

Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management Terminal Evaluation Report

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Executive summary

The Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management project (hereafter, the Project) was supported through the Special Climate Change Fund of the Global Environment Facility. UNDP was the Implementing Partner, with Execution through the Government of Egypt's Ministry of Water Resources and Irrigation, and its subsidiary institutions. The GEF grant was \$4 million, with co-financing projected at \$12.84 million, to run from November 2009 until November 2014. At the time of the Terminal Evaluation (January 2018), the Project end-date had been extended until March 2018; grant expenditure had reached \$2.83 million, with actual co-financing calculated at \$24.766 million.

In Egypt's Nile Delta coastal zone, valuable agricultural areas, densely populated urban areas, and critical industry and infrastructure are concentrated in low-lying areas exposed to coastal flooding. Long-term risks from coastal subsidence and erosion are exacerbated by impacts of climate change on sea level rise and the increasing frequency and intensity of storms. Consequently, economic and social vulnerability to climate risks are extremely high in the Nile Delta coastal zone, and are set against a background of challenges with achieving environmentally sustainable economic and social development in a complex and sensitive area.

The Project's Objective has been to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone in the Nile Delta through achieving three Outcomes; 1) a strengthened regulatory framework and institutional capacity to improve resilience of coastal settlements and development infrastructure, 2) implementation of innovative and environmentally friendly adaptation measures, and 3) establishment of a monitoring and assessment framework and knowledge management systems on adaptation.

The independent Terminal Evaluation focuses on the Project's achievement of intended outcomes, its effectiveness, efficiency, and timeliness in implementation, and highlights recommendations for future projects. 12 of the 23 recommendations in Section 4 are particularly aimed at a new project funded by the Green Climate Fund which will replicate and scale out the Project's achievements, and is anticipated to start in the summer of 2018.

The Terminal Evaluation concludes that despite extensive delays, the Project has largely achieved its overall objectives. Challenges in delivery arose primarily from: i) weak conceptual framing in the Project Document of the distinction between integrated coastal zone management and shoreline protection, ii) inadequate analysis in the Project Document of the institutional environment, iii) ongoing political instability in Egypt after 2011. Despite these challenges, performance increased markedly after the Mid-Term Evaluation (2013), and appointment of a new Project Manager and increase in political stability (2014).

The Project remains **Relevant** due to the global and national significance of the Nile Delta coastal zone as a hotspot of climate change vulnerability, and the alignment of Project objectives with GEF and national policies and strategies for climate change

adaptation and ICZM. The overall project formulation approach is rated as **Moderately Satisfactory**, with conceptual inconsistencies and inadequate assessment of the institutional environment for ICZM contributing to some of the challenges later experienced by the Project. Monitoring and evaluation was **Moderately Satisfactory**; the Project would have benefited greatly from a less complex implementation system, a clearer and more consistent use of the Strategic Results Framework, and tools that better supported the Project's regulatory and institutional reform agenda.

Execution by UNDP was **Satisfactory**, with highly effective staff deeply engaged in the Project, although financial reporting could have been more robust. Stakeholder participation in the Project was **Moderately Satisfactory**; close engagement with key partners in the Ministry of Water Resources and Irrigation was not matched by participation from broader stakeholders in integrated coastal zone management, including, sub-national units of government, local communities and the private sector. Overall, efficiency was **Satisfactory** as the Project leveraged funding with a ratio of 1:4.95 during its lifespan and raised a further \$105.2 million for replication and out-scaling, despite delays in activating co-finance early in Project implementation.

Overall progress against Objectives was **Satisfactory**, despite delays and challenges in implementation due to misconceptualisations in the framing of outcomes and outputs during Project formulation. These issues particularly affected progress towards regulatory and institutional reform, yet the Project team adaptive creatively and used resources effectively to advance towards overall objectives; progress against Outcome 1 is therefore rated as **Moderately Satisfactory**. Implementation of pilot adaptation measures was also subject to significant delays, but reached **Satisfactory** levels of achievement the Project's final years despite limited gains for some outputs. Progress with Outcome 3 was rated as **Moderately Unsatisfactory** due a lack of demonstrable results in this area, although this could be ameliorated by swift action. Sustainability of the Project is **Likely**, due the significant change in attitudes, behaviours and co-financing commitment of the Government of Egypt towards soft coastal protections. These factors also contribute to a **Satisfactory** catalytic effect, alongside an extensive technical training programme, but are set against limited progress with integrated coastal zone management.

Based on these criteria, the Project's overall performance is judged to be **Satisfactory**. Some areas of the Project did not reach the targets envisioned in the Project Document, notably regarding reform of the regulatory and institutional framework for ICZM. However, the Project made significant progress towards core objectives, and had a catalytic effect on soft protections and climate risk management in Egypt's coastal areas. The significant level of continuation funding secured from the GCF for outscaling and replication of interventions, and advancing towards the goal of ICZM reform, is a recognition of these achievements.

Based on these findings, the Terminal Evaluation report makes 23 recommendations under four categories; i) actions for the Project to undertake before closure, ii) follow-up actions for partners to ensure the realisation of benefits from the Project, iii) recommendations to the anticipated Green Climate Fund project, and iv) recommendations to GEF and UNDP for future projects.

Acronyms and Abbreviations

4.44
titute
ntal Affairs Agency
Facility
t
Institute
ne management
l zones
stal Zone Management Committee
n
esources and Irrigation
Coastal Zone Management Committee
arch Centre
Unit
nge Fund
Authority
mework
opment Program
y Office

1. Introduction

1.1. Brief description of the project

- 1. The dominant feature of Egypt's Northern Coastal Zone is the low-lying delta of the River Nile, with its large cities, industry, agriculture and tourism. The Delta and the narrow valley of the Nile comprise 5.5% of the total area of Egypt but over 95% of its people of which 25% live in the Low Elevation Coastal Zone (LECZ) areas. The Nile Delta and Mediterranean Coast include 30-40% of Egypt's agricultural production, half of Egypt's industrial production, which is concentrated mainly in Alexandria, Damietta and Port Said.
- 2. With much of Egypt's infrastructure and development and prime agricultural land concentrated in the Nile delta, coastal inundation or saline intrusion caused by anthropogenic climate change induced sea-level rise poses a direct and critical risk to Egypt's entire economy. Egypt's social sensitivity to sea level rise is particularly high. It is expected that the climate change will produce varied impacts on the local lagoon population depending on how climate changes interact with, if not exacerbate, existing stresses e.g. population growth, poverty, poor nutrition, accumulating levels of air, land, and water pollution, ever growing gender and class inequalities. In addition to the current trends, Egypt's Mediterranean coast and the Nile Delta have been identified as highly vulnerable to climate change induced Sea Level Rise (SLR).
- 3. The objective of the "Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management" project (hereafter: the Project) is to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone in the Nile delta by (1) strengthening the regulatory framework and institutional capacity to improve resilience of coastal settlements and development infrastructure, (2) implementing innovative and environmentally friendly measures that facilitate/promote adaptation in the Nile Delta, and (3) establishing a monitoring and assessment framework and knowledge management systems on adaptation.
- 4. UNDP is the GEF Implementing Agency in this project, while the Ministry of Water Resources and Irrigation (MWRI) is the Executing Partner, through the Coastal Research Institute (CORI) and the Shore Protection Agency (SPA). UNDP Egypt's Country Office (UNDP-CO) is an active partner in the project's implementation under the UNDP National Execution modality. The Project Management Unit (PMU) is based at CORI in Alexandria. UNDP-CO supports the implementation of the project by contracting project personnel, experts and subcontractors, undertaking procurement, and providing other assistance upon request of the National Executing Agency. Meanwhile, it also monitors the project's implementation and achievement of the project outcomes and outputs, and ensures the proper use of UNDP/GEF funds.

