



وزارة الموارد المائية والري  
 جمهورية مصر العربية  
 MINISTRY OF WATER RESOURCES AND IRRIGATION  
 Arab Republic of Egypt



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**Project Document**  
 for nationally implemented projects financed by the Green Climate Fund (GCF)

<b>Project title: Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt</b>	
<b>Country: Egypt</b>	
<b>Implementing Partner:</b> <i>Ministry of Water Resources &amp; Irrigation</i>	<b>Management Arrangements :</b> National Implementation Modality (NIM)
<b>UNDAF/Country Programme Outcome:</b>  UNDAF priority area 5: <i>Environmental Sustainability and Natural Resource Management</i>  <b>Outcome 5.1:</b> The Government of Egypt has adopted and effectively implemented sound climate change adaptation and disaster risk reduction policies and programmes focused on vulnerable sectors, groups and high-risk geographic locations.  <b>Outcome 5.3:</b> Government of Egypt and local communities have strengthened mechanisms for sustainable management of, and access to, resources such as land, water and ecosystems.	
<b>UNDP Strategic Plan Output:</b> <b>Output 1.3:</b> Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. <b>Output 1.4:</b> Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented	
<b>UNDP Social and Environmental Screening Category: LOW</b>	<b>UNDP Gender Marker for each project output:</b> <b>Output 1.3: 2</b> <b>Output 1.4: 1</b>
<b>Atlas Project ID/Award ID number: 00098798</b>	<b>Atlas Output ID number: 00101999</b>
<b>UNDP-GEF PIMS ID number: 5945</b>	<b>GCF ID number FP053</b>
<b>Planned start date: <u>29/10/2018</u></b>	<b>Planned end date: <u>29/10/2025</u></b>
<b>LPAC date: 6 August 2018</b>	

**Brief project description:** This project seeks to support adaptation efforts of Egypt in the Nile Delta which is identified by the IPCC in its Fourth Assessment Report as one of the world's three "extreme" vulnerable hotspots. The objective of the project is to reduce coastal flooding risks in Egypt's North Coast due to the combination of projected sea level rise and more frequent and intense extreme storm events. Output 1 focuses on constructing 69 km of sand dune dikes along five vulnerable hotspots within the Nile Delta that were identified during an engineering scoping assessment and technical feasibility study. Output 2 focuses on the development of an integrated coastal zone management (ICZM) plan for the entire North Coast, to manage long-term climate change risks and provide Egypt with adaptability to impending flood risks. The barriers that will be addressed by the project include lack of high quality data to inform planning decisions; absence of a suitable framework for implementing integrated approaches to coastal adaptation; weak institutional coordination to build coastline resilience to sea level rise impacts; and low institutional capacity to anticipate and manage expected sea level rise impacts. The project will facilitate transformational change in the short-term by reducing coastal flooding threats along vulnerable hotspots in the Delta and in the long-term by integrating additional risks of climate change into coastal management and planning, budgeting and implementation of risk reduction measures.

**FINANCING PLAN**

GCF grant	USD 31,384,800
UNDP TRAC resources	USD 100,000
<b>(1) Total Budget administered by UNDP</b>	<b>USD 31,484,800</b>
<b>PARALLEL CO-FINANCING (all other co-financing (cash and in-kind) administered by other entities, non-cash co-financing administered by UNDP)</b>	
Government	USD 73,707,000
<b>(2) Total co-financing</b>	<b>USD 73,707,000</b>
<b>(3) Grand-Total Project Financing (1)+(2)</b>	<b>USD 105,191,800</b>

**SIGNATURES**

<b>H.E. Ambassador Hany Selim,</b> Assistant Minister of Foreign Affairs and Director of the Department for International Cooperation for Development, Ministry of Foreign Affairs <b>Signature:</b>	<b>Agreed by Government</b> 	<b>Date:</b>
<b>Dr. Ragab Abdel Azim,</b> First Undersecretary Ministry of Water Resources and Irrigation <b>Signature:</b>	<b>Agreed by Implementing Partner</b> 	<b>Date:</b> 2-10-2018
<b>Ms. Randa Aboul-Hosn</b> Country Director, United Nations Development Programme, Egypt <b>Signature:</b>	<b>Agreed by UNDP</b> 	<b>Date:</b> 2-10-2018

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## II. DEVELOPMENT CHALLENGE

IPCC has singled out low-lying river deltas to be one of the most vulnerable systems in the world to climate change and sea level rise.<sup>1</sup> They are home to millions of people, highly productive agricultural lands, industrial/transport infrastructure and valuable touristic assets. For the Nile Delta, the problem is aggravated by the compound effect of sediment consolidation (i.e., compaction of river sediments over time) leading to natural lowering of delta areas in addition to anthropogenic factors (groundwater abstraction, construction of upstream dams which restrict the flow of sediment that would otherwise reach the river mouth and build up delta lands). The Nile Delta is classified in the IPCC Fourth Assessment Report as one of the world's three "extreme" vulnerable hotspots under climate change conditions<sup>1</sup>. The rate of sea level rise for the Nile Delta ranges between 3.2 - 6.6 mm per year. The IPCC concludes that global mean sea levels have risen between 2.8 and 3.6 mm per year over the period 1993 to 2010. During that same period, local land subsidence has been evident across the entire Delta, with actual rates ranging from about 0.4 mm/year in Alexandria to the West to around 3.0 mm/year in Port Said to the East.<sup>2</sup>

The Nile Delta accounts for more than 50% of the country's economic activity through agriculture, industry and fisheries, contributing about 20% of the country's GDP and accounting for the employment of 30% of the national labor force. As Egypt is far below food self sufficiency, any loss of prime agricultural land due to coastal flooding will have a direct adverse impact on the livelihoods of millions of people and lead to hardship throughout the entire economy. Extreme storm events, driven by the combination of high tides associated with sea level rise and storm surges, have led to devastating coastal flooding and millions of dollars in damages (for example the flooding events in Alexandria 2015).

Moreover, coastal areas in the Nile Delta will be vulnerable to an increasing frequency and intensity of extreme coastal storms associated with sea level rise. With a considerable level of uncertainty in climate modeling efforts, regional projections at the spatial scale of the Nile Delta are even more difficult, as they need to account for both storm intensity and changes in storm tracks. Nevertheless, Southern Mediterranean has already seen a measurable increase in the number of natural disasters: from an average of three natural disasters per year in 1980, to more than 15 per year in 2006. An increase in frequency and severity of storm surges is already evident over the past seven years, with three extreme storms most commonly associated with 1-in-50 year storm events. Thus, despite its relatively negligible contributions to global greenhouse gas emissions, Egypt is disproportionately burdened with the need to cope with climate change risks.

Studies on the vulnerability of Alexandria, indicated that sea level rise of 0.3 meters would lead to infrastructure damage worth billions of dollars, displacement of over half a million inhabitants, and a loss of about 70,000 jobs<sup>3,4,5</sup>. Moreover, the Nile Delta's coastal lagoons, are among the most productive natural systems in Egypt and they are internationally renowned for their abundant bird life. Approximately 60% of Egypt's annual fish catch are from three main Delta lagoons, Idku, Burullus and Manzalla, separated from the Mediterranean by a mere 0.5- 3 km sand belt and dune system. Coastal flooding and/or permanent inundation of these areas would lead to a decline in water quality adverse

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<sup>1</sup> IPCC (2007); Fourth Assessment Report

<sup>2</sup> El-Shinnawy, I. (2008). Coastal Vulnerability to Climate Changes and Adaptation Assessment for Coastal Zones of Egypt, Final Report. Ministry of Water Resources and Irrigation (MWRI), National Water Research Center (NWRC), Coastal Research Institute (CoRI)

<sup>3</sup> Frihy, O.E. and Lotfy, M.F. (1997), 'Shoreline changes and beach-sand sorting along the northern Sinai coast of Egypt', *Geo-Marine Letters*, 17, 140-146

<sup>4</sup> El Raey, M. Kh. Dewidar, M. El Hattab. (1999) Adaptation to the impacts of sea level rise in Egypt. *Climate Research*, Vol. 12: 117-128

<sup>5</sup> El Raey, M. (2004). Adaptation to Climate change for Sustainable Development in the Coastal Zone of Egypt. Global forum on Sustainable Development 11-12 Nov, Paris

impacts on fishery activities. Potential Impacts of Climate Change in Egypt<sup>6</sup> estimated a reduction of 16% in agricultural production by 2030 and up to 47% by 2060, with reductions in agriculture-related employment of up to 39% leading to millions of people losing their jobs. Welfare losses in agriculture in 2060 are estimated to range from 4.5 to 26.5 billion USD. Food prices could increase by 16 to 68% further threatening food security in the country. Climate change induced sea level rise also threatens critical infrastructure for the Egyptian economy and trade such as roads and ports. Loss of beaches, and higher temperatures affecting coastal ecosystems could reduce annual tourist revenues by 10 to 12 billion USD.

All these factors make the low-lying Northern coast and Nile Delta region a high priority for adaptation to climate change in Egypt. Such concerns are well-reflected in Egypt's Initial (GoE, 1999), 2nd (GoE, 2010) and 3rd (GoE, 2016) National Communications under the United Nations Framework Convention on Climate Change (UNFCCC). The Sustainable Development Strategy 2030 also includes coastal adaptation to climate change and investment in infrastructure to face climate change is priority. The GoE has already started addressing these urgent needs for Alexandria, committing \$200 million to constructing hard coastal protection structures there, while seeking to develop an ICZM approach to the long-term planning for the entire North Coast in the face of climate change. One of the most prominent obstacles to ICZM in Egypt is the complex and sometimes unclear institutional framework for addressing development activities, as well as the limited, ad hoc cooperation among different agencies. Nonetheless, there have been some developments in Egypt that have advanced strategies and plans that are compatible with an ICZM framework and can be leveraged in the project. Some examples are:

- *EEAA Vision 2007–2012*: presents an overview of efforts made in fields of education, information, public awareness-raising, institutional building and capacity development in relation to climate changes; and incorporation of relevant action plans into the State's general plan.
- *National Wetland Strategy/Action Plan*: Medwet, UNDP, EEAA (2006), GEF developed a National Wetland Strategy/Action Plan for the conservation of Wetland and Coastal Ecosystems in the Mediterranean Region.
- *Integrated Coastal Zone Management of the Coastal Area between Mersa Matrouh and Sallum*: creates a strategy and guidelines for definitions of an ICZM plan for North West of Mediterranean coast, covering 200 km long of a semi-desert.
- *MAP's Protocol on the Integrated Management of Mediterranean Coastal Zones*: developed by Barcelona Convention to provide for key definitions, broad principles governing sustainable development, institutional coordination protocols, protection and use of coastal zones, and others.
- *The Costs of Environmental Degradation in Coastal Areas of Egypt*: The Mediterranean environmental technical assistance programme "METAP" recommended to develop ICZM and land use plans to avoid loss of habitats, and proper enforcement of existing legislation to protect coastal line.
- *Alexandria Integrated Coastal Zone Management Project sub-programme (AICZM) of the Egyptian Pollution Abatement Project (EPAP II)*: financed by GEF, GoE seeks to supply a strategic framework to reduce land-based pollution entering the Mediterranean Sea at El-Mex Bay hot spot and Alexandria, to protect/restore globally significant coastal heritage and ecosystem via a National CZM Plan.

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<sup>6</sup> Smith, J., McCarl, B., Kirshen, P., Malley, J., et.al.(2013). *Potential Impacts of Climate Change on the Egyptian Economy*. Prepared for the UNDP/UN MDG Spanish Fund

- *SMAP III ALAMIN Alexandria (EC- funded) "Alexandria Lake Maryut Integrated Management"*: The main objective of this project is to promote ICZM approaches & strengthen institutional and human capacities for the effective management and monitoring of Lake Maryut in Alexandria.

However, these projects have not produced the kind of transformational change Egypt required to sustain long-term coastal resilience along its North Coast. The project which oversees the design and implementation of soft measures to adapt with climate induced coastal vulnerabilities along with provision of a comprehensive system for national CZM, will address these additional risks and raise the adaptive capacity of planning organizations in Egypt. This project represents a departure from the business-as-usual practices and instigates a paradigm shift in Egypt's coastal protection practices by: a) preferring critical soft coastal protection over shoreline armoring in exposed hot spots that require immediate attention; and b) strengthening the local coastal management capacities to ensure future integrated CZM. This system will embed climate change risks into a holistic approach to coastal risk management that clearly delineates responsibilities to achieve overall institutional coordination. The project, thus seeks to instigate transformative change in not only the current practices in coastal protection, but also in the perceptions of stakeholders within coastal management so that shorelines are perceived as a part of an integrated coastal system. The support of Egyptian institutions evolves from historical practices and lessons learned from the emerging results of the GEF/SCCF project on coastal adaptation<sup>7</sup>. Over the longer-term, the paradigm-shifting nature of the project is rooted in the plausibility of prospects for the GoE to alter its trajectory of future investments toward climate-resilient practices and technologies.

Project design is rooted in Egypt's priorities identified in the 2013-2017 United Nations Development Assistance Framework (UNDAF) and UNDP's Country Programme Action Plan (CPAP). It draws on the Egypt Vision 2030 sustainable development strategy document, the National Strategy for Adaptation to Climate Change and Disaster Risk Reduction (2011), the Strategic Framework for Economic and Social Development until Year 2022 (2012), and the Intended Nationally Determined Contribution (INDC) report. The project strategy is consistent with the priorities established as part of national action plans calling for shoreline protection and integrated coastal zone management.

The project directly serves SDG-13: *"Take urgent action to combat climate change and its impacts (acknowledging that the United Nations Framework Convention on Climate Change (UNFCCC) is the primary international, intergovernmental forum for negotiating the global response to climate change)"* with targets:

- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries<sup>[1]</sup><sub>[SEP]</sub>
- 13.2 Integrate climate change measures into national policies, strategies and planning<sup>[1]</sup><sub>[SEP]</sub>
- 13.3 Improve education, awareness-raising, human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning<sup>[1]</sup><sub>[SEP]</sub>
- 13.4 Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

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<sup>7</sup> GEF/SCCF(2009 - present):Adaptation to Climate Change in the Nile Delta through ICZM Project

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### III. STRATEGY

The project aims to *enhance the resilience of local communities in the Northern coast and Nile Delta in Egypt*, through integrated coastal management and scaling up the use of soft engineering solutions and ecosystem-based adaptation measures. Such measures would curtail negative potential impacts including displacement of local coastal communities, businesses, young people and women. This project provides adaptive measures to cope with climate related impacts in the Delta’s most vulnerable areas located across 69 km in five areas. Concurrently, the project also addresses the broader and longer-term climate change adaptation challenges seeking an integrated coastal development plan for Delta and the entire North Coast. The challenges addressed by the proposed project are high priorities in Egypt’s national strategy for adaptation to climate change and will address baseline vulnerability conditions, build upon past coastal protection interventions and leverage recent coastal adaptation initiatives. This contributes directly to fulfilment of UNDAF outcomes 5.1 & 5.3.

An OECD report<sup>8</sup> has summarized and ranked the key climate change impacts and vulnerabilities in Egypt for sectors important to the national economy<sup>8</sup>. The socio-economic impacts associated with sea water intrusion and coastal inundation are far-reaching. In 1986, GoE identified 13 hotspots in Nile Delta Coast affected by the High Aswan Dam (HAD) construction and exerted large effort in the implementation of shore protection plan focused on construction of sea walls and other hard structures.. In 2011, the National Strategy for Adaptation to Climate Change and Disaster Risk Reduction (NSACC) was issued. A 2017 study by I.H. Cantabria, identified 19 climate-related hotspots across the North Coast of Egypt seven of which were identified in the Nile Delta Coast including the five hotspots of the current project. All hotspots are flat lands threatened by shoreline retreat due to any increase in mean sea levels thereby impeding the socioeconomic development of these regions.

