	Age	Mar. status	Dependents #	Job	Residence

What Subproject/ Activity have you been involved in/ benefited from? Please tick

Solar energy	Bakery production	Dairy Goats	Handicrafts/ sewing	Boat/ gear maintenance	Fishers centre	Women Centre	Tourism	Fishing	Training (any)	Others*

*Specify others: ----------

Kindly, answer the following questions regarding items you indicated above (provide a separate answer for each item in case more than one indicated):

Type of subproject/ service selected……

2.1.1 How did you benefit from the subproject/service? (Give examples)

2.1.2 Did the subproject increase your income (e.g. from product sales, salary, etc.)? Yes/ No

If yes, how much per month approximately

2.1.3 Did the subproject save any costs/ expenses for you? Yes/ No

If yes, how this happened? and for how much per month approximately

2.1.4 Do you think it is more gainful for you to increase fishing, or to expand your earning from alternative sources facilitated by this project or any other opportunities that may arise in the future?

2.1.5 How many other beneficiaries do you know from the same subproject? How did they benefit

2.1.6 What obstacles/ challenge did you face to get more benefit or advantage from your involvement?

2.1.7 How will you continue in this activity in the future?

2.1.8 If you received training, please indicate its kind, and explain how it helped you anyway?

2.1.9 Are you willing to participate in similar projects with PERSGA in the future?

2.1.10 Do you agree with MPA rules of prohibiting fishing of spawning aggregation and gears that have impacts on fish stock?

2.1.11 Do you have any other remarks?

Annex 5: Responses to Beneficiary Questionnaire

Responses in blue and un-edited from original.

2.1.1 How did you benefit from the subproject/service? (Give examples)

"Solar energy direct: lighting of the house, school, mosque; as a headmaster, the school saved the running costs of the generator which used to be run 4 hours only in the night. Saved amount equal to 2 gallons/day (one-gallon price is 20 (Sudanese Pound) SDG), i.e. saved amount per month is 1200 SDG. Also, no noise more, no pollution and clean surrounding of the energy.Dairy goat to the household direct; contribute by 1.5-litter of milk production to the household, consumed for kids. No sale, but has very good benefits, because they used to purchase milk daily; poor families could not afford this in the past, and their children simply lack milk and under-nourished. Other benefits above indirect, and difficult to quantify; considering the solar units and other subprojects, the number of beneficiaries in M. Gol are around 2000 people." (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Solar energy direct: lighting of the workshop and operating workshop tools; others school, mosque," (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Solar energy direct: lighting of the women centre and operating bakery tools; others school, mosque, landing site" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Establishment of fishermen centre at Maskali Island, which now represents a base and venue for all fishermen activities, resting and meeting place. The centre is well furnished and supplied by solar energy; include TV and awareness facility. Foster membership of fishers in the society, empowered us and facilitate our participation in discussing fishery management issues with the MPA and government authority, improved our relation with coast guards and marine security forces. We use the centre to sleep during the day for night working fishers, and during the night for day working fishers." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Received equipment (winch) to participate in pelagic fishing assessment. Using hooks to catch swordfish in season, and other pelagic fish species at depth of 400m" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"I work in the handicraft and textile production workshop established by the project at our women centre at Abu Ghoson. I received training on knitting machines, crochet, leather work, loom-work and other handicraft designing and preparation. I also received training on management, household safety and waste management. The centre is also represents for me a social gathering place with other women in the village and we have other social activities." (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Central solar energy system established and functioning well at my village. A separate solar unit to supply desalination unit" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.2 Did the subproject increase your income (e.g. from product sales, salary, etc.)? Yes/ No