1.2. Evaluation purpose and scope

- 5. As a Terminal Evaluation coming near the end of the Project's activities, the objectives of this evaluation are to assess the achievement of project results, and to identify lessons and recommendations for out- and upscaling good practice on climate adaptation and coastal management in Egypt. The Terminal Evaluation's main objectives are:
 - 1. To document the lessons learnt on project management and monitoring functions of climate change adaptation projects;
 - 2. To document the lessons learnt for enhancing accountability for achieving climate change adaptation objectives;
 - 3. To enhance organisational and development learning;
 - 4. To enable informed decision-making for future climate change adaptation programming.
- 6. As set out in the Terms of Reference (see Annex 1) the evaluation focuses on Project results and progress towards outcomes. In particular, the evaluation examines the Project's design and relevance, strategic results framework, management arrangements, the timeline and rate of implementation, and the Project's overall success, in terms of sustainability, effectiveness, efficiency, contribution to capacity building, replication, and synergy with other projects.
- 7. Where appropriate, lessons and recommendations produced by the Terminal Evaluation address future climate change adaptation projects, especially those developing soft /complementary engineering solutions to protect low-lying coastal lands in the Nile Delta. At the time of writing (January 2018), a significant Green Climate Fund (GCF) investment is expected for the Nile Delta region that substantially builds on the experience and foundations laid by the Project. The Terminal Evaluation therefore specifically addresses lessons and recommendations to the anticipated GCF project. The report also presents recommendations of broader applicability to UNDP, GEF, and the Government of Egypt that highlights better and worse practices in areas under the evaluation's scope.

1.3. Evaluation methodology

8. The Terminal Evaluation draws on desk analysis of project documents, reports, and secondary data, interviews and consultation with key stakeholders, staff from implementing and executing agencies, and the project management unit, and visits to observe the pilot intervention sites. Documentary evidence included project management documentation, annual implementation reports, financial reports, and reports and studies produced by the Project. The Evaluator is also informed by his experience of living and working in Egypt on climate change adaptation and coastal management issues between 2003 and 2013.

1.4. Structure of the report

9. The Evaluation Report consists of four sections. Section 1 introduces the Project, and the evaluation's scope and methodology. Section 2 provides detail on Project implementation, including the Project timeline, objectives, key stakeholders, and expected results. Section 3 presents the main evaluation findings, examining the

Project design, implementation and results in turn. Section 4 presents the evaluation's key lessons and recommendation¹.

¹ The report structure has been slightly revised from the minimum criteria for GEF evaluations as set out in the Terms of Reference, drawing on guidance from UNDP (2012).

2. Project description and development context

2.1. Project implementation status

- 10. The project identification form (PIF) was first submitted in September 2006, and re-submitted on 20 May 2008. Endorsement by the GEF CEO was requested on 25 June 2009, and on November 5th, 2009 the Project Document was officially signed. Following signature, UNDP and MWRI finalised agreement on implementation arrangements, including office location and facilities provided to the project as part of the Government's in-kind contribution. Terms of Reference were agreed for the Project Manager (PM) and the position was advertised in early December 2009. The recruitment process took approximately three months, and Dr. Mohamed Borhan took up the role of PM at the beginning of April 2010. In parallel, UNDP recruited Jonathon McCue as International Consultant (IC) to the project. The IC started work at roughly the same time as the PM, enabling a smooth start to the Inception Phase in April 2010. The Inception Workshop took place on 5-6 December 2010, and the Inception Report - marking the end of the Inception Phase - was submitted on 15 May 2011. The Mid-Term Evaluation concluded that although the project's 13-month Inception Phase was longer than might expected, this was justified by Egypt's political instability during January and February 2011. The Terminal Evaluation endorses that finding and notes that although the situation on the streets calmed after February 2011, continued political and institutional instability affected the operations of government at least until the summer of 2014.
- 11. The Project was planned to last 5 years, to conclude in November 2014. However, both the Inception and Implementation Phases of the project experienced significant delays that led to a series of no-cost extensions. The factors causing delays are discussed in the main body of this report's findings, but included; national political instability and uncertainty, leadership changes in key implementation partners, and the time taken to obtain permits for interventions on the ground. Frustrations with limited progress contributed to turnover in key staffing positions; in May 2013 the PM resigned, and was replaced by Mohamed Ahmed Ali in November 2013. The innovative nature of the proposed interventions also contributed to delays, with additional time needed to engage and reach agreement between key stakeholders.
- 12. Following the Mid-Term Evaluation (March to June 2013), GEF approved a no-cost extension until March 2016. A second no-cost extension until December 2017 was approved in 2016. In January 2018, a final no-cost extension of 3 months was approved to allow the project to close final activities by the end of March 2018. In total the project is expected to have a duration of 96 months by the time it closes. The Terminal Evaluation concludes that these extensions have been justified by significant progress in implementation since 2015. It also finds that the willingness and ability GEF and UNDP to grant extensions while

managing risks appropriately was key to progress of both the Project and the broader agenda of sustainable adaptation to SLR in Egypt



Figure 1: Project implementation timeline and key milestones

2.2. Problems that the project sought to address

- 13. The Project set out to address barriers hindering the institutionalisation of policies and measures for climate change adaptation in Egypt, and to set the basis for reversing present inefficient implementation of policies and measures to protect the Nile Delta area against the climate change driven sea level rise. The project intended to:
 - Improve scientific understanding of the processes leading to climate change and sea level rise, and of the impacts of climate change and SLR in the Nile Delta, covering all the physical, socio-economic, and institutional implications;
 - Address institutional barriers limiting the uptake of Integrated Coastal Zone Management (ICZM) as tool for managing adaption to climate change in the Nile Delta area;
 - Identify cost effective and environmentally sensitive protection measures for the Nile Delta coastal area;
 - Coordinate climate change adaptation management efforts between Egypt's institutions, and other projects, donors and international agencies;
 - Consolidate national and international support for climate change adaptation in Nile Delta area, recognised as a hotspot of vulnerability in the Mediterranean; and
 - Raise public awareness of, and stakeholders' participation in, adaptation to climate change.

2.3. Immediate and development objectives of the project

14. The immediate and development objectives of the Project are not specified in the Project Document. The project's overall Goal is to "enhance Egypt's resilience and reduce vulnerability to Climate Change impacts", while the project's Objective is "to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone (LECZ) in the Nile Delta." The Mid-Term Evaluation concluded that the project Goal and Objective are general, do not capture the project's specific contribution or thematic focus, and yet that the Project's intended objectives are contained in the component titles. The Terminal Evaluation concurs with these findings.