To reduce vulnerability to sea level rise, GCF funding will also be directed to overcoming a number of key barriers, including: i) Lack of high quality data to inform planning decisions, ii) Lack of a suitable framework for implementing integrated approaches to coastal adaptation.

The project will seek to strengthen national capacities to adapt coastal zones with climate change impacts first in the hotspot sites and then scaled up within an integrated coastal zone management process using GCF funds, while adding on to what has already been accomplished through a “paradigm shifting” approach. Key lessons and success factors have been drawn from previous major GoE initiatives (such as enhancing Mohamed Ali sea wall and installing protection works for the low-lying area of El Malaha East of Port Said) and incorporated into this project. It demonstrates the effectiveness of soft protection measures in the Nile Delta; it promotes launching integrated coastal zone management processes in Egypt; and facilitates stakeholder engagement mechanisms for promoting inter-agency coordination on CZM issues. This GCF project will ensure reducing negative impacts of economic activities and coastal communities.

The project estimates that nearly 0.75 million inhabitant will directly benefit from the soft interventions involved, almost half of which are women. **Table 1** quantifies the distribution of beneficiaries among the five hot spots. The total direct and indirect beneficiaries of the project reach about 17 million inhabitant and represent about 18% of the Egyptian population (female: 49%; male: 51%). As for the second output of the project (development of an ICZM plan), it is expected to produce far more outreach in the long term.

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<b>Hot Spot</b>	<b>Coastal centers</b>	<b>Total (2015)</b>	<b>Male (2015)</b>	<b>Female (2015)</b>
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<sup>8</sup> Agrawala, et al. (2004). Development and Climate Change in Egypt: Focus on Coastal Resources and The Nile. OECD.

3	Rashid (Rosetta)	235,868	119,718	116,150
1	Motobas	277,707	141,502	136,205
1	El Brolos	216,908	109,965	106,943
4	New Dameitta	32,222	16,936	15,286
5	Gamasa	2,375	1,215	1,160
2	West Port Said	3,084	1,639	1,445
	<b>Total</b>	<b>768,164</b>	<b>390,975</b>	<b>377,189</b>

**Table 1**  
**Direct**

**Beneficiaries (Source: <http://geoportal.capmas.gov.eg> )**

**Key structural reasons for the problem:** First, there is a lack of coordination across governmental organizations that have a stake in coastal development planning. This has led to ad hoc construction activities in high risk areas. Second, shore protection is based on stable climate parameters (e.g. the 100-yr design storm event used in codes does not account for changing climatic conditions). Third, lack of a systematic observation system hinders updates of design parameters.

**Ideal solution:** In the near-term, coastal protection is urgently needed for those areas that are the most highly vulnerable to climate change (5 hot spots identified). In the longer-term, ICZM that incorporates capacity building and accounts for all stakeholder perspectives is needed to establish a basis to address future sustainable development activities along the North Coast. This approach, characterized by receptivity, willingness to engage, duly motivation, and commitment to learning by doing safeguards against maladaptive practices.

**Potential pathways for achieving the solution:** the business as usual pathway (*Baseline pathway*) involves continual installing of ad hoc hard (or armored) protections in affected localized areas. Planning is focused on mitigating the site-specific threat. An *Alternative pathway* towards risk reduction in the north coast is directly related to the implementation of the ICZM cycle that consists of systemic project stages, namely; diagnosis, preparation of the ICZM plan, implementation of coastal protection measures, and monitoring & evaluation.

**Pros and cons of each of these pathways:** One major disadvantage of the Baseline pathway is the high risk of unintended adverse consequences. “Hard” structures are expensive, can cause unexpected erosion to beaches and dunes, require costly ongoing maintenance, adversely affect adjacent areas/properties, and disrupt natural water flows. One major advantage of the Baseline pathway is that institutional management and technical capacities needed are already in place. One major disadvantage of the Alternative pathway is that it represents a planning approach that is new to Egypt and would require substantial resources to ramp up the various kinds of capacity, institutional coordination, and stakeholder engagement that would be necessary. One major advantage of the Alternative pathway are the various benefits of ICZM such as improved decision-making and more coherent spatial planning in the context of preparation for climatic impacts. Benefits would accrue to infrastructure, tourism activities, private sector, environment, coastal communities, among others. The pathway for the current project is illustrated in Figure 1. The pathway supports the paradigm shift discussed before. It involves a diagnosis of coastal threats and areas at highest risk; preparation of a comprehensive ICZM Plan that defines the necessary engineering and management measures for climate change adaptation; implementation of such measures sequenced to account for urgently needed coastal protection; and development of a systematic observation network to monitoring changing marine conditions and evaluate the effectiveness of coastal protection measures



The Theory of Change for the proposed project is shown in Figure 2. It illustrates how the development of project outputs will lead to an outcome of strengthened capacity and resilience of the Egyptian government and communities to manage climate change-induced sea level rise on coastal areas. In the longer-term, the outputs will lead to a fund level impact of a reduction of climate change related disaster risks for the region. The project potential for knowledge generation is high. Stakeholder engagement and network building is a central feature of the Proposed Project. Details of the stakeholder engagement process that led to the specific activities in the proposed project are described in Annex IIa. The project is anticipated to effectively participate in scientific, policy-based and/or any other networks concerned with ICZM. Over the mid- to long-term, effective incorporation of knowledge-developed experiences, success stories, lesson learned, technical and institutional capacities, etc. will help to reduce vulnerability and build resilience to the adverse impacts of climate change.

The project positively contributes to the creation of an enabling environment. The approach will work on the critical barriers, focusing on environmentally-friendly soft protection measures, capacity building (both technical and knowledge-based), and introduction of a national observation system, an enabling environment will be created towards the achievement of the broader protection goals of the GoE for the Nile Delta under climate change conditions. It will also contribute towards upscaling and replication in the broader Mediterranean Basin.

The project fosters sustainable development through avoiding economic losses from coastal inundation events, creating short- and medium-term job opportunities for local labor force, especially youth and women, controlling coastal erosion, preserving groundwater quality, and safeguarding local and poor communities against threats of reallocation. Finally, any regulatory and legislative changes that emerge from the ICZM development process will be gender responsive in that they will be based on stakeholder participation plans that include equitable representation of women and men in developing the ICZM plan

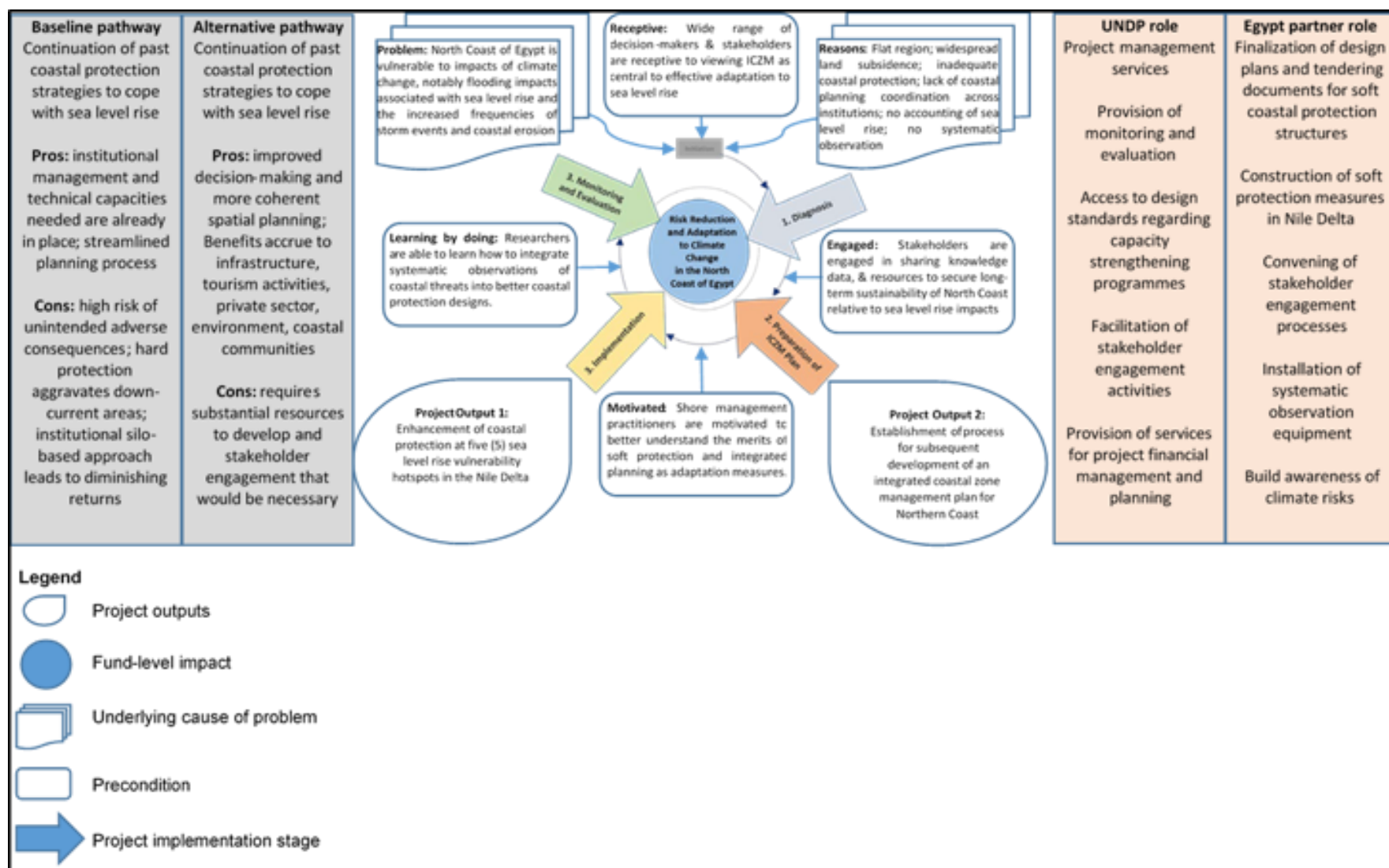
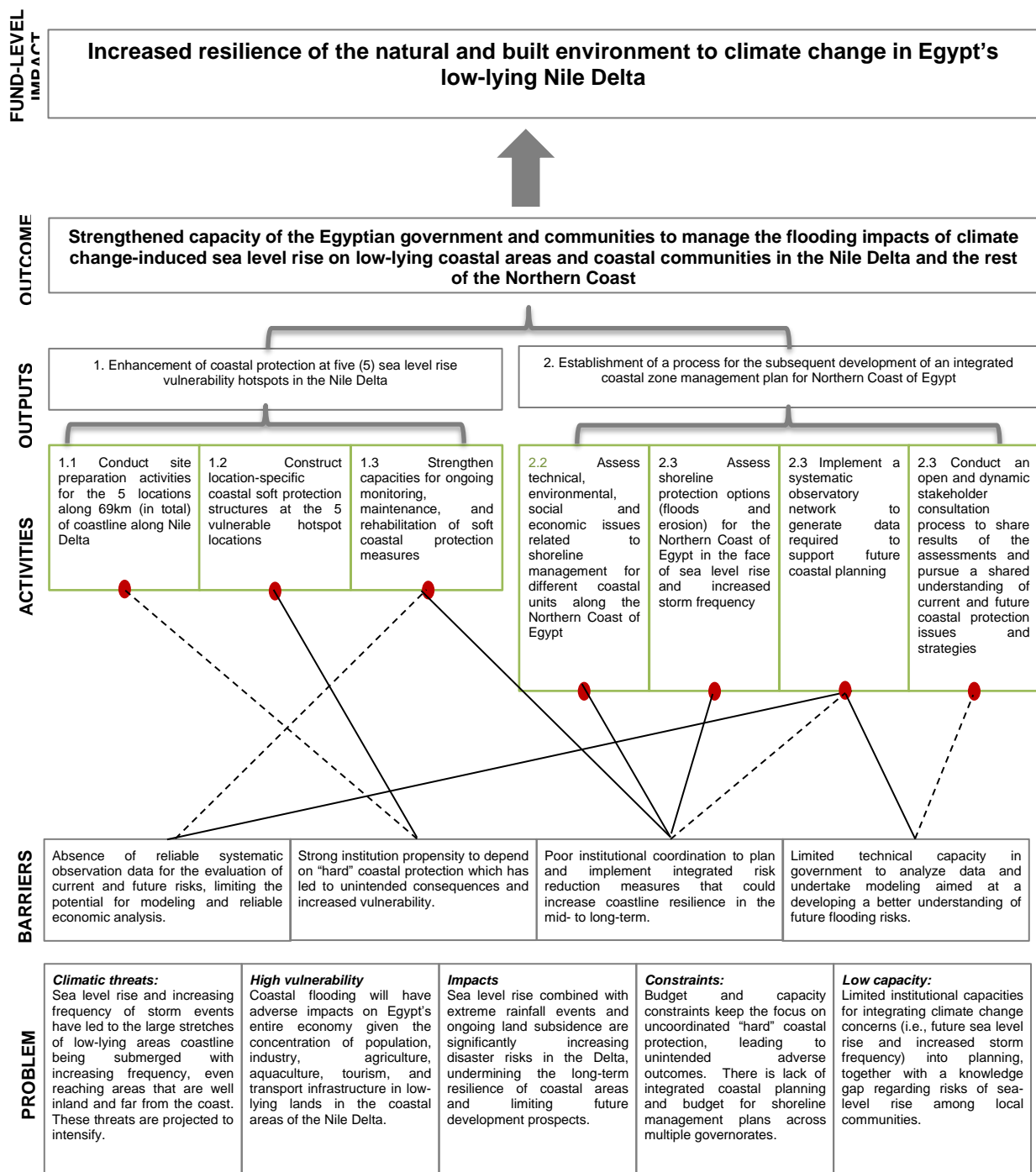


Figure 1 Selected Project Pathway



**Figure 2 Theory of Change**

#### IV. RESULTS AND PARTNERSHIPS

##### i. Expected Results:

Output 1 is achieved through three steps:

- 1.1 Site-specific assessments and detailed designs for soft protections at 5 selected hotspots along the Delta coastline