If yes, how much per month approximately

"Yes, See 2.1.1 above. Check also with the women and the workshop mechanic" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Yes, used to maintain some light work using at the landing site (trained by previous projects), before having the equipment, workplace and solar supply by the project; now I perform all kinds of boat maintenance at the workshop (machines, fiberglass work, etc.); all fishers benefit from the proximity and handy service; I receive also customers from neighboring areas (Osief, Ashat) and even from Port Sudan. I have right now received two boats from a tourist Yacht anchoring on the near water of the village. They need some fiberglass maintenance work and painting.I have maintained around 30 boats during the last two months. In total I performed more than fifty boat handling operation at M. Gol centre, and a similar number at Dungonab centre. Monthly returns is on average of 18000-20000 SDG (around 600 dollars)" (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Yes,We work as groups in the bakery, producing cakes and biscuits. We are 5 groups, each group include around 15 women and use the bakery in shifts. We produce 3-4 kilos per shift (day), and we sell them either by kilo to the local merchant or by piece to school kids, and other customers in the village market. Each women earns approximately 100-200 pounds (US$2-4), when we divide the profit (estimated as $10-20 per month, based on the information they provide regarding the frequency of the shift work)." (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Yes, we now operate side business based on the centre. We arrange picnics for visitors and tourists from Djibouti city to the islands, which have nice beaches and corals. The picnic include 8-10 visitors group, we take them by boats to spend the whole day at the island and cook fish meals for them at our centre for them. Each picnic group pay US$600. The costs of the boat, food and beverage is around $400, so our profit is $200. We organize 3-4 picnics per month, so we earn $600-800 per month as addition income from tourism, based on this side business. A share of this is deposited in the society fund, for maintenance of the centre, boat, and other expenditure, also to provide emergency loans for needy members. The other share is divided among the fishermen members." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Yes, My, the catch value is 300-400 JD (US$500-700) per month. I consider this, as a good increase to my income (I work also as a part-time school teacher)" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Yes, We market our products at several points in the nearby resorts and hotels. Generally, each women earn 200-300 pounds monthly (12-24 $). Sometimes we have an order to prepare room carpets for a big hotel or a resort; in this case we a good deal and much more profit. I assume if we can have marketing points at Hurghada and other coastal cities in the north, we can produce to get at least 1500 pound per month (90$) for each working woman" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Yes, The tourist tent and service provided by the village (shop, café, etc.) are supplied by solar energy. Traditional fish catch: we are small village (around 100 people); we practice fishing (traditional); we use to sell our catch locally to passing merchants, or road passers and visitors 15-18 pounds for kilogram. Now we got electricity from the solar system of the project; an NGO has donated us a fridge, and we preserve our catch and could sell it for 35-40 pounds per kilogram, just as in Abu Ghoson market" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.3 Did the subproject save any costs/ expenses for you? Yes/ No

If yes, how this happened? and for how much per month approximately

"Yes, See 2.1.1 above. Check also with the women and the workshop mechanic" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Yes, energy supply from the solar unit. Equipment provision, working place" (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Yes, we became self-sufficient of daily bread and cake needs for our individual households. We have also become self-sufficient for the milk needs. We do not sell milk, because production is consumed by the family, but we saved the cost of purchasing milk. There is still a gap in milk in the village, and we need to have more animals" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Yes. The centre has reduced costs of transport, as we camp there most of the week and our journeys between Djibouti city and the island are less. The boat fuel to travel between the City and the island costs 30-40$ per trip depending on the outboard engine size (15 -25 h). for example the fishermen can now share one or two boats to transport their catch to Djibouti market, and import inputs, while most of them rest remain at the centre on island." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Yes, Cost of purchasing equipment and battery, and training" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Yes, Support by equipment and training. We would not be able to purchase the equipment and initial inputs without the project" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Yes, Cost of purchasing fuel and maintenance of the generator. The generator used to consume 2 tons of fuel per month, which costs around 10,000 pounds (550 $) and run for 5-6 hours in the night only. Now we have 24 energy supply to our houses (18 houses), mosque and other amenities (kindergarten, social centre); No noise pollution and oil and fuel leakage at the site (generator is removed now and replaced by the solar station). The continuous electric supply has improved our livelihood very much. We enjoy also clean water supply from the solar desalination unit. Our village became also attractive for visitors and tourists, the MPA declared it as "eco-village" and we are proud of that. We have seen the benefits of solar energy. Our relatives in other villages and some people from inland settlements and nomads are trying to get solar units. Some of them have money and contracted the firm to provide small units for lighting; others are seeking donors and projects through NGOs" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.4 Do you think it is more gainful for you to increase fishing, or to expand your earning from alternative sources facilitated by this project or any other opportunities that may arise in the future?