15. The Project's immediate objective is to manage coastal flood risks to low lying areas in the Nile Delta by piloting innovative adaptation measures which complement existing protection structures. Reducing flood risk in these areas contributes to immediate development needs by safeguarding local populations, livelihoods and infrastructure, and enabling new investment opportunities in the protected zone. This immediate objective is complemented by a longer term strategic objective, of increasing resilience and adapting to climate change and SLR in the Nile Delta coastal zone. The adoption of cost-effective, environmentally-friendly coastal protections, coupled with institutional strengthening for ICZM is a reasonable approach to reducing vulnerability to climate change and SLR in the Nile Delta while enhancing sustainable development outcomes.

2.4. Main stakeholders

- 16. Major stakeholders are at the national and governorate (sub-national) levels. The principal national stakeholder is the Ministry of Water Resources and Irrigation (MWRI), through two subsidiary organisations, CoRI and the SPA. The Coastal Research Institute (CoRI), under the National Water Research Centre, is responsible for research on coastal processes and engineering. It monitors the evolution of the Egyptian coast, and studies shoreline dynamics to identify efficient and cost-effective methods for coastal protection. The Shore Protection Authority (SPA) is responsible for shoreline protection in areas with high socioeconomic or natural resource value, and that are threatened by erosion. It develops shore protection plans, designs shore protection works, and implements and subcontracts projects. It also issues license for projects located in the coastal zone area. As Executing Partners, the MWRI, CoRI and SPA were directly involved in project implementation, and the relationship closely managed by the PMU and UNDP.
- 17. The second major national stakeholder is the Egyptian Environmental Affairs Agency (EEAA), the executive agency of the Ministry of State for Environmental Affairs. Among a range of other duties, the EEAA is the national organisation responsible for developing, promoting and coordinating ICZM planning and activities. The EEAA houses the Secretariat of the National Integrated Coastal Zone Management Committee (NICZMC). As stated in the PD, although formally established in 1994, the NICZMC has had long periods of inactivity, and the EEAA has not been able to develop the necessary interministerial support or consensus for a shared, practical vision for advancing ICZM implementation in Egypt. A representative of the EEAA joined the Project's Steering Committee, and EEAA staff were engaged in specific activities.
- 18. The cross-sectoral nature of ICZM implies the significance of a broad range of other governmental stakeholders, particularly those involved in coastal land use and management. In the Nile Delta these include the Governorates (sub-national administrative units), line ministries for agriculture, tourism housing and urban development, the military, port and maritime authorities, and local communities. These stakeholders were briefly identified in the Project Document, and elaborated on in two project outputs; a stakeholder analysis (2011), and a legal analysis (2017)². The Project's general approach to these stakeholders was to keep them informed through consultations and low-level participation (e.g.

 $^{^2}$ Notably, central authorities receive most attention in these documents. Less attention is given to the governorates, local authorities, communities, or the private sector.

attending workshops), and look for opportunities to build collaboration where appropriate. Some of these stakeholders – notably the Governorates and the Damietta Port Authority - were implicated in the design, approval and implementation of pilot projects. See Sections 3.1.4 and 3.2.6 for analysis of the Project's stakeholder engagement approach and implementation.

2.5. Expected Results

- 19. The Mid-Term Evaluation concluded that the project's expected results would be i) increased understanding of climate change impacts on the Nile Delta; ii) enhanced capacity to manage the risks from climate change impacts on the Nile Delta; iii) the demonstration of cost-effective adaptations to sea-level rise; and, iv) removal of institutional barriers to adoption of ICZM at national, regional and local levels. The Terminal Evaluation marginally agrees with these findings.
- 20. The Terminal Evaluation concludes that the Project's key results are likely to be i) the demonstration of soft infrastructure as a complementary, cost-effective and environmentally sensitive adaptation option to sea level rise; ii) a shared understanding within the MWRI and its subsidiaries of the role of shoreline protection within ICZM, and its relevance to economic development; iii) improved technical capacity within SPA and CoRI for coastal process research and engineering; iv) a significant contribution to increasing the awareness of the risks of sea level rise, and the potential of ICZM and shoreline protection to mitigate these risks; and v) the leverage of additional funding from the GCF to scale out soft interventions and scale up commitment to ICZM.
- 21. These achievements are set against a highly dynamic and unstable period in Egypt's modern history, a complex set of institutional challenges, the complexity and ambition of the Project's vision, and a low baseline in terms of awareness and institutional readiness for ICZM and climate change adaptation mainstreaming.

3. Findings

3.1. Project Design and Formulation

3.1.1. Project vision and implementation approach

22. The project document sets out a compelling and ambitious vision for Egypt's Nile Delta coastal zone, in which integrated coastal zone management (ICZM) supports sustainable social, economic and environmental development, and integrates resilience to climate change and sea level rise. The Project's two principal components (1 & 2) tackled relevant and important elements of this challenge. Component 1 focused on the regulatory and institutional framework for ICZM and shoreline protection, while Component 2 focused on demonstrating innovative on the ground adaptation measures. Delivery of both components faced several practical and institutional challenges.

3.1.1.1 Component 1: Integrated Coastal Zone Management vs shoreline protection

- 23. One key constraint facing the Project's implementation approach for Component 1 stemmed from confusion throughout the Project Document over the conceptual and practical distinctions and interlinkages between ICZM and shoreline protection. This conceptual confusion appears to have affected the framing of the Project, particularly in terms of a disconnect between the vision and the implementation strategy.
- 24. ICZM is an approach to managing the complex physical environments, social and economic uses of land and other resources, and institutional arrangements found in coastal zones. It primarily focuses on establishing societal goals for the use of coastal areas, taking actions towards those goals and mitigating tradeoffs between them, managing conflict between coastal resource uses and users. The word 'integrated' refers to the integration of all policy areas, sectors, levels of administration, resource uses and users in the terrestrial and marine components of the coastal area, and also time. ICZM is primarily a set of institutional arrangements for cross-sectoral and multiscale governance and planning. By contrast, shoreline protection is concerned with managing the marine/terrestrial interface, particularly in terms of engineering works to mitigate flood risk and coastal erosion. Where ICZM policies are enacted and informs the objectives of shoreline protection, shoreline protection is more likely to support the integrated sustainable development of coastal areas. In summary, where-as ICZM is primarily a policy and governance challenge, shoreline protection is primarily an engineering challenge.
- 25. As recognised in the Project Document, the baseline for ICZM in Egypt was limited at the time of Project formulation. The legal basis for National and Local ICZM Committees was enshrined in Law 4 of 1994. However, there was no documented case of Local ICZM Committees (LICZMC) forming, and the National ICZM Committee (NICZMC) had met only a few times and was currently inactive. Policies for ICZM had been drafted but not implemented, and

did not incorporate sea level rise or climate change risks. The Project's targets of activating the NICZM, having a strengthened regulatory and institutional framework in place, and developing an ICZM masterplan for the north coast were therefore highly relevant, but highly ambitious against such a low baseline.