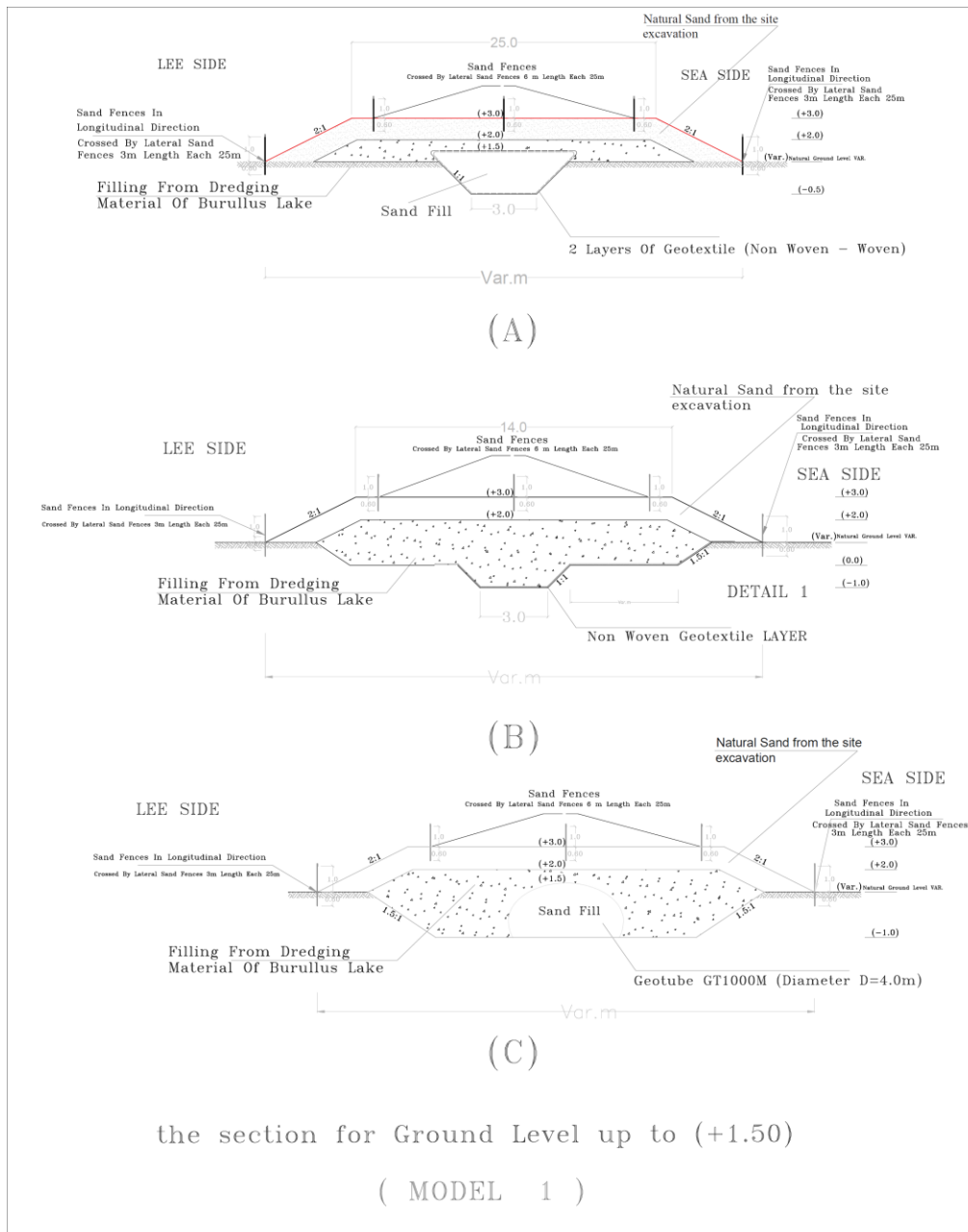


Figure 3: Model 1 Design

- 1.2 Construction of coastal soft protection structures
- 1.3 Development and implementation of an operations & maintenance program for protection structures

Output 2 is foreseen to materialize through four components

- 2.1 Development of national systematic procedures (including d-bases and modeling tools) to conduct long-term climate related risks induced hazard, vulnerability, assessments of erosion and flooding
- 2.2 Formulation of an ICZM plan to include a shoreline master plan and a regulatory/legislative framework
- 2.3 Development of a capacity building program on climate change risk management
- 2.4 Installation of specific components of a climate-related national observation system

There are four (4) types of soft coastal protection designs, or models (Model 1, Model 2, Model 3, and Model 4). The choice of which model to construct at a given hotspot site depends on sea level rise projections, anticipated height of storm surge above mean high tide during extreme events, site geomorphological characteristics, nearby bathymetry, etc. Annex IIa, Section 7 provides further details.

The cross sections of Model 1 designs are presented in Figure 3. This design will be constructed in areas where the adjacent land elevations are up to 1.5 m above msl. With the Model 1 design are three different sub-designs, A, B, and C. Each design will use sand from site excavation activities as fill material. There are no large stone face coverings included in any of the sub-designs. The sub-designs are distinguished by the quantities of dredging material coming from Lake Burullus. Sub-design A requires the least amount of dredged material and sub-design B requires the largest. All three sub-designs require the use of geotextiles as a barrier between sand fill and the substratum.

The cross sections associated with the design of Models 2, 3, and 4 are shown on Figure 4. Model 2 is entirely made of dredged materials from the nearest lake. This design will be constructed in areas where the adjacent land elevation is higher than 1.5 m above msl. It will be restricted to areas in the front of beach cities and villages. Model 3 will be constructed in areas where the adjacent land elevations are less than 1.0 m above msl. The design will use sand from site excavation activities as fill material as well as large dolomite stone (i.e., up to 100 kg stones) covering the slope on the seaside of the structure. Model 4 will be constructed in areas where the adjacent land elevations are higher than 1.5 m above msl. The design involves the construction of interlocking wooden fence that will serve to capture shifting sand in the coastal areas. Based on existing piloting, within a period of nearly 2 years enough sand will be accumulated within the interlocking fence that it will resemble natural sand dune. At that point, the structure will be stabilized with local vegetative species to thwart future shifting of the sand. Pages 190-209 - Annex IIa include further technical details.



the section for Ground Level higher than (+1.50) in the fornt beach cities and valleges  
( MODEL 2 )

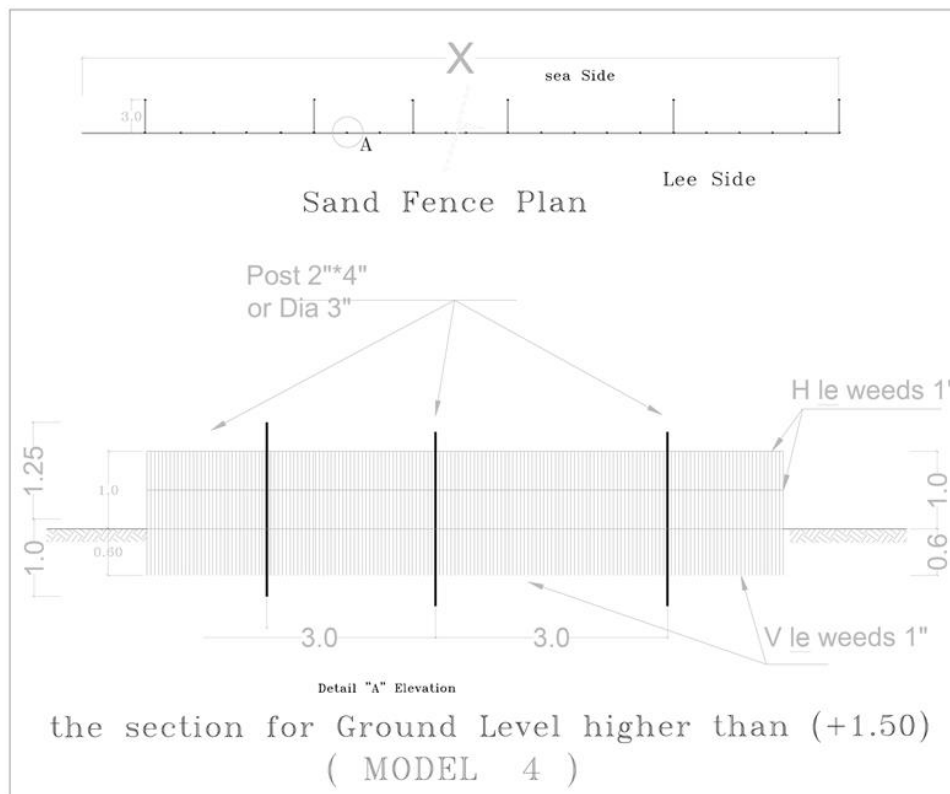
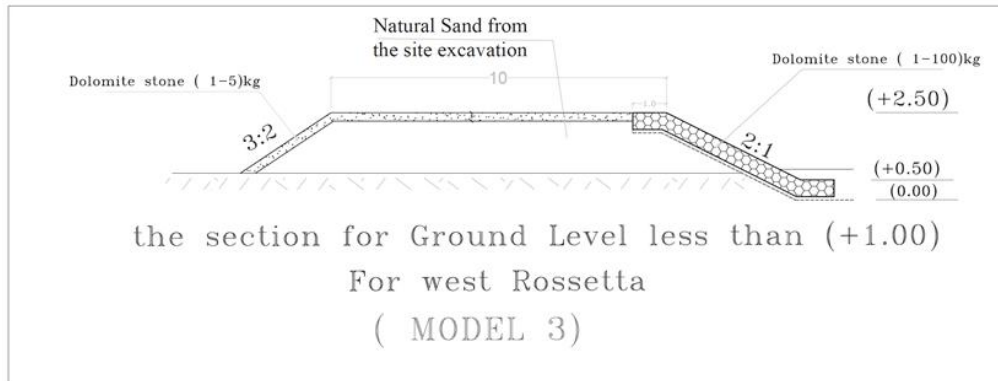


Figure 4 Model 2, 3, 4 Designs

Details regarding the location and key characteristics of the priority hotspots are provided in pages 36-45 of Annex IIa. The current land use to be protected by the soft coastal protection ranges from agricultural lands to permanent infrastructure to touristic areas. Actual lengths constructed using different Model Designs will be determined following results of the pre-construction finalization of specifications and engineering drawings. Meanwhile, the selection of the soft protection option(s) in the hot spot areas will be based on a review by an international expert of the proposed options in the project document. The design of those options will also include a review of the estimates of the sea level rise projections, storm surge height above mean tide during extreme events, site geomorphological characteristics and nearby bathymetry and social and economic activities

ii. Partnerships:

The Ministry of Water Resources and Irrigation MWRI will be the National Executing Partner (Implementing Partner of UNDP) will provide project management support and parallel/in-kind contribution to project implementation through its technical and administrative staff and systems . The Shore Protection Authority (SPA) that falls directly under the Ministry of Water Resources and Irrigation is responsible for protection of the Egyptian coasts along the Mediterranean and Red Sea. SPA is responsible for managing the shoreline in coastal areas that have socioeconomic value or natural resource value that are threatened by erosion. SPA develops coastal zone management plans, designs projects for shore protection, and issues license for projects located in the coastal zone area. It is a key player in the implementation of project activities because of its experience in coastal protection structures and planning activities in the North Coast.

The National Water Research Center (NWRC) is the research executive arm for the MWRI. In particular Coastal Research Institute (CoRI) is responsible for investigating the coastal process along the Nile Delta as well as all the entire Egyptian coasts; monitor the evolution of the Egyptian coast, study the dynamics of its shores and to find out efficient and cost-effective control methods to protect valuable coastal infrastructure from erosion. It works closely with SPA on diagnosing coastal threats and has been at the forefront of calls for urgently protecting areas under threat from sea level rise-induced flooding and for the development of an ICZM plan to guide future development plans along the North Coast. MWRI including SPA & CoRI have sufficient institutional capacities to perform all related tasks and technical expertise from universities can also be sought as needed. International technical expertise will be needed for the modeling of the ICZM plan in collaboration with the Egyptian counterparts. EEAA hosts the ICZM national focal point as well as the GCF DNA. EEAA acts as national focal point for all environmental issues and oversees strategic directives related to compliance with national and international environmental norms.

iii. Risk and Assumptions:

The overall risk rating for this project is low. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on status of risks to UNDP Country Office, which will record progress in UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5 and probability is 1,2,3,4, 5 or when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported in the Annual Project report. Identified risk factors and mitigation measures are shown in Table 3.

<b>Table 3 Risk Factors and Mitigation Measures</b>			
<b>Selected Risk Factor 1</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Implementing a new planning framework within an existing planning context with sharply delineated lines of responsibility could create resistance	Technical and operational	High (>20% of project value)	High
Mitigation Measure(s)			
Risk mitigation will benefit from experiences over the past decades to create buy-in and institutional momentum to integrate climate change into an integrated planning framework. Reasons for resistance will be analyzed and appropriate approaches to eliminate them will be identified and applied.			
<b>Selected Risk Factor 2</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Lack of agreement among key stakeholders on the developed ICZM Plan	Social and environmental	High (>20% of project value)	Medium
Mitigation Measure(s)			
The project will employ experts in participatory approaches. International expertise will be sought for this component, as needed, to ensure the utilization of highest level of available modeling techniques and to provide evidence based proposals to achieve the best possible interest of all stakeholders. Experts will be selected based on competitive selection process starting from the identification if the assignment can be conducted by an individual expert or needs company with multi-disciplinary team. Market assessments will be done prior to procurement on whether there is local capacity in-country for the work at hand or whether it would be necessary to procure from the international market place. Terms of References will then be advertised and the selection panel including UNDP and the Government will evaluate the proposals received and decide on the appointment based on the combination of financial and technical proposals. EOIs and RFPs may be used as well.			
<b>Selected Risk Factor 3</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Low skills and staff limitations could impede the monitoring and follow-up of implementation	Technical and operational	Medium (5.1-20% of project value)	Low
Mitigation Measure(s)			
Capacity needs assessments will be undertaken to identify any specific needs and gaps. The project is building on significant activities to strengthen capacities of staff in key national institutions and local governments, considered the needs for follow up and implementation after the project is finalized. UNDP will ensure that a long term M&E plan will be an output of the project for the sustainability of operations after end of the GCF project including needed financial and human resources.			
<b>Selected Risk Factor 4</b>			
Description	Risk category	Level of impact	Probability of risk occurring



Long term sustainability of investments (e.g. info. systems, coastal protection measures) is threatened if project interventions do not prevent the ongoing coastal flooding, and vulnerabilities in urban and agricultural areas increase	Technical and operational	Low (<5% of project value)	Low
<b>Mitigation Measure(s)</b>			
Project interventions will be integrated into the planning and budgeting processes of key national agencies and local governments. Implementation will actively engage local community groups to ensure ownership and long-term sustainability. Project interventions will be decided during the development of the ICZM plan while only those that have been tested and subject to a thorough cost-effectiveness analysis will be included in the ICZM plan. Extensive studies and thorough design will be conducted using international expertise, as needed, to reduce any chances of faulty design. A strong M&E programme will be put in place and field officers will be recruited through the project to ensure local government staff and communities have access to technical advice, and opportunities to express concerns. Through regular monitoring, success of interventions will be measured and communicated to provide assurance, as well as to inspire behavior change. The M&E plan will be prepared by the project team according to the UNDP standard format and will be discussed with the government and endorsed by the project board. The project M&E plan includes among other measures inception workshop, project board meetings, preparation of project progress reports, measurements of progress means verification, independent Mid Term and Final Evaluations, field visits, and project annual and terminal reports.			
<b>Selected Risk Factor 5</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Extreme climatic events disrupt implementation or damages investments, resulting in delays and additional costs. Egypt is at increased risk of climate-related natural hazards, such as storm surges and flashfloods which could impact implementation as well as long term sustainability of investments.	Social and environmental	High (>20% of project value)	Low
<b>Mitigation Measure(s)</b>			
Timing of fieldworks and construction activities during implementation will be scheduled to minimize risk, to the extent possible (e.g. planning around storm periods). Design of investment projects will be following the results of a thorough risk assessment to ensure long term resilience.			
<b>Selected Risk Factor 6</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Sediment movement during construction works	Social and environmental	Medium (5.1-20% of project value)	Medium
<b>Mitigation Measure(s)</b>			
There is the likelihood for sediment movement during the construction of coastal infrastructure. To ensure that the mobilized sediment will result in environmental impacts, it will be necessary to prepare an Erosion, Drainage and Sediment Control Plan (EDSCP) and install silt curtains to restrict sediment movement from the site. Further, any earthworks should be undertaken during the dry season and compacted sufficiently to reduce sediment movement. The EDSCP should contain aspects including but not limited to the installation of sediment curtains to			

reduce sediment movement and the quick placement of footing material. These impacts will be spatially and temporally restricted to works periods.			
<b>Selected Risk Factor 7</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Contamination of existing water sources	Social and environmental	Medium (5.1-20% of project value)	Medium
<b>Mitigation Measure(s)</b>			
To ensure contaminants do not enter marine, surface and groundwater systems, a water quality monitoring plan has been developed to ensure chemicals control. This will involve testing sediment prior to movement and planning so that works are not undertaken during rain events. Where rainfall is anticipated, appropriate material should be placed under sediments prior to excavation to ensure there is no seepage into groundwater. The water quality monitoring for the sources will be designed to identify potential impacts so that management measures can be proactively rather than reactively enacted upon.			
<b>Selected Risk Factor 8</b>			
Description	Risk category	Level of impact	Probability of risk occurring
Construction Noise	Social and environmental	Low (<5% of project value)	Low
<b>Mitigation Measure(s)</b>			
The construction contractor should consider any sensitive receptors including communities. Noise will be limited to excavators removing sediment from the water course. It is likely that more noise will be generated through the use of excavators and trucks moving sediment. Where necessary, noise shields should be constructed to reduce the potential for noise to reach these communities if an impact occurs. The noise will have very limited temporal scales			
<b>Other Potential Risks in the Horizon</b>			
While there exists a strong commitment from the Egyptian government that limits many risks, there is a possibility that this commitment is not carried through because of different perceptions of key decision makers, or because project activities begin to be perceived as not sufficiently contributing to an effective long-term strategy to address climate change adaptation in the Nile Delta. However, the commitment to baseline development activities implemented by government, as well as its efforts to secure the necessary co-financing, has served to minimize these risks. The risk mitigation strategies will focus on strengthening communication with national counterparts;			

iv. Stakeholder engagement plan:

The proposed project is informed by the several rounds of discussions with stakeholders at the national and local levels on climate change adaptation options and priorities in the Nile Delta. The project builds on past and ongoing stakeholder consultations regarding the overall protection of the North Coast of Egypt from flooding and other threats. It has involved engagement, typically as part of consultative workshops, of representatives from MWRI, SPA, CoRI, other governmental agencies, UNDP, and representatives from local businesses and communities. In all, the project was designed based on the input generated from a total of 36 related stakeholder consultative workshops held over the period 2015-2016 (see Annex IIa). One recent consultative workshop was organized on 17 August 2016 in Cairo

at which the emerging project design was presented to stakeholders from SPA, CoRI, EAAA, General Organization for Physical Planning (GOPP), National Center for Planning State Land Uses (NCP SLU), Tourism Development Authority (TDA) and Coastal Governorates.