"Both, but facilitate tourism will be more beneficial and profitable; we still need to have infrastructure, like reception areas, cafeterias. Young people needs training and learning foreign languages (English)" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"The boat maintenance operations are increasing, and also the income generated and budget. Fishing activities are the same, but fishermen saved expenditures on boat maintenance, because service is available near the landing site." (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"We did not work on fishing before. Some of us used to produce food or sweets for individual petty selling in the village from time to time. . The bakery is a good opportunity for us, as we did not have fixed income from any work before. Now, we are extending the work, and can produce more if we can have market access in Port Sudan city. We are now receiving further training by NGO (SUDIA & UNESCO national committee coordinated by the environment department) to produce other kinds (pizza, other cakes types) and our skills are improving." (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Tourism has potential to increase. Fishing is our original job, we never give it up, but we prefer to expand our tourism business because it is more profitable and less hard. So, our time allocated for fishing is getting less, but we will not give it up; the fish resource is rich in our area." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"No chance to increase fishing because the fishing area is very limited in Aqaba (less than 20% of the 28 km coastline; most of the coast is occupied by ports, navy, park and resorts). There is a potential and opportunity to involve fishers in touristic sport fishing (taking tourists in our boats to practice sport fishing. We have discussed this with the authority during SEM project workshops, I think they are going to have a regulation to organize sport fishing picnics and licensing system accordingly." (Mr. Abdulla Abu Asal, fisher, Aqaba)

"We did not work in fishing before. I think it is more gainful to work in tourism" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Expanding our income from tourism is better." (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.5 How many other beneficiaries do you know from the same subproject? How did they benefit

"2000 in Mohamed Gol from solar units; 82 women and households from dairy goats; 70 women from bakery business; and around 300 fishermen from the maintenance workshops. For the glass-bottom boats, still not operated, waiting for licensing, but when operated the profit will be directed to improve shared village services" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"All fishermen at Dungonab and M. Gol villages (around 300 fishermen). I am also receiving boats from Osef village and other places." (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Around 60-70 women in our centre; and other 60-70 women at Dungonab centre, some participate frequently when they have time." (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"150 members are registered in our society, and all are benefiting from the centre service. Sometimes we have visitor fishermen from other towns and areas (e.g. Tadjoura, or Oboch), who also we host in the centre." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"12 fishers supported by the project. ASEZA has supported other 12 fishers with the same equipment (total 24)" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Around 60 women. Some others work occasionally and get their profit share" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"In our village 18 households (around 80 people) + visitors of the eco-village" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.6 What obstacles/ challenge did you face to get more benefit or advantage from your involvement?

"Power supply is limited (by the solar units), so not all appliances can be used. We recommend upgrading or helping us by more units. Dairy goats: Not all households were included, only the most needy ones. We are trying to include others from the recruitment (offering goat kids)." (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"The shaded area is small. The solar power supply is rather limited, but still adequate for the day work and main equipment. For some heavy duty equipment, I use AC supply from a generator." (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"The shaded area is small. The solar power supply is rather limited, but still adequate for the day work and all equipment. The two refrigerators are running well most of the day and night, but sometime we have to stop one of them for 3-6 hours in the night when the day is cloudy. We will need to upgrade the unit, if we plan to have additional fridges for storing capacity if we increase production for marketing in Port Sudan city." (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"The centre area need to be increased, sometimes it is very crowded in the season. The solar unit needs to be upgraded to increase power supply, we have now only two fans, lights, TV and loudspeaker that can be operated. We need to have a fridge and other appliances. We need to install mooring buoys to anchor diving and visitor boats" (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Heavy shipping traffic near the fishing area." (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Sewing machines are limited; we have to operate them in alternate to allow them cooling. We also need additional wall fans and water cooler for drinking. The project national coordinator said they will still provide them. We need assistance with marketing in Hurghadah and northern coasts which hold more hotels resorts and tourists." (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"We need more training on solar unit maintenance. We need assistance for transporting our kids to schools to Abu Ghoson (irrelevant to the project)" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.7 How will you continue in this activity in the future?