- 26. The Egyptian Environmental Affairs Agency (EEAA) is the national focal point for ICZM, responsible for advancing the regulatory and institutional framework of ICZM, and convenor of the NICZMC. The Project Document and Mid-Term Evaluation concluded that ICZM's "failure to launch" in Egypt was due to the EEAA's inability to broker agreement between other ministries and stakeholders over a common, practical vision for ICZM. A 2017 report commissioned by the Project argues that in the absence of a guiding strategy, the NICZMC lacked the authority to resolve underlying conflicts between stakeholders and develop a shared strategy. The Terminal Evaluation concurs with this argument. However, the Project Document did not address in detail an implementation approach for activating the NICZMC or advancing reforms in the regulatory environment (Output 1.1). As noted in the MTE, the EEAA was also not a full partner in the Project's implementation strategy, despite their role as the leading stakeholder on the ICZM agenda. The Project's theory of change for engaging with and advancing reforms to the ICZM institutional and regulatory framework is therefore not clearly laid out in the Project Document or implementation approach.
- 27. Other outputs under Component 1 (Outputs 1.2, 1.3 and 1.4) do include detail on measures for institutional strengthening. However, these are focused on the executing partners, MWRI, SPA and CORI. Specifically, these include measures to upgrade capacities for integrating climate risk into the design of shoreline protection works, coastal adaptation planning, and monitoring and evaluation. These are relevant and important measures to effect institutional strengthening, and appear to be guided by an informed theory of change. However, these activities focus on strengthening capacity for shoreline protection rather than for ICZM. The Project Objectives might therefore have been better framed in terms of "institutional strengthening to ensure shoreline protection effectively manages climate risk", which would remain an important and relevant outcome.

3.1.1.2 Component 2: On the ground adaptation measures

- 28. The Project Document set out a clear rationale for investing in the demonstration of innovative and environmentally sensitive adaptation measures for coastal protection. Focusing on low-lying coastal lagoons endangered by multiple threats, including habitat loss and water pollution in addition to sea level rise, the Project Document proposed to trial adaptation measures that would both restore coastal habitats and increase resilience to coastal flood risk. The proposed "*Living Shorelines Approach*", been trialled in the USA, would also provide a basis for community engagement in local adaptation and spatial planning. In practice, the proposed approach, proposed interventions, and the proposed locations for pilot interventions would all became subjects of contention between the Project's Executing Partners. This was largely due to historic institutional priorities and orientations for shoreline protection.
- 29. Historically, shoreline protection measures in Egypt have understandably prioritised protection for the most vulnerable and valuable social and economic assets, usually cities and industrial infrastructure such as ports. The specific vulnerabilities of these assets, usually located on highly dynamic parts of the shoreline, has meant a focus on hard protection measures; sea walls, breakwaters and the like, made from concrete and other hard materials. In contrast to these

priorities, the Project proposed several radical innovations. The first was to trial soft structures, interventions in which the SPA had little experience or confidence. The second was to focus on rural and lake areas, which have significantly lower social and economic value than urban and industrial centres. The Project also emphasised the importance of investing in protections against climate-changed induced sea level rise. At the time of project formulation Egypt's engineering community was aware of climate change, but most engineers were not necessarily convinced that climate adaptation was an urgent and important priority. Key Project stakeholders, notably in the SPA, took a long time to accept these ideas.

- 30. The SPA's main concerns focused on the feasibility of soft structures beach nourishment and sand dunes to substantially mitigate erosion and flood risk. The MTE (2013) details how the Project's "Living Shorelines Approach" was replaced with the European "Living with the Sea" concept in response to the SPA's concerns. The time take to reach agreement over proposed interventions and pilot sites continued to delay progress until 2014, when all parties agreed to abide by the findings of numerical modelling to be conducted by the NWRC's Hydraulic Research Institute. The resulting modelling and training convinced SPA that soft structures would be appropriate interventions to counter risks in certain areas, and paved the way for implementation of pilot activities by SPA and CORI in 2015.
- **31.** The Project Document did not anticipate the challenges that the Project would face in reaching agreement on interventions and pilot sites. These challenges contributed to substantial delays in implementation and expenditure of funds, and without successive extensions by UNDP-GEF, the Project would have failed to achieve its stated objectives in this area. The eventual success of the pilot projects has vindicated the Project Documents initial vision and the persistence and tenacity of the PMU, UNDP-GEF, and the Executing Partners. In discussing the Project with SPA officials, the Evaluator encountered attitudes towards soft structures that were unrecognisable to those prevalent in 2012.

3.1.1.3 Summary

32. The Project's vision was and remains highly relevant and important to the long term sustainable development of the Nile Delta coastline, but highly challenging to achieve in the lifespan of one project. Project implementation was hampered by a lack of conceptual clarity over ICZM vs shoreline protection, unanticipated institutional challenges in achieving outputs for ICZM and implementing soft structures, and an unclear overarching theory of change to guide the Project.

3.1.2 The Strategic Results Framework

3.1.2.1 The logical hierarchy

- **33**. The Project's overall Goal is stated as being "to enhance Egypt's resilience and reduce vulnerability to Climate Change impacts". The Evaluator understands this as being the strategic vision to which the Project contributes, rather than the Project's direct goal. While improving the management of climate risk in the coastal zone and reducing vulnerability to sea level rise and coastal flooding is key to national adaptation, the Project focuses on just one aspect of Egypt's climate change vulnerabilities. The Goal is relevant, but should have been framed with more specificity.
- **34**. The Project's Objective is stated as being "to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone (LECZ) in

the Nile Delta". The Objective lacks specificity, in terms of how that will be achieved, and does not reference the role of ICZM. The Objective Target focuses on implementation of on the ground pilot projects rather than the institutional reforms required to integrated SLR risks into development planning. One Objective Indicator focuses on enhanced resilience due to implemented adaptation measures; while it quantifies the area to be protected, it does not quantify the increase in resilience or define how it might be measured. The second Objective Indicator quantifies a target for the SPA's budget earmarked for measures demonstrated by the project. The relationship between Objective Indicators and attainment of the Objective is not clear, and the Strategic Results Framework would have greatly benefitted from a fully articulated theory of change at this point. As stated in the MTE, the Project's operational objectives can be interpolated from the Outcomes stated in the SRF.

- **35.** Outcome 1 is stated as being "strengthened Regulatory Framework and Institutional Capacity to improve resilience of coastal settlements and development infrastructure". This is framed appropriately as an outcome, and can also be understood as an operational objective for the Project. Outcome 1 Indicators are objectively verifiable, and are logical prerequisite Outputs for attaining the Outcome. It is less clear whether Outcome 1 was feasible within the Project's timeframe, given the complexities and institutional challenges of making progress with the reforms required to activate ICZM in Egypt. As noted in Section 3.1.1.1, the Project's primary engagement with MWRI as executing partner and focus on strengthening the capacities of MWRI's subsidiaries was a logical pathway to achieve Outputs 1.2, 1.3 and 1.4. However, limited engagement with the EEAA and other key stakeholders for ICZM makes it whether attaining Output 1.1 (ICZM regulatory and institutional reform) was feasible.
- **36**. Outcome 2 is stated as being "strategies and measures that facilitate adaptation to climate change impacts, SLR in particular, are implemented on the ground in vulnerable coastal areas". This is framed appropriately as an outcome, and can also be understood as an operational objective for the Project. The Outcome was feasible within the Project's lifetime. The sole Outcome 2 Indicator is objectively verifiable. Although the indicator required changing once the "*Living Shoreline Approach*" was abandoned, the Outcome remained relevant.
- **37**. Outcome 3 is stated as "M&E framework and knowledge management system in place". This is framed appropriately as an outcome, and can also be understood as an operational objective for the Project. The Outcome was feasible within the Project's lifetime. Both Outcome 3 Indicators are objectively verifiable. It is not clear that Indicator 3.2 would have been attainable within the Project's lifetime, as it required incorporating the Living Shoreline Approach into the plans of undefined government agencies.