In joint collaboration with EAAA, the preparation of the ICZM Plan will involve all coastal stakeholders in an effort to build awareness of the value of coastal resources and create a sense of ownership, contributing to its involvement in long term shared goals. ICZM initiatives have development mechanism promotes stakeholder awareness and participation through the organization of workshops, hearings, and launching an ICZM website and a geoviewer. These will be leverage by the project to develop the regulatory framework for a comprehensive Coastal Management Plan. A preliminary list of other stakeholders as identified by the ESMF (Annex VIb) is given in Table 2.

**Table 2 Preliminary List of Stakeholders**

Stakeholder	Reason	Port Said	Damietta	Dakahlia	Kafr El Sheikh	El Beheira
Fishermen Community	Sea Accessibility	✓	✓	✓	✓	✓
Bird Poachers	Shore Accessibility	✓	✓	✓	✓	✓
Farmers	Protecting and increasing agricultural areas via minimizing climate change impacts				✓	✓
	Utilization of dredged materials from lakes	✓	✓	✓	✓	
Fish Farms	Protecting and increasing fish farm areas via minimizing climate change impacts	✓			✓	
National Company for Fish Farming		✓			✓	
General Authority for fisheries Resources Development		✓	✓	✓	✓	✓
Resorts and Recreational Beaches	Beach Accessibility		✓	✓		
Urban Areas near the Sea	Beach Accessibility	✓		✓	✓	
	Protecting and increasing urban areas via minimizing climate change impacts			✓	✓	
	Work Opportunities	✓	✓	✓	✓	
Industrial Areas	Protecting and increasing industrial areas via minimizing climate change impacts	✓				
Power Plant	Sensitivity to climate change impacts		✓		✓	
Non-Governmental Organizations	Provision of trained labour	✓	✓	✓	✓	✓
Scientific Communities	Interested parties	✓	✓	✓	✓	✓
Coast Guards	Relevant security party	✓	✓	✓	✓	✓
Environment and Surface	Relevant security party	✓	✓	✓	✓	✓

v. Gender equality and empowering women:

The project predicts that more than one third of a million female inhabitants will be recipients of direct benefits, while almost seven million ladies and young girls will, indirectly, be affected positively. A gender analysis and action plan was prepared (see Annex XIIIId) that accounts for gender and social inclusion implications, including the level of awareness, commitment and accountability of all stakeholders to ensure the participation by women in climate resilience processes. The following project components are included to mainstream gender prospective into project activities:

- Conducting micro level consultations in the hotspot governorates ensuring that all segments of the population, including women, youth, the elderly and the disabled are equitably represented.
- Setting explicit rules in tendering process to ensure gender equality and proactive participation by women in the contracting schemes.
- Establishment of grievance mechanisms, equally accessible by both genders, to voice complaints during the project construction phase.
- Offering capacity building trainings, communication campaigns and awareness messages related to social inclusion mechanisms, relevant to climate change resilience, that are culturally and gender sensitive.
- Involvement of national gender-based organizations as main stakeholders and ensure participation of the National Council for Women (NCW), Equal Opportunities Units (EOUs) with ministerial partners.
- Development of stakeholder participation plan, gender-responsive monitoring plan, and ensuring equitable representation of women and men in the development of the ICZM plan.
- Ensuring empowerment through women-led community stewardship committees tasked with shoreline protection and stabilization, restoration work, creation of coastal green buffer zones and maintenance of beach and dune systems and beach vegetation.
- Regulatory and legislative changes that emerge from the ICZM development process will be gender responsive
- Preparation during project implementation, of qualitative assessments on the gender-specific benefits that can be directly associated to the project. Progress will be incorporated in the annual Project Implementation Report, Mid-Term Report, and End of Project Evaluation Report.

vi. South-South and Triangular Cooperation (SSC/TrC):

GoE is committed to working with other countries in the Mediterranean Basin, in partnership with an EU initiative, to ensure that integrated coastal zone management is implemented as the core approach to building resilience to sea level rise and other climate change threats. Details about the EU initiative are provided in Annex IIa

vii. Sustainability and Scaling Up:

The project brings together the crucial elements needed for both targeted effectiveness in the near-term and replication potential in other coastal zone of Egypt that will yield long-term benefits. The project will serve both purposes: i- *Scaling up investments in critically vulnerable hotspots* through soft coastal protection measures, and ii- *Integration of climate change risks into long-term coastal development planning*. Developing an exit strategy for the GCF requires provision of a strong basis for country ownership of the outputs along with creation of conditions favorable to the sustainability of the measures introduced.

**Country ownership:** The project has been designed through extensive consultations and involvement of government officials at MWRI including SPA, CoRI officials to ensure ownership of the interventions and effectiveness of their impact (Annex IIa - outcomes of community consultations). Staff at the relevant government departments have been involved in the proposed design of the soft coastal protection measures and will be leading on implementation of these project interventions. Moreover, consultations with decision-makers at the highest levels of government have mobilized the will to address SLR within ICZM framework, reflected in a commitment to provide substantial additional co-financing. As seen in Annex IIa, there is a broad-based degree of acceptance towards the proposed project among the coastal protection community. Moreover, the GoE has committed to maintain the GCF investments in soft coastal protection upon completion of the project through the end of their useful life (Annex I).

**Sustainability:** Post implementation sustainability will be ensured by the project's focus on three factors. First, the government has made a commitment to finance operations and management of soft coastal protection measures to be constructed for the duration of their serviceable life. A letter of commitment to this effect is provided as part of Annex IV. Meanwhile the ICZM plan and climate change Adaptation directions will guide the coastal protection work in the North Coast for at least the next decade. Second, the GoE is committed to working with other countries in the Mediterranean Basin to building resilience to sea level rise and other regional climate-related threats. Third, the project will remove key technical and institutional capacity barriers to enhance long-term coastal resilience in the North Coast. The project will include an intensive capacity building programme at the individual and institutional levels that will include climate change risk management, coastal data collection/management, diagnosis/modeling of storm surge from sea level rise, and development of regulatory/planning protocols, monitor and assess dynamic coastal processes will be strengthened with CoRI and the SPA, while governmental analysts will participate in capacity building initiatives that address storm surge modeling, inundation analysis, data quality control/management, to build technical capability to respond to climate change as it continues to unfold in the region.. Second, the capacity building strategy adopted in the project is likely to have additional social benefits. The capacity building approach. Capacity building is focused on SPA and CoRI and will focus on the introduction of new diagnostic methods and tools to integrate evolving knowledge and data about climate change-induced coastal threats generated by the national observation system, as well as regional and international bodies. A capacity building program on for institutions involved in the long-term management of the north coast. The program will create the basis for a thorough understanding of various aspects of coastal management, including climate change adaptation and ICZM, as well as promoting collaborative networks equipped with the necessary skills, knowledge and attitudes to undertake different tasks involved in the climate change adaptation and planning of the coastal areas of Egypt. The framework for the program will aim to identify gaps and corresponding capacity needs relative to key ICZM implementation issues, and to build capacity of individuals and institutions to implement the ICZM Plan.

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## **V. PROJECT MANAGEMENT**

### ***i. Cost efficiency and effectiveness:***

With GCF funding, the proposed project will be able to build on the recent baseline investments through integrated coastal management planning and scaling up the use of soft engineering solutions and ecosystem-based adaptation measures. The funding requested from GCF is justified at four levels. First, extensive engineering scoping assessments have been conducted on the North Coast to identify the most vulnerable areas to coastal flooding from the combination of sea level rise and more frequent/intense storms. Details of the scoping assessments are provided in Annex IIa. Second, GCF

funds are only requested to protect priority vulnerable hotspot areas (69 km of the most vulnerable coastline out of 200 km of Nile Delta coastline). The funding gap between available government resources to protect these hotspot areas and total required resources to safeguard the communities and infrastructure in these regions is directly offset by GCF resources. Third, conceptual designs of the soft coastal protection measures have already been developed by the SPA for each of the 5 hotspot segments. Each design has been carried out relative to unique local topographical conditions; structural dimensions (i.e., crest height, slope angle, width) that account for sea level rise-induced storm surge, and fill material quantities required and their sources (see Annex IIa). Moreover, the proposed GCF project is fully aligned with national priorities and builds on existing government programmes.

Co-financing is foreseen by the GOE through MWRI providing at least USD 73.8 million over the 7-year project duration. Co-financing sources include, but not limited to, the SPA annual budget for coastal protection works within the scope of ICZM plan implementation and EU technical assistance to establish the coastal early warning system to support the ICZM activities). Additional co-financing is being mobilized under efforts such as to protect the Manzala Lake in the north coast near the Port Said hotspot. The GCF support will mainly address critical building blocks to integrating climate change risks into government programmes, thereby providing needed information and capacity to making future government investments risk-sensitive. Results of the economic analysis are presented in Annex XIIa and XIIb.

The economic analysis of the project was carried out in accordance with the *Guidelines for the Economic Analysis of Projects of United Nations Development Program*.<sup>9</sup> The economic efficiency of the investment was determined by computing the economic net present value (NPV) with an assumed 10% discount rate, and the economic internal rate of return (IRR). Economic values (costs and benefits) are all measured in real terms of 2017. Economic costs of the project are net of taxes, duties, and price contingencies. Furthermore, the analysis assumes a shadow wage rate of 1.00 for unskilled and semi-skilled labor in Egypt.

**Table 4 Project NPV and IRR**

	<b>NPV (USD)</b>
Middle SLR	124,759,388
High SLR	297,960,549
	<b>IRR</b>
Middle SLR	20.2%
High SLR	26.4%

Analysis of the economic benefits relies significantly on the detailed study of the impacts of sea-level rise in the Nile Delta presented in Smith et al..<sup>10</sup> The economic benefits of the proposed investment project include the reduction in the quantity of agricultural land which may be impacted by sea-level rise, and the mitigation of the economic cost to housing units and roads. The estimation of the benefits

<sup>9</sup> UNDP. 2015. *GUIDANCE ON THE CONDUCT AND REPORTING OF THE ECONOMIC AND FINANCIAL ANALYSIS OF CLIMATE CHANGE ADAPTATION AND MITIGATION PROJECTS AND PROGRAMMES*. UNDP.

<sup>10</sup> Complete reference is: Smith, J., McCarl, B., Kirshen, P., Malley, J, and M. Abdrabo. 2013. *Potential Impacts of Climate Change on the Egyptian Economy*. Prepared for the United Nations Development Programme. Cairo, Egypt.

has been done for two sea-level scenarios, middle and high (corresponding to the B1 and A1FI SRES emissions scenarios). The resulting NPV and IRR are shown in the Table 4

The project shows a positive NPV and a IRR in excess of the discount rate for both middle and high SLR as shown in Table 5.

**Table 5 Economic Sensitivity Analysis**

<b>20% cost increase</b>		<b>NPV (USD)</b>
	Middle SLR	110,482,619
	High SLR	283,683,779
		<b>IRR</b>
	Middle SLR	18.2%
	High SLR	24.2%
<b>20% benefits decrease</b>		<b>NPV (USD)</b>
	Middle SLR	85,530,741
	High SLR	224,091,670
		<b>IRR</b>
	Middle SLR	17.7%
	High SLR	23.8%
<b>20% cost increase and 20% benefits decrease</b>		<b>NPV (USD)</b>
	Middle SLR	71,253,972
	High SLR	209,814,900
		<b>IRR</b>
	Middle SLR	15.8%
	High SLR	21.7%

Project Management Unit: PMU will be hosted at MWRI. PMU will comprize the Project Manager, a minimum of two Project Officers, Field Engineers, one Accountant and one admin Officer. M&E and Gender Spealizsts will be recruited as needed. PMU will be equipped with necessary computational and communication services.: The PMU will subcontract specific components of the project to specialized government agencies, and national and international contractors. The PMU will be administered by a full-time Project Manager. A Consulting Group will be recruited to support the Project Manager in validating construction works before processing payments to contractors.

Agreement on intellectual property rights and use of logo on the project’s deliverables and disclosure of information: To accord proper acknowledgement to the GCF for providing grant funding, the GCF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GCF will also accord proper acknowledgement to the GCF. Information will be

disclosed in accordance with relevant policies notably the UNDP Disclosure Policy<sup>11</sup> and the relevant GCF policy.

Disclosure of information: Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy<sup>12</sup> and the GCF Disclosure Policy<sup>13</sup>.