"The municipality and local government is providing assistance, we have also the popular committees (women and fisher societies), but resources are limited" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"The municipality and local government is providing supervision. The fishermen society is also cooperative, but I will need to upgrade the workshop power supply, increase the shaded area and build a boat reception pond to be able to extend the workshop capacity." (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"It is running well. We share contributions to supply raw material, but we have limited space and equipment and more women, so we work in groups as shifts; one group work 1 or 2 days in the week; if we have more space and equipment, we can have more working days for each group." (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"It is running well, our cooperative is successful and hope to maintain it. However we need assistance by the government. The fuel and spare parts are very expensive. Fish market in the city is

limited and we need assistance to export. We also need assistance to bring tourists and market our service business." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"I have the equipment, and good experience in deep sea fishing. I do not need any further assistance or subsidy. Only highly experienced and few fishers can succeed with deep sea fishing; this is good because the stock is limited. The market is also limited (only Aqaba; it is not allowed to export fish outside Aqaba city)" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"We have the centre Fund. We save money from the income to purchase raw materials (revolving fund). We receive technical assistance (training and raw materials) as donation from some NGOs (HEPCA, Danish project)" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"We receive technical support from the government, HEPCA and Heya NGOs; we have also village fund saving funds, and will also make use of the income to be generated from the glass-bottom tours" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.8 If you received training, please indicate its kind, and explain how it helped you anyway?

"Yes, solar unit operation/ maintenance, cleaning and safety rules" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Yes, solar unit operation, cleaning and safety rules. I was informed by the ministry of the environment that they will hire young fishers as workshop assistants, and they need me to train them as boat mechanicals." (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Yes, solar unit operation; cleaning and safety rules; bakery work (various kinds); goat rearing and animal health" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Yes, MPA and fishery, awareness in fishery legislation; solar unit operation; cleaning and safety rules; MPA monitoring and cleaning marine litter, fund management." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Yes, Awareness on marine conservation, illegal fishing and legislation issues" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Yes, Was very helpful. I learned sewing, crochet, handicraft design and textile work using the manual looms" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Yes, Solar energy use and operation. Awareness on marine conservation, MPAs." (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.9 Are you willing to participate in similar projects with PERSGA in the future?

"Yes" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Yes" (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Yes" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Yes" (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Yes" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Yes" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"Yes, This project has addressed our needs. It has tangible results for us. We have been promised by many other projects to assist us in the past, but we get very little, if any benefits. We sincerely appreciate your assistance of solving our essential livelihood needs" (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.10 Do you agree with MPA rules of prohibiting fishing of spawning aggregation and gears that have impacts on fish stock?

"Yes" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Yes" (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"Yes" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Yes, but should also apply strictly to fisher coming from other places (outsiders)" (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Most of the coastal zone (more than 80%) is already prohibited (no fishing zone) for several reasons; this is quite enough for protection of fish stock and conservation. Some potential fishing grounds are permanently prohibited; I think they can allow fishing in these areas in certain season." (Mr. Abdulla Abu Asal, fisher, Aqaba)

"Yes" (Mrs. Hoodha Ali Hassan, community leader of women's centre, Abu Ghosson)

"I agree; and I think my people will cooperate, as they appreciate your assistance and seriousness; we need to have more awareness and control of outsider fisher and users." (Mr. Mansour Saeed Salih, community leader, Qula'an)

2.1.11 Do you have any other remarks?

"Solar energy was quite helpful to us. We need to expand them, and use it in desalination (water is very scares). The maintenance centre need a boat reception area and more shaded workspace. Consider seed dispersion program to rehabilitate the nearby pastoral land in valleys in the coastal area (in the rainy season). Develop handicraft work. Fish drying and processing facilities and training. As UNESCO Heritage area; we need to recruit tourist guides from the local young people raising their language and othe communications skills" (Mr. Mohamed Sherif ElGenaid, Deputy Mayer, Mohammed Gol)

"Solar energy was quite helpful to us. We need to expand them to operate other heavy tools to be used in the workshop in the future.