3.1.2.2 Indicators and Targets

38. The SRF contained 8 indicators; 2 Objective Indictors, 3 Outcome 1 Indicators, 1 Outcome 2 Indicators, and 2 Outcome 3 Indicators. The Indicators are largely SMART³, although some were not adequately measurable (e.g. Objective Indicator 1) or realistic (Outcome Indicator 3.2). None of the Indicators were specifically time-bound.

³ SMART: Specific, Measurable, Attainable, Realistic, Time-bound.

- **39**. Targets for the Objective and each Outcome were also largely SMART, providing an additional layer of objectively verifiable, measurable, and timebound indicators for project progress. Targets addressing technical points were particularly detailed.
- 40. Indicators and Targets focused on Outputs, which are more suitable for the Project's implementation aspects. Given the Project's focus on regulatory and institutional reform, the SRF would have benefited greatly from providing Targets and Indicators for changes in awareness, attitudes and behaviours of key stakeholders that would provide markers against which to assess progress towards desired Outputs and Outcomes.

3.1.2.3 Risks and assumptions

- 41. The Project Document identified three strategic risks to the Project, as well as specific risks and assumptions underlying the Objective and Outcomes of the SRF. Of the three strategic risks identified in the Project Document, two focused on limited commitment by governmental stakeholders to ICZM policy processes and the NICZM Committee. Both risks were rated as Medium. It was logical and reasonable to identify these risks, but the level of risk should probably have been rated as High rather than Medium. It is also questionable whether the proposed mitigation steps were sufficient to counter the perceived risk, and whether key ICZM stakeholders were sufficiently engaged in project implementation.
- 42. In addition to the identified strategic risks, the SRF also notes the assumption that the SPA and its staff are committed to coastal adaptation and willing to implement innovative shoreline protection strategies. This was a key assumption for the project, and one that resulted in substantial delays in implementation. The Project Document not detail a mitigation strategy for managing the risk implicit in this assumption.
- **43.** Donors such as the World Bank and the UK Department for International Development increasingly use tools such as political economy analysis (PEA) and Theory of Change to inform and test the assumptions for projects aimed at institutional or policy reform. However, such tools were not widely adopted or in common use at the time of Project formulation. Their use in the proposal preparation or early project implementation stages would most likely have challenged the assumptions underlying the likely engagement of SPA and the proposed route to reform of ICZM legislation and institutions (see Section 3.1.1.1). The Project Document would also have benefited from Theory of Change approaches to map the intended routes to reform and the underlying assumptions more explicitly. This observation is not intended as a criticism of the Project, but rather to underline the importance of PEA and Theory of Change approaches for similar projects in the future.
- 44. The Project Document did not identify the risk of the political instability that affected Egypt and the project after 2011. However, this was not a risk that could reasonably have been anticipated or mitigated at the time of project formulation.

3.1.3 UNDP comparative advantage

45. The United Nations Development Program (UNDP) was the GEF Implementing Agency for the project. The Project supports GEF objectives for the Special Climate Change Fund (SCCF) programme on adaptation, which identifies ICZM as a priority intervention. The Project aligns with the country priorities of UNDP, which has been the lead international agency for technical assistance and funding to Egypt on climate change. As the intergovernmental agency championing climate action and sustainable development in Egypt, UNDP is extremely wellplaced to act in this capacity. The UNDP Country Office and its staff have developed exceptional knowledge, networks and influence in the thematic area, and have excellent organisational and personal reputations and capacities. UNDP's comparative advantage is presented well in the Project Document. The Project Document might also have mentioned the UNDP GEF Regional Coordination Unit in Bratislava, whose experience of managing coastal adaptation projects elsewhere in the Mediterranean and in Europe also benefitted the Project.

46. During project implementation the UNDP Country Office remained closely involved at a strategic and partnership level, particularly in terms of constructively mentoring progress through challenging times and stakeholder relationships. All institutional partners met during the Terminal Evaluation mission gave highly favourable reports on UNDP's role and behaviour throughout the Project's lifespan.

3.1.4 Linkages to other interventions within the sector

- **47**. UNDP are key actors in the climate change and sustainable development policy space in Egypt, supporting major initiatives such as the National Communications, National Adaptation Plan, and maintain strong relationships with the climate change focal point in EEAA. As a result, the Project was well informed by and linked to other relevant projects. The Project Document notes that the Project is informed by findings from the Initial and Second Communications, and builds on several key ICZM initiatives in Egypt which included a project by UNEP/EEAA to develop a national framework for ICZM. These initiatives had all raised the profile of vulnerability to SLR in the Mediterranean coastal zone, and provided initial evidence on what the challenges and responses might be.
- 48. The Project Document describes how the Project was to be implemented in coordination with several other initiatives. These included the UN Climate Change Risk Management Program (CCRMP) which supported projects with four government agencies on mitigation and adaptation, the EU-funded SMAP III initiative which was preparing an ICZM plan for Port Said at the time of Project formulation, and an IDRC funded project on coastal zone adaptation to climate change in the area near Damietta. The Project has also contributed knowledge and findings with the Third National Communication Project. As the Mid-Term Evaluation notes, there was sufficient activity in the climate change adaptation and ICZM space during the Project's lifespan to provide useful opportunities to create synergies and avoid duplication of efforts between projects. The extent to which the Project was able to do so is unclear. While there is evidence that the Project leveraged additional resources from some projects, it is less clear that there were substantive operational collaborations with, for example, the UNEP/EEAA project on advancing a national ICZM framework, or SMAP III activities in Alexandria and Lake Mariut.

3.1.5 Country ownership

49. The Project Document provides a brief summary of the institutional and policy context underlying the project proposal. The vulnerability of Egypt's Delta Coast to climate change, increasing climate variability and SLR was identified in the Initial National Communication to the UNFCCC, which noted shoreline protection and ICZM as adaptation measures. Studies conducted in preparation

for the Second National Communication provided more detailed analysis on the extent of vulnerability, and noted reforms to ICZM regulation, the activation of the NICZMC, and soft shoreline protections as adaptation priorities. These findings and recommendations directly led to the formulation of the Project Document, which also aligned with the National Environmental Action plan and the National Action Plan for Climate Change. The Environmental Laws (4/1994; 9/2009) provided a legal framework for ICZM. The Project Document therefore clearly aligned with existing national policies and legislation, and addressed recommendations for action.

50. The Project Document does not provide detail on consultations with stakeholders during project formulation. However, the Evaluator is personally aware of extensive consultations during the preparation of the Project Document, and particularly strong engagement with and support from senior MWRI personnel. During implementation, the NWRC hosted well-attended Steering Committee meetings, with leadership of MWRI institutions being critical to driving progress forward. One limitation on country ownership was the engagement with EEAA. While the EEAA GEF Focal Point submitted a letter of support to the Project Document, and a senior EEAA official sat on the Steering Committee, it is not clear that relevant units of the EEAA had a stake in the project. In meetings during this evaluation exercise, key staff in the EEAA's ICZM and Climate Change units stated that their involvement in the project had been minimal. This may reflect as much on internal EEAA coordination as on efforts of the MWRI and PMU to engage with the EEAA.