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<sup>11</sup> See [http://www.undp.org/content/undp/en/home/operations/transparency/information\\_disclosurepolicy/](http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/)

<sup>12</sup> See [http://www.undp.org/content/undp/en/home/operations/transparency/information\\_disclosurepolicy/](http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/)

<sup>13</sup> See [https://www.greenclimate.fund/documents/20182/184476/GCF\\_B.12\\_24\\_-\\_Comprehensive\\_Information\\_Disclosure\\_Policy\\_of\\_the\\_Fund.pdf/f551e954-baa9-4e0d-bec7-352194b49bcb](https://www.greenclimate.fund/documents/20182/184476/GCF_B.12_24_-_Comprehensive_Information_Disclosure_Policy_of_the_Fund.pdf/f551e954-baa9-4e0d-bec7-352194b49bcb)



## VI. PROJECT RESULTS FRAMEWORK

<b>This project will contribute to the following Sustainable Development Goal (s):</b>					
SDG 13: Take urgent action to combat climate change and its impacts (acknowledging that the United Nations Framework Convention on Climate Change (UNFCCC) is the primary international, intergovernmental forum for negotiating the global response to climate change)					
<b>This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:</b>					
<b>Outcome 5.1:</b> The Government of Egypt has adopted and effectively implemented sound climate change adaptation and disaster risk reduction policies and programmes focused on vulnerable sectors, groups and high-risk geographic locations.					
<b>This project will be linked to the following output of the UNDP Strategic Plan:</b>					
Output 1.4: Scaled up action on climate change adaptation and mitigation cross sectors which is funded and implemented.					
<b>GCF Paradigm shift objectives:</b>					
<i>Increased climate-resilient sustainable development</i>					
	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
<b>SDG indicators</b>	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population 13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula	See <a href="http://unstats.un.org/sdgs/indicators/database/">http://unstats.un.org/sdgs/indicators/database/</a>	<i>Expected status a mid-point of project implementation</i>	<i>Expected status a project closure</i>	<i>Note how project data will link with national statistics offices or other bodies monitoring SDG indicators</i>
<b>UNDP Strategic Plan Indicators</b>	1.4.1a) Extent to which climate finance is being accessed 1.4.1b) Extent to which there is a system in place to access, deliver, monitor, report on and verify climate finance. 1.4.2 Extent to which implementation of comprehensive measures – plans, strategies, policies, programmes and budgets – to achieve low-emission and climate-resilient development objectives has improved. 2. Number of direct project beneficiaries.	See <i>IRRF indicators listed in opening section of this annotated project document</i>			
<b>FUND LEVEL IMPACT:</b>					
<b>Fund level impact:</b> <i>A3.0 Increased resilience of infrastructure and the built environment to climate change</i>	3.2 Number of new infrastructure constructed to withstand condition from climate variability and change	No coastal protection solution exists in vulnerable hotspots	<b>25 km</b>	Soft coastal protection measures have been put in place in 5 vulnerable hotspots across 69 km of the Nile Delta	Environmental and social impact assessment is completed and approved without delay; There is a land-use agreement with the GoE

PROJECT OUTCOMES:					
A5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	5.1 Institutional and regulatory frameworks capable of integrating climate risks into coastal zone planning and effective action	Only ad hoc planning has been undertaken which is neither climate sensitive or effectively coordinated across institutions	Development of the Shoreline Master Plan and Coastal Management Plan	Development of the ICZM Plan	There is not disruptive government led restructuring of the various ministries involved in coastal management
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks	7.2 Number of males and females benefiting from soft coastal protection measures	Currently, no local residents benefit from soft coastal protection measures	Coastal protection design and installation started to protect about 17 million people in areas prone to coastal flooding	At least 17 million people who are in flood prone areas protected by a soft coastal defense	There is not a sudden and unexpected migration of people from other parts of Egypt.
PROJECT OUTPUTS:					
<b>Output 1</b> Reduced vulnerability of coastal infrastructure and agricultural assets to coastal flooding damage in hotspot locations in Nile Delta.	The total length of vulnerable hotspots protected	0km	15-20km	69km	<ul style="list-style-type: none"> <li>Political and economic stability is maintained in Egypt</li> <li>There is no conflicts that will disrupt construction or supply chains required for materials both within Egypt and outside Egypt</li> </ul>
<b>Output 2</b> Development of an integrated coastal zone management plan (ICZM) for the entire North Coast of Egypt	<ul style="list-style-type: none"> <li>Assessment of the capacity needs of institutions and individuals (women and men) for ICZM planning</li> </ul>	<ul style="list-style-type: none"> <li>Preliminary estimates of MWRI</li> </ul>	<ul style="list-style-type: none"> <li>Assessment under development</li> </ul>	<ul style="list-style-type: none"> <li>At least 1 Capacity Needs Assessment Report indicating the capacity needs of women and men</li> </ul>	<ul style="list-style-type: none"> <li>There is not a government restructuring,</li> <li>There is appropriate environment that allows for the review and adoption of the ICZM plan</li> <li>There is no turnover of staff beyond what is expected for natural reasons</li> </ul>
	<ul style="list-style-type: none"> <li>Number of technical officers (men and women) trained on modeling and other skills associated with integrated coastal zone planning</li> </ul>	<ul style="list-style-type: none"> <li>0 people</li> </ul>	<ul style="list-style-type: none"> <li>At least 50 technical government staff exposed to hands-on trainings on the three areas</li> </ul>	<ul style="list-style-type: none"> <li>At least 100 technical government staff exposed to hands-on trainings on the three areas</li> </ul>	
	<ul style="list-style-type: none"> <li>Setup of monitoring equipment for national observation system</li> </ul>	<ul style="list-style-type: none"> <li>Tide gauges installed under the SCCF Project</li> </ul>	<ul style="list-style-type: none"> <li>All monitoring equipment procured</li> </ul>	<ul style="list-style-type: none"> <li>System is operational</li> </ul>	
	<ul style="list-style-type: none"> <li>Government of Egypt has adopted ICZM Plan</li> </ul>	<ul style="list-style-type: none"> <li>No ICZM plan</li> </ul>	<ul style="list-style-type: none"> <li>Development of the ICZM Plan</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of the ICZM</li> </ul>	

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## VII. MONITORING AND EVALUATION (M&E) PLAN

The project results as outlined in the project results framework will be monitored and reported annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GCF-specific M&E requirements will be undertaken in accordance with relevant GCF policies.

In addition to these mandatory UNDP and GCF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Workshop Report. This will include the exact role of project target groups and other stakeholders in M&E activities including national/regional institutes assigned to undertake project monitoring.

### *i. M&E oversight and monitoring responsibilities:*

**National Project Manager:** The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF Regional Technical Advisor of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Project Manager will develop annual work plans to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GCF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the Annual Project Report, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. Environmental and social management plan, gender action plan etc..) occur on a regular basis.

**Project Board:** The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

**Project Implementing Partner:** The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

**UNDP Country Office:** The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key M&E activities including the Annual Project Report, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GCF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the Annual Project Report and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. Annual Project Report quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will support GCF staff (or their designate) during any missions undertaken in the country, and support any ad-hoc checks or ex post evaluations that may be required by the GCF.

The UNDP Country Office will retain all project records for this project for up to seven years after project financial closure in order to support any ex-post reviews and evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GCF.

**UNDP-Global Environmental Finance Unit (UNDP-GEF):** Additional M&E and implementation oversight, quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as outlined in the management arrangement section above.

**Audit:**

The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies and the related arrangements agreed to in the Accreditation Master Agreement. Upon request, project audit reports (s) will be shared with the GCF (the donor).

**Additional GCF monitoring and reporting requirements:**

Inception Workshop and Report: A project inception workshop will:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;

- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E;
- e) Identify how project M&E can support national monitoring of SDG indicators as relevant;
- f) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender action plan; and other relevant strategies;
- g) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the periodic audit; and
- h) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The inception report must be submitted to the GCF within six months of project start (i.e. project effectiveness). The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

GCF Annual Project Report (due 1 March each year of project implementation): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Adviser will provide objective input to the annual project report covering the calendar year for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance so that progress can be included in the report. The APR will include reporting of: environmental and social risks and related management plans, gender, co-financing and financial commitments, GCF 'conditions precedent' outlined in the FAA, amongst other issues. The annual project report will be due for submission to the GCF in the first quarter of each year for the duration of the project. The last APR will be due for submission within 3 months after the project completion date.

The Annual Project Report submitted to the GCF will also be shared with the Project Board. The UNDP Country Office will coordinate the input of other stakeholders to the report as appropriate. The quality rating of the previous year's report will be used to inform the preparation of the subsequent report.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

Interim Independent Evaluation Report: An interim independent evaluation report will be completed by **January 2022**. The findings and responses outlined in the management response to the interim independent evaluation will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the evaluation process and the evaluation report will follow the standard templates and guidance prepared by the UNDP IEO available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Other stakeholders will be involved and consulted during the evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final interim evaluation report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

Final Independent Evaluation Report: A final independent evaluation report will be completed by **June 2025**. The final evaluation will take place upon completion of all major project outputs and activities. The final evaluation process will begin at least three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Final Independent Evaluation report is due for submission to the GCF within 6 months after the project completion date.

The Project Manager will remain on contract until the final evaluation report and management response have been finalized. The terms of reference, the evaluation process and the final evaluation report will follow the standard templates and guidance prepared by the UNDP IEO available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be ‘independent, impartial and rigorous’. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Additional quality assurance support is available from the UNDP-GEF Directorate. The final evaluation report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The final evaluation report will be publicly available in English on the UNDP ERC.

The UNDP Country Office will include the planned project evaluations in the UNDP Country Office evaluation plan, and will upload the evaluation reports in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC).

Final Report: The project’s final Annual Project Report along with the final independent evaluation report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be ‘independent, impartial and rigorous’. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publicly available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC).

**Final Report:** The project’s final Annual Project Report along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

The approximate timeline for achievement of key milestones is subject to the date of FAA effectiveness as shown in Table 6, while M&E budget is shown in Table 7.

**Table 6                      Timeline for Achievement of Milestones**

<b>Milestones</b>	<b>Expected timing</b>
Project implementation start date	FAA effectiveness date
Inception Report and Baseline Assessments	No later than 6 months after FAA effectiveness date
Independent Interim Evaluation report	No later than 9 months after the third year of project implementation
End of Project Implementation	7 years after FAA Effective Date
Completion Report (Final APR)	Within 3 months after the project completion date
Independent Final Evaluation Report	Within 6 months from completion date

**Table 7 Mandatory GCF M&E Requirements and M&E Budget**

GCF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>14</sup> (US\$)		Time frame
		GCF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD 11,000	In-kind	
Inception Workshop Report and baseline assessments	Project Manager	None	None	
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework (including hiring of external experts, project surveys, data analysis etc...)	Project Manager	Per year: USD 10,000	In-kind	Annually
Annual Project Report	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	Per year: USD 2,100	In-kind	Annually or other frequency as per UNDP Audit policies
Lessons learned, case studies, and knowledge generation	Project Manager	Per year: USD: 4,000	In-kind	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	Per year: USD 1,500	In-kind	On-going
Monitoring of gender action plan	Project Manager UNDP CO	Per year: USD 4,000	In-kind	On-going
Monitoring of stakeholder engagement plan	Project Manager UNDP CO	Per year: USD 4,000	In-kind	On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None	None	
Project Board meetings	Project Board UNDP Country Office Project Manager	Per year: USD: 1,500	In-kind	At minimum annually
Supervision missions	UNDP Country Office	None <sup>15</sup>	None	Two per year
Oversight missions	UNDP-GEF team	None <b>Error! Bookmark not defined.</b>	None	Troubleshooting as needed
GCF learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None	None	To be determined.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 25,000	In-kind	
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 45,000	In-kind	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	USD 6,000	In-kind	As required. GCF will only accept reports in English.
<b>TOTAL indicative COST</b> Excluding project team staff time, and UNDP staff and travel expenses		USD 116,000	In-kind	

<sup>14</sup> Excluding project team staff time and UNDP staff time and travel expenses.

<sup>15</sup> The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GCF Agency Fee.



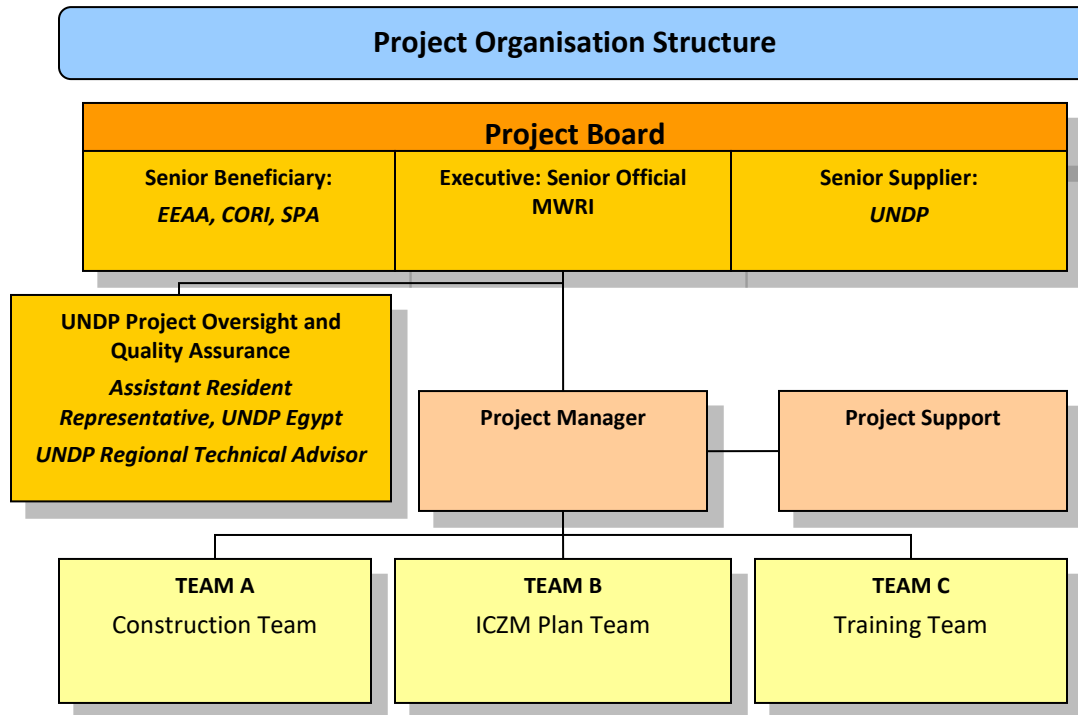
**VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS**

The project will be implemented following UNDP’s national implementation modality, according to the Standard Basic Assistance Agreement between UNDP and the Government of *Egypt*, and the Country Programme.

The **Implementing Partner** for this project is Ministry of Water Resources and Irrigation (MWRI). The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources. The Implementing Partner is responsible for:

- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

The project organisation structure – as outlined in Schedule 3 of the FAA - is as follows:



**Project Board:** The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP’s ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager.

Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Agree on project manager's tolerances as required;
- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.

The composition of the Project Board must include the following roles:

Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is Senior Official in MWRI.

The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

Specific Responsibilities: (as part of the above responsibilities for the Project Board)

- Ensure that there is a coherent project organisation structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organise and chair Project Board meetings.

Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. The Senior Supplier is UNDP.

Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;

- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

**Senior Beneficiary:** The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiary will include Shore Protection Authority, Coastal Research Center and Egyptian Environment Affairs Agency (EAAA)

The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

**Project Manager:** The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

The Implementing Partner appoints the Project Manager, who should be different from the Implementing Partner's representative in the Project Board.

Specific responsibilities include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;

- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available;
- Prepare the Annual Project Report and submit the final report to the Project Board;
- Based on the Annual Project Report and the Project Board review, prepare the AWP for the following year,
- Ensure the interim evaluation process is undertaken as per the UNDP guidance, and submit the interim evaluation report to the Project Board;
- Identify follow-on actions and submit them for consideration to the Project Board; and
- Ensure the final evaluation process is undertaken as per the UNDP guidance, and submit the final evaluation report to the Project Board;

**Project Assurance:** UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the accredited entity fee provided by the GCF.

As an Accredited Entity to the GCF, UNDP delivers the following GCF-specific oversight and quality assurance services: (i) day to day project oversight supervision covering the start-up and implementation; (ii) oversight of project completion; and (iii) oversight of project reporting. A detailed list of the services is presented in the table below.