The maintenance centre need a boat reception area and more shaded workspace" (Mr. Mahmoud M. Hussein, Vessel maintenance Mechanic, Mohammed Gol)

"We need assistance with marketing our products in Port Sudan, we have the potential to produce more for this; More training; We need assistance to extend our work to provide party services. If we can purchase some additional stuffs (plastic chairs, tables, festival tent and households), then we want to extend our business to provide party services (e.g. weddings, group tourist picnics, etc.)" (Mrs. Eisha Ahmed, Bakery, Mohammed Gol)

"Mooring buoys. Glass bottom tours. We need to own one for the centre. It has promising market in the water surrounding the islands, and we have many visitors, especially in the weekends. The project has opened our eyes to use our resource (boats, centre and fish) to have income from servicing toursis and visitors. We also learned the impact of marine litter. Now we organize regular cleaning campaigns and collect the litter, transport it by our shuttling boats to the city; we also sell empty bottles. Our society have put signs in several parts of the island (beach, mangrove, etc.) warning visitors from disposing plastic and other litter. We also observe and help Mr. Aden and his MPA colleagues in monitoring." (Mr. Salih Elmi Borale, Head of fisher association, Mouchi-Maskali Islands NP)

"Allow fishermen to operate touristic sport fishing. Revise No Take zones (too many) Deep sea cleaning (hanging old naylon /ropes and debris)" (Mr. Abdulla Abu Asal, fisher, Aqaba)

"" (Mr. Mansour Saeed Salih, community leader, Qula'an)

Annex 6: People Consulted During Final Evaluation

Name	Organisation	Role in Project
Dr. Ahmed S. M. Khalil	PERSGA	Regional Project Coordinator
Dr. Maher A-Aziz Amer	PERSGA	Biodiversity & MPAs Program Coordinator
Mr. Bashar M. Albataineh	PERSGA	Program Coordinator, Environmental Monitoring
Mr. Nagmeldin Awad	PERSGA	Procurement manager
Mr. Fahad Al-balawi	PERSGA	Fixed assets controller
Dr. Mohammed Satti	PERSGA	Finance – Administrative Manager
Dr. Mamdouh Meligy	PERSGA	Director of the Hurghada Office
Dr. Alex Sheppard	Consultant	Project consultant (fisheries)
Dr. Rebecca Klaus	Consultant	Project consultant (MPAs)
Sudan		
Mr. Eisa Kabashi Eisa	Minister, Ministry of Environment (Red Sea State)	Partner/Beneficiary
Mrs. Samia Ali Ahmed	Director of Environment and Tourism (Red Sea State)	Partner/Beneficiary
Mr. Ashbo Ohag	Director of Environment, Ministry of Environment	Assistant National Coordinator
Dr. Elsheikh Bashir Ali	Red Sea University	Consultant
Dr. Moamer El Tayb	Red Sea University	Consultant
Dr. Somaya Khidir	Red Sea University	Consultant
Dr. Adel Mohammed Salih	Red Sea University	Consultant
Dr. Munna Almahi	Director of Marine Fisheries Research Station, Ministry of Animal Research	Partner
Dr Elamin Mohammed Elamin	Researcher, Marine Fisheries Research Station, Ministry of Animal Research	Partner
Mr. Hamad Takuliya	Fishery Administrators, Ministry of Animal Research	Partner/Beneficiary
Mr. Nasreldin Alhalangy	Director Red Sea Wildlife Office (enforcement)	Partner/Beneficiary
Mr. Mustafa	Red Sea Wildlife Office	Partner/Beneficiary
Mr. Magdi	Red Sea Wildlife Office	Partner/Beneficiary
Mr. Anwar	Red Sea Wildlife Office	Partner/Beneficiary
Mr. Osman Hussein	Mohammed Gol District Commissioner	Partner
Mr. Sherif El Hadj Jenid	Community Leader at Mohammed Gol	Beneficiary associated with sub-projects
Mrs. Eisha Ahmed	Bakery, Mohammed Gol	Beneficiary associated with sub-projects
Mrs. Amena Ahmed	Bakery, Mohammed Gol	Beneficiary associated with sub-projects
Mrs. Fatimah Osman	Bakery, Mohammed Gol	Beneficiary associated with sub-projects
Mr. Mahmoud Mohammed Hussein	Vessel mechanic, sub-project lead for vessel maintenance, Mohammed Gol	Beneficiary associated with sub-projects
Mr. Mohammed Hamoud	Fisher Mohammed Gol	Beneficiary associated with sub-projects
Mr. Ahmed Hussein	Fisher Mohammed Gol	Beneficiary associated with sub-projects
Mr. Eisa Kuger	Fisher Mohammed Gol	Beneficiary associated with sub-projects
Mr. Eisa El Hassen	Fisher Mohammed Gol	Beneficiary associated with sub-projects
Mr. Ahmed Abu Mohammed	Fisher Mohammed Gol	Beneficiary associated with sub-projects
Djibouti		
Mr. Hussein Rirache	Director of Department of the	Partner