3.1.6 Management arrangements

- 51. The Project's management and partnership arrangements were largely foreseen in the Project Document. UNDP is the Implementing Partner, and operated under national execution policies and procedures. The Executing Partner is the MWRI through two subsidiary institutions, the SPA and CORI, operating under the policies and procedures of the Government of Egypt. The roles, responsibilities and reporting arrangements of the National Project Director (with strategic responsibilities), Project Manager (with operational responsibilities), and Project Management Unit (with technical, administrative and financial staff) were all properly identified in the Project Document and implemented accordingly.
- **52.** Except for the issue regarding engagement with authorities responsible for ICZM (see Section 3.1.1.1), the choice of Executing Partners and partnership arrangements envisioned were appropriate and implemented accordingly. The resources and capacities of the Executing Partners and PMU were appropriate for the Project's focus on shoreline protection, particularly at the technical level. However, having some PMU senior staff with more specific expertise and experience on advancing policy and institutional reform would have been a benefit.
- **53**. The Mid-Term Evaluation provides a useful account of the Project's complex initial governance arrangements, and how four layers of committees were simplified into three over the early years of implementation. As the Project progressed, the function of the remaining committees was furthered revised to make management more effective and streamlined without compromising the Project's collaborative and consensus-building approach (see Section 3.2.5)

The Evaluator rates the Project as **Relevant** due to the significance of the Nile Delta coastal zone as a global hotspot of vulnerability to climate change, and the Project's

alignment with GEF, UNDP and national policies and strategies for climate change adaptation and ICZM.

The Evaluator rates the overall project formulation approach as 'Moderately Satisfactory' due to conceptual inconsistencies and inadequate assessment of the institutional environment for ICZM.

3.2. Project Implementation

3.2.1 Implementation

- 54. With an official start date in November 2009, the core Project team was assembled by May 2010 and the Inception Workshop held in December 2010. At this point it was clear that both the institutional complexities of advancing ICZM reform (Component 1) and reaching agreement between CORI and SPA over pilot interventions and sites (Component 2) would be more challenging than anticipated in the Project Document. The Egyptian Uprising began in January 2011.
- 55. For the next several years the Project experienced significant challenges in making substantial progress. While individual studies and activities were commissioned and completed, there was little progress towards breaking the deadlock between CORI and SPA, and little advancement with ICZM. Ongoing political instability further problematized the situation. Changing senior leadership in SPA, CORI, NWRC, MWRI and EEAA was an impediment to progress, and there were limited opportunities to convince other stakeholders that ICZM reform was a significant priority given immediate political challenges they faced. The Mid Term Evaluation, completed in early 2013, concluded that while the Project remained relevant, low levels of progress necessitated an extension and a significant turnaround in performance. The Project Manger stepped down shortly afterwards, followed by the International Consultant. That year, annual grant expenditure (see Section 3.2.2.1) fell to 10 per cent of the budget projection. It is to the great credit of GEF and UNDP that the Project was not cancelled at this point.
- **56.** In late 2013, the recruitment of a replacement Project Manager coincided with a return to relative stability in Egypt. 2014 saw significant developments for the Project. SPA and CORI agreed that modelling by the Hydraulic Research Institute should decide the question of whether soft interventions were suitable for the pilot sites, which directly led to implementation of experimental interventions in 2015, and full pilot interventions subsequently. An ambitious technical training program was also rolled out that ultimately benefitted 192 engineers and researchers. Starting in 2015 the Project began to build significant momentum in implementation.
- **57**. The Project had early realised that the grant would not be sufficient to finance a master ICZM plan for the north coast, and had sought finance from the EU. However, due to irregularities in the two leading consultancy bids, the EU cancelled the tender in December 2014. Adapting, the PMU, UNDP and NWRC began in 2015 to prepare a submission for a grant from the Green Climate Fund (GCF), which was approved in January 2018. The GCF grant will advance the Project's Component 1 objectives for ICZM and an ICZM masterplan, and scale out the Project's pilot interventions.

58. The turnaround in project performance starting in 2014 is remarkable. Particularly significant has been the improved working relationship between CORI and SPA, and the SPA's attitudes towards and competencies in executing soft coastal protection works. After seven years and three extension, the Project has substantially achieved the catalytic effect it set out to accomplish

3.2.2 Project Finance

59. The project's financial planning and management was carried according to UNDP rules. The total finance from all sources projected in the Project Document was \$16,838,060. The GEF grant amounted to \$4 million, with a commitment of \$12 million parallel funding from the Government of Egypt, for engineering works and \$4 million in-kind contributions. Other sources of finance included \$200,000 (in cash) contributions from UNDP, and \$638,060 (parallel funding) from the International Development Research Centre (IDRC) through a coastal adaptation project with CORI. Most projected parallel funding was in cash, and allocated to the Outcome 2 pilot projects.

3.2.2.1 Grant expenditure

60. Delays in the early phase of the Project contributed to significant underexpenditure of grant funds (Table 1). As is to be expected from the foregoing discussion on Implementation (Section 3.2.1), annual expenditures between 2010 and 2014 were substantially below projections in the Project Document. Actuals were typically less than 20 per cent of projections. The low point of 2013 correlates with the change in Project Manager, and period of six months where Project leadership was lacking. At the end of 2014, the Project's original enddate, just \$709,099 (18 per cent) of the \$4 million grant had been spent.

	Projected	Actual	%
2010	672,500	142,794.97	21
2011	789,000	233,953.39	30
2012	918,500	115,784.26	13
2013	836,500	82,292.48	10
2014	783,500	134,274.15	17

Table 1. Annual and actual grant expenditure, 2010-14 (\$)

61. This picture of financial underperformance changed dramatically in 2015, after which agreement on pilot interventions and sites led to rapid growth in expenditure (Figure 2). While annual grant expenditure remained below \$150,000 for most years between 2010 and 2014, expenditure increased significantly in 2015 and continued growing year on year (Table 2). At the time of the Terminal Evaluation project activities were still ongoing at a rapid pace. As of December 2017, total grant expenditure was \$2,830,814.53 against a grant total of \$4 million (71 per cent). The rapid increase in expenditure after agreement on the pilots indicates the capacities of the sector to absorb and implement large quantities of funding were accurately gauged in formulation; delays in expenditure related to a lack of agreement, not a lack of ability to absorb and use funds.