Function	Detailed description of activity	Typical GCF fee breakdown
Day-to-day oversight supervision	<ol style="list-style-type: none"> <li><b>Project start-up:</b> <ul style="list-style-type: none"> <li>• In the case of Full Funding Proposals, prepare all the necessary documentation for the negotiation and execution of the Funding Activity Agreement (for the project) with the GCF, including all schedules</li> <li>• In the case of readiness proposals, if needed assist the NDA and/or government partners prepare all the necessary documentation for approval of a readiness grant proposal</li> <li>• Prepare the Project Document with the government counterparts</li> <li>• Technical and financial clearance for the Project Document</li> </ul> </li> </ol>	70%

Function	Detailed description of activity	Typical GCF fee breakdown
	<ul style="list-style-type: none"> <li>• Organize Local Project Appraisal Committee</li> <li>• Project document signature</li> <li>• Ensure quick project start and first disbursement</li> <li>• Hire project management unit staff</li> <li>• Coordinate/prepare the project inception workshop</li> <li>• Oversee finalization of the project inception workshop report</li> </ul> <p><b>2. Project implementation:</b></p> <ul style="list-style-type: none"> <li>• <u>Project Board</u>: Coordinate/prepare/attend annual Project Board Meetings</li> <li>• <u>Annual work plans</u>: Quality assurance of annual work plans prepared by the project team; issue UNDP annual work plan; strict monitoring of the implementation of the work plan and the project timetable according to the conditions of the FAA and disbursement schedule (or in the case of readiness the approved readiness proposal)</li> <li>• <u>Prepare GCF/UNDP annual project report</u>: review input provided by Project Manager/team; provide specialized technical support and complete required sections</li> <li>• <u>Portfolio Report (readiness)</u>: Prepare and review a Portfolio Report of all readiness activities done by UNDP in line with Clause 9.02 of the Readiness Framework Agreement.</li> <li>• <u>Procurement plan</u>: Monitor the implementation of the project procurement plan</li> <li>• <u>Supervision missions</u>: Participate in and support in-country GCF visits/learning mission/site visits; conduct annual supervision/oversight site missions</li> <li>• <u>Interim Independent Evaluation Report</u>: Initiate, coordinate, finalize the project interim evaluation report and management response</li> <li>• <u>Risk management and troubleshooting</u>: Ensure that risks are properly managed, and that the risk log in Atlas (UNDP financial management system) is regularly updated; Troubleshooting project missions from the regional technical advisors or management and programme support unit staff as and when necessary (i.e. high risk, slow performing projects)</li> <li>• <u>Project budget</u>: Provide quality assurance of project budget and financial transactions according to UNDP and GCF policies</li> <li>• <u>Performance management of staff</u>: where UNDP supervises or co-supervises project staff</li> <li>• <u>Corporate level policy functions</u>: Overall fiduciary and financial policies, accountability and oversight; Treasury Functions including banking information and arrangements and cash management; Travel services, asset management, and procurement policies and support; Management and oversight of the audit exercise for all GCF projects; Information Systems and Technology provision, maintenance and support; Legal advice and contracting/procurement support policy advice; Strategic Human Resources Management and related entitlement administration; Office of Audit and Investigations oversight/investigations into allegations of misconduct, corruption, wrongdoing and fraud; and social and environmental compliance unit and grievance mechanism.</li> </ul>	

Function	Detailed description of activity	Typical GCF fee breakdown
<b>Oversight of project completion</b>	<ul style="list-style-type: none"> <li>Initiate, coordinate, finalize the Project Completion Report, Final Independent Evaluation Report and management response</li> <li>Quality assurance of final evaluation report and management response</li> <li>Independent Evaluation Office assessment of final evaluation reports; evaluation guidance and standard setting</li> <li>Quality assurance of final cumulative budget implementation and reporting to the GCF</li> <li>Return of any un-spent GCF resources to the GCF</li> </ul>	10%
<b>Oversight of project reporting</b>	<ul style="list-style-type: none"> <li>Quality assurance of the project interim evaluation report and management response</li> <li>Technical review of project reports: quality assurance and technical inputs in relevant project reports</li> <li>Quality assurance of the GCF annual project report</li> <li>Preparation and certification of UNDP annual financial statements and donor reports</li> <li>Prepare and submit fund specific financial reports</li> </ul>	20%
	<b>TOTAL</b>	<b>100%</b>

## IX. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is *USD 105,191,800*. This is financed through a GCF grant of *USD 31,384,800*, *USD 100,000* in cash co-financing to be administered by UNDP and *USD 73,707,000* in parallel co-financing. The Government parallel funding in Outcome 1 will contribute to the construction of the coastal defense system and amounts to LE 140 million over seven years as noted in the co-funding letter in Annex 4. The equivalent of the LE 140 million is equivalent to USD 7.71 million at the exchange rate when the commitment letter was drafted and reached USD 8.72 at the time project budget was prepared but the commitment remains linked to the value in Egyptian pounds. Meanwhile the parallel funding in Outcome 2 is allocated for the implementation and monitoring of the ICZM plan with a commitment of LE 1.2 billion over seven years which was estimated to be equivalent to USD 64.98 at the exchange rate when the project budget was prepared. UNDP, as the GCF Accredited Agency, is responsible for the oversight and quality assurance of the execution of GCF resources and the cash co-financing transferred to UNDP bank account only.

### i. Project Financing

**Table 8 Activity-Based Budgeting**

Output	Activity	Financing (million US\$)			Total cost per Activity
		GCF	Co-financing From UNDP	Co-financing from GoE	
1) Reduced vulnerability of coastal infrastructure and agricultural assets to	1.1 Soft coastal protection (pre-construction) detailed designs, and site-specific assessments undertaken for protecting 69 km of the Nile Delta in 5 vulnerable hotspot locations	820,000		300,000	1,120,000

coastal flooding damage in hotspot locations in Nile Delta	1.2 Construction of coastal soft protection structures at the 5 vulnerable hotspot locations	23,938,000		7,710,000	31,648,000
	1.3 Development and implementation of an operations & maintenance programme for the installed soft protection structures	125,000		713,000	838,000
2) Development of an integrated coastal zone management (ICZM) plan for the entire North Coast of Egypt	2.1 Development of national capability to conduct long-term climate change risks induced hazard, vulnerability and risk high resolution assessments of erosion and flooding under climate change scenarios on an ongoing and iterative basis	500,000		0	500,000
	2.2 Development of a climate change risk informed ICZM plan to include a shoreline master plan and a regulatory/legislative framework	1,725,000		59,384,000	61,109,000
	2.3 Development of a capacity building program on climate change risk management for institutions involved in the long-term management of the north coast	743,500		0	743,500
	2.4 Implementation of specific components of a national observation system	1,732,500		5,600,000	7,332,500
Project Management	Project Management Cost	1,800,800	100,000		1,900,800
<b>Total</b>		<b>31,384,800</b>	<b>100,000</b>	<b>73,707,000</b>	<b>105,191,800</b>

**ii. GCF Disbursement schedule**

GCF grant funds will be disbursed according to the GCF disbursement schedule. The Country Office will submit an annual work plan to the UNDP-GEF Unit and comply with the GCF milestones in order for the next tranche of project funds to be released. All efforts must be made to achieve 80% delivery annually. Scheduling for disbursements is given in Table 9.

**Table 9: Project Disbursement Schedule**

Description	Indicative Scheduled date	(USD million)	Milestones
<b>For Year 1 Activities</b>	Within 4 weeks after the date of effectiveness of the FAA	3,068,979	Fulfillments of conditions for the first disbursement have been met.
<b>For Year 2 Activities</b>	12 months after the previous disbursement	5,649,279	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>For Year 3 Activities</b>	12 months after the previous disbursement	5,984,529	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>For Year 4 Activities</b>	12 months after the previous disbursement	6,371,779	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>For Year 5 Activities</b>	12 months after the previous disbursement	6,031,704	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>For Year 6 Activities</b>	12 months after the previous disbursement	3,498,102	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>For Year 7 Activities</b>	12 months after the previous disbursement	780,428	Submission of annual progress reports and financial reports in form and substance satisfactory to the Fund.
<b>Total (USD):</b>		31,384,800	

Direct Project Services as requested by Government: services provided to government directly under NIM. The UNDP Country Office will also deliver a pre-determined set of project-specific execution services at the request of the Government. To ensure the strict independence required by the GCF and in accordance with the UNDP Internal Control Framework, these execution services should be delivered independent from the GCF-specific oversight and quality assurance services (i.e. not done by same person to avoid conflict of interest). These execution services will be charged to the project budget in accordance with the [UNDP's Harmonized Conceptual Funding Framework and Cost Recovery Methodology](#). The letter of agreement for these direct project costs is included in Annex to this project document.

In addition, the Government of Egypt may request UNDP to provide direct project services for this project. The UNDP and Government of Egypt acknowledge and agree that those services are not mandatory, and will be provided only upon Government request and specified in the Letter of Agreement. If requested, the direct project services would follow UNDP policies on the recovery of direct project costs relating to GCF funded project.

The government has requested UNDP to undertake the following services:



1. Procurement Services: processing terms of reference for recruitments, consultant recruitments, advertising, short-listing & selection, contract issuance
2. Finance Services: administrative services for consultant mobilization such as payments, creation of vendor forms, issuing cheques etc...

Budget Revision and Tolerance: 10% of the total overall projected costs can be reallocated among the budget account categories within the same project output. Any budget reallocation involving a major change in the project's scope, structure, design or objectives or any other change that substantially alters the purpose or benefit of the project requires the GCF's prior written consent.

As outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board (within the GCF requirements noted above). Should such deviation occur, the Project Manager and UNDP Country office will seek the approval of the UNDP-GEF Unit.

Any over expenditure incurred beyond the available GCF grant amount will be absorbed by non-GCF resources (e.g. UNDP TRAC or cash co-financing).

Refund to GCF: Unspent GCF resources must be returned to the GCF. Should a refund of unspent funds to the GCF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.<sup>16</sup> On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-Global Environmental Finance Executive Coordinator.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Final Independent Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed.

Transfer or disposal of assets: In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file<sup>17</sup>.

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<sup>16</sup> see <https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx>

<sup>17</sup> See

[https://popp.undp.org/\\_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP\\_POPP\\_DOCUMENT\\_LIBRARY/Public/PPM\\_Project%20Management\\_Closing.docx&action=default](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default).

In addition, the following GCF requirements must be followed: As stated in Clause 9.03 of the Funding Activity Agreement included in Annex<sup>[1]</sup>, the Accredited Entity shall inform the GCF, in the final APR, which steps it intends to take in relation to the durable assets and/or equipment purchased with the GCF Proceeds to implement the Funded Activity.

Financial completion: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project is required to be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

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<sup>[1]</sup> 23.04 of the AMA states: “ In relation to a Funded Activity that is a grant financed in whole or in part with GCF Proceeds, if any part of such grant is used to purchase any durable assets or equipment used to implement the relevant Funded Activity (such as vehicles or office equipment), upon completion of the Funded Activity or termination of the relevant FAA in accordance with its terms, the Accredited Entity shall take such steps in relation to such assets or equipment which it reasonably deems in the best interest of the continued operation of the Funded Activity taking into consideration the objectives of the Fund and the terms of the applicable SBAA.”

## TOTAL BUDGET AND WORK PLAN

Atlas[1] Proposal or Award ID:	00098798	00101999
Atlas Proposal or Award Title:	Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt	
Atlas Business Unit	EGY10 10	
Atlas Primary Output Project Title	Enhancing Climate Change Adaptation	
UNDP-GEF PIMS No.	5945	
Implementing Partner	Ministry of Water Resources and Irrigation	

GCF Output / Atlas Activity	Responsible party (Atlas Implementing Agent)	Donor Name	Fund ID	Budgetary Account Code	Budget Account Description	Amount	Amount	Amount	Amount	Amount	Amount	Amount	TOTAL (USD)	Budget Note
						Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	Year 6 (USD)	Year 7 (USD)		
Reduced vulnerability of coastal infrastructure and agricultural assets to coastal flooding damage in hotspot locations in Nile Delta	Ministry of Water Resources and Irrigation  (MWRI)	GCF	66000	71300	Local Consultants	30,000	-	-	-	-	-	-	30,000	1A
				71400	Contractual Services /Individ	92,904	92,904	92,904	92,904	92,904	94,080	29,400	588,000	1B
				71600	Travel	2,550	3,000	3,000	3,000	2,700	-	750	15,000	1C
				72200	Equipment and Furniture	-	25,000	25,000	25,000	25,000	-	-	100,000	1D
				72300	Materials & Goods	90,000	15,000	15,000	15,000	-	-	15000	150,000	1E
				74200	Audio Visual & Print Prod Costs	10,000	-	-	-	-	-	-	10,000	1F
				74500	Miscellaneous Expenses	11,900	14,000	14,000	14,000	12,600	-	3500	70,000	1G
				75700	Training, Workshops and Conference	-	-	10,000	10,000	-	-	-	20,000	1H
				72100a	Contractual Services - Companies / Nat	1,850,000	3,325,000	4,300,000	5,250,000	5,250,000	3,150,000	625,000	23,750,000	1I

				72100b	Contractual Services - Companies / Int	150,000	-	-	-	-	-	-	150,000	1J
<b>TOTAL Output 1 (GCF)</b>						<b>2,237,354</b>	<b>3,474,904</b>	<b>4,459,904</b>	<b>5,409,904</b>	<b>5,383,204</b>	<b>3,244,080</b>	<b>673,650</b>	<b>24,883,000</b>	
Development of an integrated coastal zone management plan (ICZM) for the entire North Coast of Egypt	Ministry of Water Resources and Irrigation	GCF	66000	71300	Local Consultants	15,000	40,000	23,500	1,500	20,000	-	-	100,000	2A
				71400	Contractual Services - Individ	-	7,500	15,000	7,500	-	-	-	30,000	2B
				71600	Travel	875	2,625	2,275	1,225	-	-	-	7,000	2C
				72200	Equipment and Furniture	176,000	752,000	425,600	150,400	-	-	-	1,504,000	2D
				72600	Grants	50,000	50,000	50,000	50,000	-	-	-	200,000	2E
				72800	Information Technology Equipmt	25,000	150,000	125,000	-	-	-	-	300,000	2F
				75700	Training, Workshops and Conference	3,750	31,250	38,750	11,250	-	-	-	85,000	2G
				72100b	Contractual Services - Companies / Int-	282,500	840,000	512,500	450,000	390000	-	-	2,475,000	2H
<b>TOTAL Output 2 (GCF)</b>						<b>553,125</b>	<b>1,873,375</b>	<b>1,192,625</b>	<b>671,875</b>	<b>410,000</b>	<b>0</b>	<b>0</b>	<b>4,701,000</b>	
<b>GCF Output / Atlas Activity</b>	<b>Responsible party (Atlas Implementing Agent)</b>	<b>Financing Source</b>		<b>Budgetary Account Code</b>	<b>Budget Account Description</b>	<b>Amount Year 1 (USD)</b>	<b>Amount Year 2 (USD)</b>	<b>Amount Year 3 (USD)</b>	<b>Amount Year 4 (USD)</b>	<b>Amount Year 5 (USD)</b>	<b>Amount Year 6 (USD)</b>	<b>Amount Year 7 (USD)</b>	<b>TOTAL (USD)</b>	<b>Budget Note</b>
Project Management	Ministry of Water Resources and Irrigation	GCF		64397	Services to Project	45,000	60,000	75,000	60,000	30,000	30,000	-	300,000	3A
				71400	Contractual Services - Individ	148,646	148,646	148,646	148,646	148,646	150,530	47,040	940,800	3B
				71600	Travel	5,530	5,530	5,530	5,530	5,530	5,600	1,750	35,000	3C
				72200	Equipment and Furniture	7,500	7,500	-	15,000	-	-	30000	60,000	3D