	Environment, Ministry of Housing, Urban Planning and Environment	
Mr Aden HassanElmi	Department of the Environment	National Coordinator
Mr. Idris Ismael	Department of the Environment	Partners / Beneficiary
Mr. Jamie Elmi	Department of the Environment	Partners / Beneficiary
Mr. Salih Elmi Borale	Head of the Fishers Association	Beneficiary associated with sub-project
Jordan		
Mr. Soleiman	Director of the Environment (ASEZA)	Partner
Mr. Abdullah Abu Awali	Director, Aqaba Marine Park	National Coordinator
Dr. Aiman	Director of the Environment (ASEZA)	National Steering Committee and Environmental Advisor ASEZA
Dr. Mohammad Al-Tawaha	Program Manager of the Royal Marine Conservation Society of Jordan	Beneficiary
Dr. Nedal Al-Aoran	UNDP	Consultant (originally established the SEM monitoring program) in Jordan
Mr. Abdulla Abu el Hasi	Head of local fisher association	Beneficiary
Egypt		
Dr. Mahmoud Hanafy	HEPCA and advisor to Red Sea Governorate	National Coordinator
Mr. Monsour Saleh	Qual'an village community leader	Beneficiary with sub-project
Mr. Ibrahim Abdalla Saad Hamid	Abu Ghosson community leader	Beneficiary with sub-project
Mr. Hussein Ibrahim	Abu Ghosson community	Beneficiary with sub-project
Mrs. Hoodha Ali Hassan	Abu Ghosson community leader of women's centre	Beneficiary with sub-project
Mr. Mustafa Ali	Director WGHNP	Beneficiary/Partner
Mr. Ahmed Abdulrahman	WGHNP	Beneficiary/Partner
Mr. Ahmed Ghallab	Red Sea Protectorate, Hurghada	Beneficiary/Partner
Mrs. Heba Shawky	Director of HEPCA	Project partner

Annex 7: List of co-finance and parallel projects

A) Co-finance:

Institute/ organization/ agency	Co-finance description	Monetary value (US$)	Remarks
PERSGA	PCU staff (technical, finance-administrative)	3,000,000	Annual/ part-time salaries for PM, 3 components coordinators, FM, and 3 finance/ procurement assistants, IT, awareness officer and 3 supporting staff
PERSGA	Venue, office supplies, office and communication facilities	1,500,000	For the day to day project management, regional workshops and activities, meetings, other supplies (5 years)
PERSGA	Use of mobile assets	50,000	Cars at the HQ and EMARSGA (transport of workshop participants) and project team missions.
PERSGA	EMARSGA assistance staff	30,000	Assistance with onsite supervision, monitoring and procurement
PERSGA	Support of Saudi Arabia PC & Steering Committee Staff participation in the Project workshops and meetings	150,000	Participants of KSA supported by PERSGA in all regional workshops and meetings
National staff/ member states	NCs and NSCs members/experts	2,500,000	Full and part-time staff work in Djibouti, Egypt, Sudan, Jordan; 5 national coordinators (fulltime); 10-12 NCS experts/ members in each country
Djibouti Gov	Land piece to establish fishermen centre	50,000	Maskalli island beach
Fisher Society-Djibouti	Work construction of the centre	10,000	Fishermen participation in construction work and cleaning campaigns
Egypt Gov	Women centre building	120,000	The centre was established by the Red Sea Governorate
Egypt Gov	Environmental monitoring team	200,000	The environment monitoring team budget supported by EEAA for three years field surveys and reporting
Egypt Gov	Qula'an-land pieces for solar system and desalination units	100,000	Accommodating solar system (panels and battery gauge) and solar desalination unit
Sudan Gov	Container office and land piece for boat maintenance workshops	25,000	furnished container office at M. Gol landing site To accommodate the workshop tools and work area
Sudan Gov	Land pieces for solar units	40,000	Accommodate panels for solar units at Dungonab village

Sudan Gov	Women and fishermen centres at Dungonab and Mohamed Gol	300,000	Women centre at Mohamed Gol is established by the state government. Women centre at Dungonab was established by the state government; and expanded by SEM project
Sudan MPAs/ NGOs Partners	beneficiary vocational training	10,000	Training of local community/ awareness workshops
HEPCA- NGO-Etypt	Floor furniture of women centre	5,000	Building constructed by the government; all equipment (machines, looms, office and storage furniture supported by SEM)
Heya-NGO Egypt	Qula'an ecovillage houses (18 houses)	300,000	Design ecovillage masterplan; design and construction of 18 houses for local inhabitants
Jordan Gov	Fish sampling gears	28,000	
KSA and PERSGA	Monitoring program	50,000	Monitoring field surveys at two pilot sites
KSA and PERSGA	Fishery legislation assessment	12,000	review assessment study and workshop
KSA and PERSGA	Ornamental Fish management workshop	25,000	mainstreaming EBM and co-management principles in ornamental fish management and regulation
PERSGA	Consultancy on SOMER	25,000	hiring consultancy team for technical backstopping to improve SOMER process; workshop and database supported by SEM
Total		**8,530,000**	

B) Parallel Projects

Project	**Country/ Site**	**Project Budget**	**Remarks (description and relevance to SEM)**
UNDP/EIECP: Support to the Egyptian Protected Areas (SEPA) Project 2013-2015	Egypt, Siwa, Wadi El Rayan and Wadi Gamal National Park	1,800,000	Complementary and synergic actions to the UNDP-GEF project "Strengthening Protected Areas' financing and management systems- Enhancing the archaeological and cultural heritage in WGNP (tourism)
UNDP/EEAA: Strengthening Protected Area Financing and Management Systems (2010-2017)	Egypt, Several MPAs	17,666,000	GEF: 3,616,000; Egypt parallel finance:13,800,000; UNDP: 250,000. Establishment of protected areas financing system with management structure and capacities; ensure revenues for biodiversity conservation
UNDP/Djibouti gov: Establishing Effectively Managed Marine Protected Areas in Djibouti (2013-2016)	Djibouti, MPAs	2,000,000	GEF support 980k: build management capacity and financing mechanisms of MPAs in Djibouti

UNDP/Jordan gov: Mainstreaming Marine Biodiversity Conservation into Coastal Zone Management in the Aqaba Special Economic Zone (2011-2015)	Jordan, Aqaba	8,250,000	GEF support 1,000,000; co-finance 7,250,000. Promote more effective and integrated management of the coastal zone in the Aqaba Special Economic Zone (ASEZA)
Total		**29,716,000**	

Source: PERSGA project team