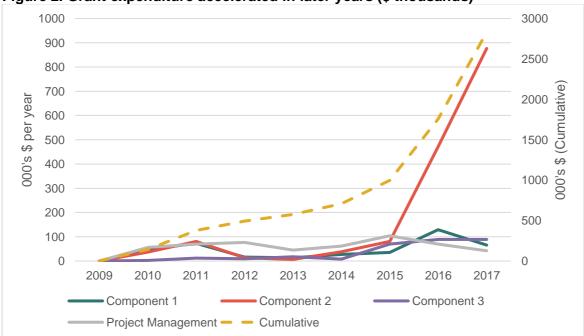


Figure 2. Grant expenditure accelerated in later years (\$ thousands)

Table 2. Annual grant expenditure (\$ thousands) Component 1 Component 2 Component 3 Management 3

	Component 1	Component 2	Component 3	Management	lotal	Cumulative
2009	0	0	0	0	0	0
2010	47.908	36.943	1.65	56.294	142.795	142.795
2011	72.153	80.707	11.889	69.205	233.953	376.748
2012	15.779	13.476	9.845	76.684	115.784	492.533
2013	13.169	6.992	17.862	44.269	82.292	574.825
2014	26.99	37.456	7.937	61.892	134.274	709.099
2015	34.746	81.25	69.696	103.929	289.620	998.7194
2016	129.14	471.019	88.931	69.773	758.863	1,757.583
2017	65.979	876.631	88.874	41.748	1,073.232	2,830.815

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3.2.2.2 Co-financing

62. The Egyptian Pound (EGP) was floated in November 2016, leading to a rapid and significant loss in exchange rate value (see Figure 3). The EGP's varying value, 5.5 EGP/\$ in November 2009 to 17.7 EGP/\$, problematizes the assessment of in-kind and parallel contributions leveraged by the Project. The Evaluator has therefore adopted the UNDP-CO's approach of applying an exchange rate of 10EGP/\$ across the Project timeline, recognising that this will undervalue and overvalue contributions in EGP made before and after November 2016, respectively. The Evaluator was also not able to verify the co-financing data provided by the UNDP-CO.

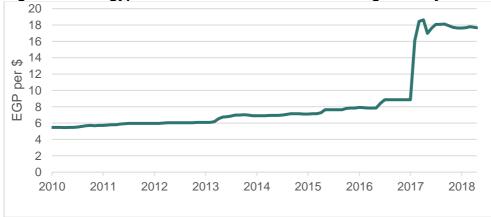


Figure 3. The Egyptian Pound tumbled in value during the Project.

Source: xe.com

63. There was significant variation between the Project's projected and actual cofinancing. While some of this variation reflects unanticipated co-financing from other projects, finance from the Government of Egypt was the biggest source of variation. Overall, the actual co-financing received was \$ 24.77 million, greatly exceeding the \$12.84 million projected in the Project Document (Table 3). This represents an uplift ratio of 1:4.95 compared to the projected 1:3.21 ratio, a substantial achievement. Most co-finance (\$23.71 million) was in parallel cash funding, while in-kind contributions – at \$1.56 million – were substantially smaller than those anticipated in the Project Document.

UNDP		Government		Partner Agency		Total		
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
In cash	0.2	0.2	8	22.24	0	0	8.838	23.71
In kind	0	0	4	1.056	0.638	1.27	4	1.056
Totals	0.2	0.2	12	23.296	0.638	1.27	12.838	24.766

Table 3. Project co-financing (\$ millions)

- 64. Government in-cash contributions focused on the implementation of shoreline protection works in the Nile Delta coast under Component 2. This included a contract worth an estimated \$1 million for transporting dredged materials to nourish the shoreline in Damietta as part of a Project pilot intervention. The largest contributions included here are for soft protection works implemented by SPA outside of the Project pilot interventions, but aligned with an informed by the broader Project objectives. These include the dredging and rehabilitation of Lake Manzallah, and protections for the newly built fish farms in Kafr el-Sheikh, both of which were identified as possible interventions by the Project team in the Project's initial phase. While the Evaluator was unable to visit or assess these interventions, they align with the Project orientation and potential interventions discussed in the Project Document. The Evaluator is satisfied to accept them as relevant co-finance on that basis.
- 65. In-kind contributions predominantly came from parallel funding from other donor agencies. The IDRC project provided finance to CORI for coastal adaptation research in Kafr el Sheikh and Ras el Bar, which contributed to Component 2. CORI also received \$340,000 from Egypt's Science and Technology Development Fund for research underlying the first pilot project. Under Component 3, the Dutch-Egyptian Water Advisory Panel provided

\$150,000 towards conference fees, and consultants for adaptation interventions in Burulus and the Rasheed Sea Wall. \$ 322 000 from the EU also contributed to the Rasheed study, while the Spanish MDG Fund project for Egypt provided \$150,000 towards a study of the economic impacts of climate change in Egypt. In-kind contributions from the Government of Egypt included the PMU office premises at CORI (estimated value \$96,000) and the time of staff, valued at \$960,000 over the life of the Project. In addition to these in-kind contributions, the UNDP-CO also notes 164 475 m² of land allocated by the Port of Damietta for the pilot project on beach nourishment.

3.2.2.3 Financial balance across components

66. There was significant variation in projected and actual finance for Components 1 (ICZM regulation) and 2 (pilot projects), but not Components 3 (knowledge management) and 4 (project management) (Table 4). Financial performance under Component 1 was extremely low, achieving just 13 per cent of total projected expenditures. No actual co-finance was reported, against a projection of \$2.2 million, while SCCF expenditures were 44% of the projected \$930,000. This reflects the challenges implicit in the Project's conceptual framing, approach taken to, and partnerships adopted for ICZM regulatory and institutional reform, as well as the complex nature of the challenge and the political instability in the country. By contrast, performance under Component 2 was exceptionally strong, with overall finance reaching 228 per cent despite SCCF expenditures of 74 per cent.

SCCF			Co-financing	3	Total		
	Projected	Actual	Projected	Actual	Projected	Actual	
Component 1	930,000	405,864	2,200,000	0	3,130,000	405,864	
Component 2	2,100,000	1,604,475	8,400,000	22,340,000	10,500,000	23,944,475	
Component 3	570,000	296,682	938,060	1,270,060	1,508,060	1,566,742	
Component 4	400,000	523,793	1,300,000	1,156,000	1,700,000	1,679,793	
Total project costs	4,000,000	2,830,815	12,838,060	24,766,060	16,838,060	27,596,875	

Table 4. Projected and actual finance by component (\$)

3.2.2.4 Financial management and reporting

- 67. The Project Document contains a clear budget and workplan, linking budget lines to each component for each year. There is not a high level of detail, however. Budget preparation and financial management would benefit from justifications for the level of resourcing indicated, and linking budget lines with specific outputs or activities. In the absence of this detail, it is not clear how the budget and workplan might support adaptive decision making by the PMU and UNDP. Similarly, based on reviews of each Combined Delivery Report (CDR) for the Project, financial reporting is not highly detailed. While the CDRs distinguish between, for example, international and national consultants for each component, it is not clear how many consultants were hired, for how many days, at what rate, or for what specific activity. The same issue is noted in the Mid-Term Evaluation, which also notes that UNDP rules for financial reporting are being followed.
- **68**. As noted the MTE, co-financing data was not regularly or consistently captured in Project Implementation Reports (PIRs). Although the MTE recommended that

a template be prepared to capture and report on co-finance each year, the Evaluator saw no evidence that this has been done.

The Evaluator rates the Project efficiency as 'Satisfactory'. There were considerable delays in activating the co-financing aspect of the Project, and these are not transparently quantified. However once pilot interventions began financial performance improved rapidly, and the Project has demonstrable evidence of leveraging additional resources and for replication and out-scaling of results.