			66000	72500	Supplies	1,988	1,988	1,988	1,988	1,988	1,988	2,072	14,000	3E
			66000	72800	Information Technology Equipmt	2,500	2,500	5,000	-	7,500	-	7500	25,000	3F
			66000	73100	Rental & Maintenance-Premises	13,272	13,272	13,272	13,272	13,272	13,440	4,200	84,000	3G
			66000	74200	Audio Visual & Print Prod Costs	16,000	16,000	16,000	-	16,000	8,000	8,000	80,000	3H
			66000	74500	Miscellaneous Expenses	5,964	5,964	5,964	5,964	5,964	5,964	6,216	42,000	3I
			66000	75700	Training, Workshops and Conference	30,000	37,500	37,500	37,500	7,500	-	-	150,000	3J
			66000	74100b	Professional Services - Int	2,100	2,100	23,100	2,100	2,100	38,500	-	70,000	3K
				<b>Sub-total GCF</b>		<b>278,500</b>	<b>301,000</b>	<b>332,000</b>	<b>290,000</b>	<b>238,500</b>	<b>254,022</b>	<b>106,778</b>	<b>1,800,800</b>	
	UNDP	04000		74100	Contractual Services - Individ	15,000	15,000	15,000	15,000	10,000	15,000	15,000	100,000	3B
					<b>TOTAL Project Management</b>	<b>293,500</b>	<b>316,000</b>	<b>347,000</b>	<b>305,000</b>	<b>248,500</b>	<b>269,022</b>	<b>121,778</b>	<b>1,900,800</b>	
					<b>Total GCF</b>	<b>3,068,979</b>	<b>5,649,279</b>	<b>5,984,529</b>	<b>6,371,779</b>	<b>6,031,704</b>	<b>3,498,102</b>	<b>780,428</b>	<b>31,384,800</b>	
					<b>Total UNDP Co-financing</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>10,000</b>	<b>15,000</b>	<b>15,000</b>	<b>100,000</b>	
					<b>Total Amount</b>	<b>3,083,979</b>	<b>5,664,279</b>	<b>5,999,529</b>	<b>6,386,779</b>	<b>6,041,704</b>	<b>3,513,102</b>	<b>795,428</b>	<b>31,484,800</b>	

**Budget Notes:**

Note	Description of cost item
1A	National consultants support to identify compile needed data for the detailed design of the coastal protection systems and supported the field studies. (LCs: 300 days at USD 100/day = USD 30,000)
1B	5 site engineers for construction supervision for project sites for a salary of USD 1,000/month/engineer (1000usd x 12months x 7 years x 5 engineer = USD 420,000) 5 site supporting staff including drivers and technicians supporting the field engineers for a salary of USD 400/month/person (400usd x 12 months x 7 years x 5 staff = USD 168,000) Salaries for the project field team for construction supervision at five sites
1C	In-country travel of Project staff for follow up and supervision of field work at an average of one trip for one person/months (100 visits x USD 50/trip) In-country travel of Project for follow up and supervision of field work (100 visits x USD50 = 5,000) Travel cost for field works supervision (100 visits x USD50 = 5,000) Daily Subsistence allowance (DSA) and other in country travel cost for the data collection, and monitoring and supervision during site preparation and construction phases.
1D	Procurement of field equipment for monitoring the performance of the coastal protection works (USD 50,000 x 2 items= USD 100,000)
1E	Purchase of data such as satellite images, meteorological data, and other needed sources of data for design of the coastal protection works (USD 15,000 x 10 items = USD 150,000)
1F	Printing tendering documents (USD 2,000 x 5 unit = USD 10,000)
1G	Sundry (USD 100 x 350 items = USD 35,000) Sundry (USD 100 x 350 items = USD 35,000) Misc. expenses in the five project sites including fuel, maintenance, field supplies, ad-hoc expenses in the site, O&M costs for field offices, etc.
1H	Training of government technical staff on O&M of the constructed coastal protection systems (USD 5,000 x 4 workshop = USD 20,000)
1I	National consulting firm to conduct pre-design field surveys and studies for five sites (USD 250,000 x 1 contract = USD 250,000) National consulting firm to prepare detailed designs for construction works (USD 200,000 x 1 contract = USD 200,000) National consulting firm to produce tendering documents as part of the design work (USD 50,000 x 1 contract) = USD 50,000) National company to complete site preparation field activities (USD 2,000,000 x 1 contract = USD 2,000,000) National construction company to construct the coastal protection works (USD 21,000,000 x 1 contract = USD 21,000,000) National company to develop the monitoring plan as part of the design activities (USD 150,000 x 1 contract = USD 150,000) National consulting firm to develop the O&M manual as part of the design activities (USD 50,000 x 1 contract = USD 50,000) National consulting firm to prepare the code as part of the design activities (USD 50,000 x 1 contract = USD 50,000)
1J	International company to analyze and review field data and develop the design criteria (USD 150,000 x 1 contract = USD 150,000)

Note	Description of cost item																																											
2A	<p>Local consultant for monitoring and evaluate the capacity building programme (USD 400/day x 50 days = USD 20,000)</p> <p>Local consultant to design and implement community development programme for local residents to integrate in the construction works and later on the implementation of the ICZM plan (USD 300 per day x 150days = USD45,000)</p> <p>Local consultant for technical supervision to support the establishment of the National Observation System (USD 300/day x 50 days = USD 15,000)</p> <p>Local Consultant to support design and implementation of data sharing system for generated date from the National Observation System at (USD 250/day x 80 days = USD 20,000)</p>																																											
2B	<p>Local consultants for Training of government officials/practitioners for professional development of different aspects of coastal management (NCs: 100 days at USD 300/day = USD 30,000)</p>																																											
2C	<p>In-country travel of Project for follow up and supervision of field work related to the installation of the National Observation System (USD 50 x 70 trips= USD 3,500)</p> <p>Travel cost for field works supervision for the development and implementation of the ICZM plan (USD 50 x 70 trips= USD 3,500)</p>																																											
2D	<p>Procurement of monitoring equipment comprising the National Observation System through an international tender (USD 376,000 x 4 contracts= USD 1,504,000)</p>																																											
		<table border="1"> <thead> <tr> <th data-bbox="445 662 888 695">Equipment</th> <th data-bbox="888 662 1094 695">Cost</th> <th data-bbox="1094 662 1266 695">Unit</th> <th data-bbox="1266 662 1465 695">Total Cost</th> </tr> </thead> <tbody> <tr> <td data-bbox="445 695 436 781" rowspan="2"><b>Platforms</b></td> <td data-bbox="445 695 896 743">Slacom gliders</td> <td data-bbox="896 695 1094 743">230,000</td> <td data-bbox="1094 695 1266 743">1</td> <td data-bbox="1266 695 1465 743">230,000</td> </tr> <tr> <td data-bbox="445 743 896 781">Remus 100</td> <td data-bbox="896 743 1094 781">200,000</td> <td data-bbox="1094 743 1266 781">1</td> <td data-bbox="1266 743 1465 781">200,000</td> </tr> <tr> <td data-bbox="445 781 436 992"><b>Meteorological sensors</b></td> <td data-bbox="445 781 896 992">Meteorological system delivered, fully wired and prepared for installation. It is proposed that 10 such stations be purchased for the project</td> <td data-bbox="896 781 1094 992">11,000</td> <td data-bbox="1094 781 1266 992">10</td> <td data-bbox="1266 781 1465 992">110,000</td> </tr> <tr> <td data-bbox="445 992 436 1382" rowspan="5"><b>Oceanographic sensors-</b></td> <td data-bbox="445 992 896 1036">Tide gauges or water level sensors</td> <td data-bbox="896 992 1094 1036">234,000</td> <td data-bbox="1094 992 1266 1036">1</td> <td data-bbox="1266 992 1465 1036">234,000</td> </tr> <tr> <td data-bbox="445 1036 896 1105">Microwave Water level station with IP Modem</td> <td data-bbox="896 1036 1094 1105">26,000</td> <td data-bbox="1094 1036 1266 1105">2</td> <td data-bbox="1266 1036 1465 1105">52,000</td> </tr> <tr> <td data-bbox="445 1105 896 1175">Optional CT Sensor integrated into Microwave Tide Station</td> <td data-bbox="896 1105 1094 1175">12,000</td> <td data-bbox="1094 1105 1266 1175">1</td> <td data-bbox="1266 1105 1465 1175">12,000</td> </tr> <tr> <td data-bbox="445 1175 896 1252">Conductivity/temperature/depth probes (CTDs)</td> <td data-bbox="896 1175 1094 1252">12,000</td> <td data-bbox="1094 1175 1266 1252">12</td> <td data-bbox="1266 1175 1465 1252">144,000</td> </tr> <tr> <td data-bbox="445 1252 896 1382">Current meters (The bottom deployed ADCP would be a 600 khz ADCP plus trawl resistant bottom mount and acoustic release)</td> <td data-bbox="896 1252 1094 1382">42,000</td> <td data-bbox="1094 1252 1266 1382">1</td> <td data-bbox="1266 1252 1465 1382">42,000</td> </tr> </tbody> </table>	Equipment	Cost	Unit	Total Cost	<b>Platforms</b>	Slacom gliders	230,000	1	230,000	Remus 100	200,000	1	200,000	<b>Meteorological sensors</b>	Meteorological system delivered, fully wired and prepared for installation. It is proposed that 10 such stations be purchased for the project	11,000	10	110,000	<b>Oceanographic sensors-</b>	Tide gauges or water level sensors	234,000	1	234,000	Microwave Water level station with IP Modem	26,000	2	52,000	Optional CT Sensor integrated into Microwave Tide Station	12,000	1	12,000	Conductivity/temperature/depth probes (CTDs)	12,000	12	144,000	Current meters (The bottom deployed ADCP would be a 600 khz ADCP plus trawl resistant bottom mount and acoustic release)	42,000	1	42,000			
Equipment	Cost	Unit	Total Cost																																									
<b>Platforms</b>	Slacom gliders	230,000	1	230,000																																								
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	Current meters (The bottom deployed ADCP would be a 600 khz ADCP plus trawl resistant bottom mount and acoustic release)	42,000	1	42,000																																								

Note	Description of cost item				
	Environmental sensors	Water rosette sampler with CTD	45,000	1	45,000
		Moored water profiler (MMP)	85,000	1	85,000
		Environmental Sample Processor (ESP)	350,000	1	350,000
		<b>TOTAL</b>			1,504,000
2E	Income generation activities for local community including procurement of hardware that can help local communities improve their income such as nets or engines for fishing boats for fishermen, small equipment and training for local women on handicrafts and constructing fences from local materials (20,000usd x 10items =USD 200,000)				
2F 72800	IT hardware and software for communicating storage, analysis and exchange of the data generated from the National Observation System Hardware and software tools for coastal management modeling and design				
2H7 2100	International Company to prepare ICZM Plan Training conducted by equipment supplier (International Company) of the National Observation System				
3A	Admin services/support related to procurement and finance including: processing terms of reference, consultant recruitments, advertising, short-listing & selection, and contract issuance, payments, creation of vendor forms, issuing cheques. (DPC)				
3B	Monthly salaries for PMU staff: Project Manager USD 3500/month (USD 3500 x 12months x 7years =USD294,000) Two Technical Officers USD 1500/month/person (USD 1500 x 12months x 7years x 2person =USD 252,000) One accountant and one admin. Person USD 750/month/person (USD 750x12 months x 7years x 2persons =USD 126,000) Three supporting staff USD 400/month/person (USD 400 x12 months x 7 years x 3 person =USD100,800) Gender Specialist and Communication Specialist USD 1000/month/person (USD 1000 x 12 months x 7 years x 2 person =USD168,000)				
3C	Missions costs for PMU staff to visit the site at an average rate of one visit per week from the project staff over 7 years (USD 100 x 350 visits=USD 35,000)				
3D	Procurement of furniture of main project office and site offices and 2 cars to follow up on field work (USD 20,000 x 3 contracts= USD60,000)				
3E	Stationary and other office consumables (USD 100 x 140 items =USD14,000)				
3F	IT equipment for PMU including photocopiers, printers for main and field offices as well as computers and communication tools for 20 project staff members between PMU and field offices				



Note	Description of cost item
	(USD 500 x 50 items =USD 25,000)
3G	Rent for 3 field offices in 3 governorates out of five governorates that host project construction sites  (USD 4,000 /year x 7 years x 3 offices= USD 84,000)
3H	Communication, Printing and production of project documents  (USD 16,000 x 5 contracts = USD 80,000)
3I	Sundry (USD 100 x 420 items=USD 42,000)  Misc expenses for project office including fuel for cars, O&M costs for the office, office equipment and car, etc.
3J	Systemic, institutional and individual capacity development including study tours for SPA/CORI engineers and participation in relevant international events to present the project  Study tour for government technical staff from the participating governorate to visit soft engineering coastal protection projects (5 trips at cost of USD 25,000 each include 10 engineers for 4 nights at DSA rate of USD 250/night plus USD 750/air tickets/person)  Travel for PMU to participate in international related events 2-person trips/year
3K	Project financial audits and technical evaluations  (USD 7,000 x 10 contracts=USD70,000)

**Cost/Budget Breakdown (for GCF funding only)**

Project Outputs	Budget Account Description	Total (USD)
<b>Output 1: Reduced vulnerability of coastal infrastructure and agricultural assets to coastal flooding damage in hotspot locations in Nile Delta.</b>	Contractual Services - Companies / Nat-Serv	23,750,000
	Travel	15,000
	Materials & Goods	150,000
	Contractual Services - Companies / Int-Serv	150,000
	Local Consultants	30,000
	Miscellaneous Expenses	70,000
	Audio Visual & Print Prod Costs	10,000
	Contractual Services – Individ	588,000
	Equipment and Furniture	100,000
	Training, Workshops and Conference	20,000
	<b>TOTAL Output 1</b>	<b>24,883,000</b>
<b>Output 2: Development of an integrated coastal zone management (ICZM) plan for the entire North Coast of Egypt</b>	Travel	7,000
	Contractual Services - Companies / Int-Serv	2,475,000
	Local Consultants	100,000
	Contractual Services – Individ	30,000
	Equipment and Furniture	1,504,000
	Training, Workshops and Conference	85,000
	Information Technology Equipment	300,000
Grants	200,000	
	<b>TOTAL Output 2</b>	<b>4,701,000</b>
<b>Project Management</b>	Travel	35,000
	Miscellaneous Expenses	42,000
	Audio Visual & Print Prod Costs	80,000
	Contractual Services – Individ	940,800
	Equipment and Furniture	60,000
	Training, Workshops and Conference	150,000
	Information Technology Equipment	25,000
	Supplies	14,000
Rental & Maintenance-Premises	84,000	

<b>Project Outputs</b>	<b>Budget Account Description</b>	<b>Total (USD)</b>
	Professional Services – Int	70,000
	Services to Projects	300,000
	<b>TOTAL Project Management</b>	<b>1,800,800</b>
	<b>TOTAL GCF</b>	<b>31,384,800</b>

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## **X. LEGAL CONTEXT**

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Egypt and UNDP, signed on (date). All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by Ministry of Water Resources and Irrigation in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

By signing this UNDP GCF project document, the Implementing Partner also agrees to the terms and conditions of the GCF Funded Activity Agreement (FAA) included in Annex and to use the GCF funds for the purposes for which they were provided. UNDP has the right to terminate this project should the Implementing Partner breach the terms of the GCF FFA.

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## **XI. RISK MANAGEMENT:**

Consistent with the Article III of the SBAA [*or the Supplemental Provisions to the Project Document*], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.

The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml).

Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).

The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at [www.undp.org](http://www.undp.org).

In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will

inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

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## **XII. MANDATORY ANNEXES**

The following documents are mandatory annexes and must be included as part of the final project document package. These documents must be posted to [open.undp.org](http://open.undp.org), and can also be posted to the UNDP County Office website as appropriate.

1. GCF Term sheet and Funding Activity Agreement
2. Direct project cost letter of agreement (template)
3. Letter of agreement between the Implementing Partner and Responsible Parties
4. Letters of co-financing
5. Social and environmental screening procedure (signed) and management plan for moderate risk projects (in English and local language as required by GCF disclosure policy. Note that these documents should have been disclosed on the UNDP CO website for 30 days in advance of the GCF Board Decision to approve this project.)
6. Gender analysis and action plan
7. Map of project location (s) with GPS coordinates
8. Monitoring Plan (see template below)
9. Evaluation Plan (see template below)
10. Timetable of project implementation (included as Annex to the GCF project document)
11. Procurement plan (included as Annex to the GCF project document)
12. Terms of reference for Project staff (including Project Manager, Accountant, M&E specialist; Gender specialist; Safeguards advisor etc... as appropriate)
13. UNDP Project Quality Assurance Report (to be completed by UNDP Country Office)
14. UNDP Risk Log (complete offline template below)
15. Results of the capacity assessment of the project implementing partner and HACT micro assessment (to be completed by UNDP Country Office)
16. Any additional agreements, such as cost sharing agreements, project cooperation agreements signed with NGOs (where the NGO is designated as the “executing entity”)





**Monitoring Plan:** The Project Manager will collect results data according to the following monitoring plan.

**Guidance to project developer:** *The data for most indicators should be readily available from existing and credible national or international sources. It should be feasible and affordable to gather the data for the indicators on an annual basis.*

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
SDG indicator	<b>Indicator 1</b>	<i>Describe the indicator</i>	<i>List the source of the data or explain how the data will be collected and which methodology will be used .</i>	Annually Reported in DO tab of the Annual Project Report	<i>For example, National Office of Statistics; UNDP Country Office; Project consultant</i>	<i>Consultant report  National statistics report</i>	<i>List assumptions and risks to collecting the project objective data</i>
	<b>Indicator 1</b>	No. of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	<i>Government official statements</i>	Annually	PMU	<i>Consultant report</i>	<i>Availability of accurate data on human and economic losses</i>
UNDP Strategic Plan IRRF Indicators	<b>Indicator 1</b>	Extent to which climate finance is accessed	<i>Government records</i>	Annually	PMU	<i>Consultant report</i>	<i>Availability of segregated breakdown of national budget including reference to climate change related activities</i>
	<b>Indicator 2</b>	Extent to which there is a system in place to access, deliver, monitor, report on and verify climate finance.	<i>Consultant</i>	Annually	PMU	<i>Consultant report</i>	<i>As above</i>
	<b>Indicator 3</b>	Extent to which implementation of measures, plans, strategies, policies, programs and budgets to achieve low-emission and	<i>Fourth National Communication Report</i>	One time	UNDP	<i>National report</i>	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
		climate-resilient development objectives has improved.					
	<b>Indicator 4</b>	Number of direct project beneficiaries.	<i>Project progress report</i>	<i>Twice throughout the project</i>	<i>PMU</i>	<i>Project survey</i>	Government approval to conduct the study
<b>Fund level Impact</b>	<b>Indicator 1</b>	Number of new infrastructure constructed to withstand condition from climate variability & change	<i>Progress reports, contactors records, financial cash flow records</i>	<i>Annually</i>	<i>UNDP</i>	Annual progress report; mid-term review; terminal evaluation	Environmental and social impact assessment is completed and approved without delay; There is a land-use agreement with the GoE
<b>Project Outcome</b> Strengthened institutional and regulatory systems for climate-responsive planning and development	<b>Indicator 1</b>	Institutional and regulatory frameworks capable of integrating climate risks into coastal zone planning and effective action	<i>Shore Protection Agency Reports</i>	<i>Bi-Annually</i>	<i>PMU</i>	Climate change related budget and expenditure reports from coastal governorates; Annual progress report	There is not disruptive government led restructuring of the various ministries involved in coastal management
<b>Project Outcome</b> Strengthened adaptive capacity & reduced exposure to climate risks	<b>Indicator 1</b>	Number of males and females benefiting from soft coastal protection measures	<i>National statistics</i>	<i>Annually</i>	<i>PMU</i>	Implementation report by construction vendor; Annual progress report; mid-term review; terminal evaluation	There is not a sudden and unexpected migration of people from other parts of Egypt.
<b>Project Output1</b> Reduced	<b>Indicator 1</b>	The total length of vulnerable hotspots protected	<i>Progress reports, contactors records, financial cash flow records</i>	<i>Annually</i>	<i>NPM, PD, UNDP</i>	<ul style="list-style-type: none"> <li>Detailed specifications and drawings for the soft</li> </ul>	<ul style="list-style-type: none"> <li>Stability is maintained in Egypt</li> <li>There is no conflicts that</li> </ul>

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
vulnerability of coastal infrastructure and agricultural assets to coastal flooding damage in hotspot locations in Nile Delta.						<ul style="list-style-type: none"> <li>protection measures</li> <li>Implementation report by assessment/ construction vendor;</li> <li>Annual progress report;</li> <li>MTR; terminal review</li> </ul>	will disrupt construction or supply chains required for materials both within Egypt and outside Egypt
<b>Project Output2</b> Development of an integrated coastal zone management plan (ICZM) for the entire North Coast of Egypt	<b>Indicator 1</b>	<ul style="list-style-type: none"> <li>Assessment of the capacity needs of institutions and individuals (women and men) for ICZM planning</li> </ul>	<i>As above</i>	<i>As above</i>	<i>As above</i>	<ul style="list-style-type: none"> <li>Assessment report</li> <li>Annual progress report; questionnaires; mid-term review; terminal evaluation</li> </ul>	<ul style="list-style-type: none"> <li>There is not a government restructuring,</li> <li>There is government stability that allows for the review and adoption of the ICZM plan</li> <li>There is not turnover of staff beyond what is expected for natural reasons</li> </ul>
	<b>Indicator 2</b>	<ul style="list-style-type: none"> <li>Number of technical officers (men and women) trained on modeling and other skills associated with integrated coastal zone planning</li> </ul>	<i>As above</i>	<i>As above</i>	<i>As above</i>	<ul style="list-style-type: none"> <li>Training reports</li> <li>no institutional arrangements where technical officers (men and women) can gain technical skills needed for undertaking integrated coastal zone management planning under climate change</li> <li>Annual progress report; MTR; terminal evaluation</li> </ul>	
	<b>Indicator 3</b>	<ul style="list-style-type: none"> <li>Setup of monitoring equipment for national</li> </ul>	<i>As above</i>	<i>As above</i>	<i>As above</i>	<ul style="list-style-type: none"> <li>Procurement documents</li> <li>Annual progress report; MTR; terminal</li> </ul>	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
		observation system				evaluation	
	<b>Indicator 4</b>	<ul style="list-style-type: none"> <li>Government of Egypt has adopted ICZM Plan</li> </ul>				<i>Officially adopted ICZM Plan by GoE</i>	
<b>Mid-term Review</b>	N/A	N/A	To be outlined in MTR inception report		<i>Independent evaluator</i>	Completed MTR	
<b>Environmental and Social risks and management plans, as relevant.</b>	N/A	N/A	Updated SESP and management plans	Annually	Project Manager UNDP CO	Updated SESP	
<b>Gender action plan as relevant</b>							
<b>Stakeholder engagement plan as relevant</b>							

**Evaluation Plan:**

<b>Evaluation Title</b>	<b>Planned start date Month/year</b>	<b>Planned end date Month/year</b>	<b>Included in the Country Office Evaluation Plan</b>	<b>Budget for consultants<sup>18</sup></b>	<b>Other budget (i.e. travel, site visits etc...)</b>	<b>Budget for translation</b>
<b>Mid Term Evaluation</b>	<i>Q4 2021</i>	<i>Q1 2022</i>	Yes Mandatory	<i>USD 25,000</i>	<i>Included in consultant budget</i>	<i>USD 3,000</i>
<b>Terminal Evaluation</b>	<i>Q1 2025</i>	<i>Q2 2025</i>	Yes Mandatory	<i>USD 45,000</i>	<i>Included in consultant budget</i>	<i>USD 3,000</i>
<b>Financial Audit</b>	<i>Q1 Each Year</i>	<i>Q2 Each Year</i>		<i>USD 2,100/year Total USD 14,7000</i>	<i>Included in the consultant budget</i>	
<b>Total evaluation budget</b>				USD = USD 79,700		

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<sup>18</sup> The budget will vary depending on the number of consultants required (for full size projects should be two consultants); the number of project sites to be visited; and other travel related costs. Average # total working days per consultant not including travel is between 22-25 working days.

## OFFLINE UNDP RISK LOG

To be entered into Atlas by UNDP Country Office

#	Description	Date Identified	Type (equivalent to GCF risk category)	Impact & Probability (equivalent to GCF level of impact + probability of risk occurring)	Countermeasures / Mngt response (equivalent to GCF mitigation measures)	Owner	Submitted, updated by	Last Update	Status
	<p>Enter a brief description of the risk</p> <p><i>(Copy from GCF funding proposal section G.2 Risk Factors and Mitigation Measures)</i></p> <p><i>(In Atlas, use the Description field. Note: This field cannot be modified after first data entry)</i></p>	<p>When was the risk first identified</p> <p><i>(In Atlas, select date. Note: date cannot be modified after initial entry)</i></p>	<p>Environmental Financial Operational Organizational Political Regulatory Strategic Other</p> <p><i>(Copy from GCF funding proposal section G.2 Risk Factors and Mitigation Measures)</i></p> <p><i>(In Atlas, select from list)</i></p>	<p>Describe the potential effect on the project if this risk were to occur</p> <p>Enter probability on a scale from 1 (low) to 5 (high) P = (choose 1,2,3,4,5)</p> <p>Enter impact on a scale from 1 (low) to 5 (high) I =(choose 1,2,3,4,5)</p> <p><i>(Copy from GCF funding proposal section G.2 Risk Factors and Mitigation Measures)</i></p> <p><i>(in Atlas, use the Management Response box. Check "critical" if the impact and probability are high)</i></p>	<p>What actions have been taken/will be taken to counter this risk</p> <p><i>(Copy from GCF funding proposal section G.2 Risk Factors and Mitigation Measures)</i></p> <p><i>(in Atlas, use the Management Response box. This field can be modified at any time. Create separate boxes as necessary using "+", for instance to record updates at different times)</i></p>	<p>Who has been appointed to keep an eye on this risk</p> <p><i>(in Atlas, use the Management Response box)</i></p>	<p>Who submitted the risk</p> <p><i>(In Atlas, automatically recorded)</i></p>	<p>When was the status of the risk last checked</p> <p><i>(In Atlas, automatically recorded)</i></p>	<p>e.g. over, reducing, increasing, no change</p> <p><i>(in Atlas, use the Management Response box)</i></p>
1	<p>Implementing a new planning framework within an existing planning context</p>		<p>Technical and operational</p>	<p>The impact of this risk will be very high if it is to occur</p> <p>P =4 I = 5</p>	<p>Risk mitigation will benefit from experiences over the past decades to create buy-in and institutional momentum to integrate climate change into an integrated planning framework. Reasons for resistance will be</p>				

	with sharply delineated lines of responsibility could create resistance				analyzed and appropriate approaches to eliminate them will be identified and applied.				
2	Lack of agreement among key stakeholders on the developed ICZM Plan		Operational	P=3 I=5	<i>The project will employ experts in participatory approaches. International expertise will be sought for this component, as needed, to ensure the utilization of highest level of available modeling techniques and to provide evidence based proposals to achieve the best possible interest of all stakeholders. Experts will be selected based on competitive selection process starting from the identification if the assignment can be conducted by an individual expert or needs company with multi-disciplinary team. Market assessments will be done prior to procurement on whether there is local capacity in-country for the work at hand or whether it would be necessary to procure from the international market place. Terms of References will then be advertised and the selection panel including UNDP and the Government will evaluate the proposals received and decide on the appointment based on the combination of financial and technical proposals. EOIs and RFPs may be used as well.</i>				
3	Low skills and staff limitations could impede the monitoring and follow-up of implementation		Operational	P:=2 I=3	Capacity needs assessments will be undertaken to identify any specific needs and gaps. The project is building on significant activities to strengthen capacities of staff in key national institutions and local governments, considered the needs for follow				

					up and implementation after the project is finalized. UNDP will ensure that a long term M&E plan will be an output of the project for the sustainability of operations after end of the GCF project including needed financial and human resources.				
4	Long term sustainability of investments (e.g. info. systems, coastal protection measures) is threatened if project interventions do not prevent the ongoing coastal flooding, and vulnerabilities in urban and agricultural areas increase		Regulatory	P= 2 I= 2	Project interventions will be integrated into the planning and budgeting processes of key national agencies and local governments. Implementation will actively engage local community groups to ensure ownership and long-term sustainability. Project interventions will be decided during the development of the ICZM plan while only those that have been tested and subject to a thorough cost-effectiveness analysis will be included in the ICZM plan. Extensive studies and thorough design will be conducted using international expertise, as needed, to reduce any chances of faulty design. A strong M&E programme will be put in place and field officers will be recruited through the project to ensure local government staff and communities have access to technical advice, and opportunities to express concerns. Through regular monitoring, success of interventions will be measured and communicated to provide assurance, as well as to inspire behavior change. The M&E plan will be prepared by the project team according to the UNDP standard format and will be discussed with the government and endorsed by the project board. The project M&E plan includes among				



					other measures inception workshop, project board meetings, preparation of project progress reports, measurements of progress means verification, independent Mid Term and Final Evaluations, field visits, and project annual and terminal reports.				
5	Extreme climatic events disrupt implementation or damages investments, resulting in delays and additional costs. Egypt is at increased risk of climate-related natural hazards, such as storm surges and flashfloods which could impact implementation as well as long term sustainability of investments.		Operational	P= 2 I=4	Timing of fieldworks and construction activities during implementation will be scheduled to minimize risk, to the extent possible (e.g. planning around storm periods). Design of investment projects will be following the results of a thorough risk assessment to ensure long term resilience.				
6	Sediment movement during construction works		Environmental	P=3 I=3	There is the likelihood for sediment movement during the construction of coastal infrastructure. To ensure that the mobilized sediment will result in environmental impacts, it will be				

					necessary to prepare an Erosion, Drainage and Sediment Control Plan (EDSCP) and install silt curtains to restrict sediment movement from the site. Further, any earthworks should be undertaken during the dry season and compacted sufficiently to reduce sediment movement. The EDSCP should contain aspects including but not limited to the installation of sediment curtains to reduce sediment movement and the quick placement of footing material. These impacts will be spatially and temporally restricted to works periods.				
7	Contamination of existing water sources		Environmental	P=3 I=3	To ensure contaminants do not enter marine, surface and groundwater systems, a water quality monitoring plan has been developed to ensure chemicals control. This will involve testing sediment prior to movement and planning so that works are not undertaken during rain events. Where rainfall is anticipated, appropriate material should be placed under sediments prior to excavation to ensure there is no seepage into groundwater. The water quality monitoring for the sources will be designed to identify potential impacts so that management measures can be proactively rather than reactively enacted upon.				
8	Construction Noise		Environmental	P=1 I=2	The construction contractor should consider any sensitive receptors including communities. Noise will be limited to excavators removing				

					sediment from the water course. It is likely that more noise will be generated through the use of excavators and trucks moving sediment. Where necessary, noise shields should be constructed to reduce the potential for noise to reach these communities if an impact occurs. The noise will have very limited temporal scales				

*Determine overall risk rating as follows:*

<i>Score</i>	<i>Rating</i>
5	Critical
4	Severe
3	Moderate
2	Minor
1	Negligible

**Rating the 'Probability' of a Risk**

<i>Score</i>	<i>Rating</i>
5	Expected
4	Highly Likely
3	Moderately likely
2	Not Likely
1	Slight

The combination of impact and probability is then used to determine the overall significance of the risk (Low, Moderate or High) using Table 4 as a guideline.

**Determining 'Significance' of Risk**

<b>Impact</b>	5					
	4					
	3					
	2					
	1					
		1	2	3	4	5
<b>Probability</b>						
<b>Green = Low, Yellow = Moderate, Red = High</b>						