3.2.3 Monitoring and evaluation

3.2.2.1 M&E arrangements

- 69. The monitoring and evaluation (M&E) arrangements in the Project Document align with established UNDP and GEF procedures at the time. The Strategic Results Framework provides output indicators to guide Project activities, and against which to measure success. Clear sources of verification are also provided. However, as noted in Section 3.1.2, the SRF provides a less useful framework for the project management team to assess their progress towards those indicators, and provide a basis for adaptive management. The relationship between outputs, indicators, targets and activities also unclear at several places in the Project Document SRF.
- 70. The SRF has been unclearly implemented in practical monitoring. The MTE refers to changes in the SRF made in the Inception Report, particularly in the framing of some key Outputs. However, these changes were not carried over to the SRF used in annual PIR monitoring, making it unclear the extent to which they were institutionalised within the Project. Further, the unclear relationship between outputs, indicators, targets and activities noted in the Project Document are reflected in confusion in comments in annual PIR monitoring. For example, in the 2017 PIR under Outcome 3 progress against the target "3 examples of best practice to be documented under the ALM" is evidenced by extensive details on training provided to engineers and modellers. Meanwhile, in the 2016 PIR under Outcome 3 progress against the indicator "LSA reflected in the coastal plans of government entities", is evidenced in terms of project communications efforts on Facebook and keeping the website updated. It is unclear whether this is an artefact of systems used to manage M&E data, or if the SRF was never actually updated. Regardless, the overall impression is one of extreme confusion that the Evaluator was unable to resolve from desk analysis.
- 71. The Project Document's M&E plan references day-to-day monitoring, periodic monitoring, and annual monitoring. Day-to-day monitoring is the responsibility of the PMU, although no specific framework or tools for managing information or assessing progress are provided. Periodic reporting is based around specific deliverables, such as the Inception Report, and regular meetings between the Project Manager and UNDP-CO. Annual reporting is based on tripartite reviews, resulting in Project Implementation Reports, and annual field visits to pilot sites. Collectively, the M&E procedures outlined in the Project Document are complex, not all elements are clearly linked to decision points, there is a lack of specificity about what information will be used and how, and implicit in the arrangements is a significant amount of management time. The arrangements could have been streamlined to more effectively support project management.
- 72. The Project Manager was clearly monitoring the Project closely, and aware of all aspects of Project implementation. He also had a strong and mutually beneficial relationship with the UNDP-CO Manager, with highly productive

benefits for Project coordination. It was not clear that all aspects of the M&E plan were implemented as foreseen in the Project Document; as the MTE notes, field site visits did not take place in the absence of pilot implementation, and there was no evidence of monthly written reports.

- **73.** Aside from operational procedures, the M&E plan also provides for independent Mid-Term and Terminal Evaluations. The MTE was conducted in early 2013 by an experienced professional, and provided clear, timely and useful advice that has clearly been a positive influence on several technical and managerial aspects of the Project. In the aftermath of the MTE the PMU prepared a document concisely responding to the evaluator's recommendations, and setting out an action plan for addressing them. However, the documentation does not record whether these follow-up actions were taken.
- 74. Each annual Project Implementation Report (PIR) contains two indicators; 'progress towards development objective' (DO), and 'progress in project implementation' (IP). Each indicator is assigned a rating by the Project Manager, UNDP-CO Manager, and the UNDP Technical Advisor (Table 5). The ratings provided for the two indicators over the lifespan of the project correlate with the facts: an initially promising start in 2011 (Satisfactory ratings), followed by challenges in progress between 2012 and 2014 (a mixture of Satisfactory and Moderately Satisfactory ratings), and then a return to performance after 2015 (mostly Satisfactory ratings).

	FIUGIESS LOW	alus Developille	in Objective	FIOGLESS III F	roject implemen	lation
	PM	UNDP-CO	UNDP-TA	PM	UNDP-CO	UNDP-TA
2011	S	S	S	S	S	S
2012	S	S	MS	MS	MS	MS
2013	S	MS	MS	MS	MS	MS
2014	S	S	MS	S	MS	S
2015	S	S	S	S	S	MS
2016	HS	S	S	HS	S	MS
2017	S	S	S	S	S	S

Table 5. Progress indicator ratings in annual PIRs Progress towards Development Objective Progress in Project Implementation

75. Ratings show quite consistent agreement between the three assessors. The UNDP-TA's ratings were more cautious than the UNDP-CO and PM, noting challenges with progress towards objectives earlier and more persistently in the Project's early years, and noting concern with the slow rate of expenditures persisted in 2015 and 2016. Of the seven cases with discrepancies between assessors, in four cases a single assessor rated progress one grade lower, and in two cases a single assessor rated progress was rated differently by all three assessors, from Highly Satisfactory by the PM to Moderately Satisfactory by the UNDP-TA. In this case the assessors justified their ratings on different bases. The PM notes the long-awaited start of the pilot interventions as a sign that the Project is getting on track. The UNDP-TA acknowledges the progress made, but expresses concerns that persistently low levels of expenditure imply a further extension will be necessary. Both are valid points, which the UNDP-CO balances in his 'Satisfactory' rating.

The Evaluator rates the M&E system as 'Moderately Satisfactory'. The Project would have benefited from a less complex implementation system, and more consistency and clarity in implementation of the SRF would have supported clearer, objective appraisal of progress against objectives.

3.2.4 Adaptive Management

- 76. The Project team displayed an impressive tenacity and adaptive capacity in a dynamic and uncertain environment. Political instability affected not only general operating conditions, but also directly affected the Project through several changes in senior leadership positions in Implementing Partners and the MWRI. The Project team's ability to navigate these challenges is to be commended. The Project also navigated changing in conceptual orientations, with the substitution of the Living with the Sea concept for the Living Shorelines Approach, and complex negotiations over the identification of pilot interventions.
- 77. Regular monitoring, particularly through the Steering Committee, PIRs, and orientation of the SRF, was clearly important for the Project's adaptive management, and made strong contributions to PMU decision-making. The Project also adapted in response to specific managerial and technical recommendations from the Mid-Term Evaluation. The plethora of committees that complicated governance was streamlined (see Section 3.2.5), and the conceptual distinction between shoreline protection and ICZM was internalised in Project orientations. The changes resulting from these decisions did not substantially reorient the Project or project outcomes; rather, they focused on means of achieving outcomes.
- 78. As has been noted elsewhere in this report, the Project would have benefitted from planning and monitoring, evaluation, and learning tools (MEAL) to support adaptive management, particularly in pursuit of its institutional and policy reform objectives. The Project benefitted from highly competent leadership in staff and the UNDP-CO, but appropriate MEAL tools such as Theory of Change and Outcome Mapping would have strengthened their capacities to adapt in a complex and dynamic environment.

3.2.5 Project implementation, operations and coordination

- **79.** Key project actors are located in Cairo and Alexandria. The UNDP-CO Manager is based in Cairo, physically close to the MWRI, and NWRC and SPA headquarters. In Alexandria, the PMU is based inside CORI premises, and the PM also has an assigned working space at NWRC headquarters. The PM travels weekly between Cairo and Alexandria, facilitating interactions with the UNCP-CO and other partners. Given the Project's determination to strengthen working relationships between CORI and SPA, this arrangement was sensible and has functioned well. The PMU office is equipped appropriately equipped, although not large.
- 80. The Project Board (Steering Committee) meets twice a year at NWRC headquarters and serves an advisory and accountability function. It has drawn members from UNDP, NWRC, CORI, SPA, EEAA, the Agricultural Research Centre, International Development Research Centre, and academic experts over the course of the Project. The Executive Committee is chaired by the NWRC and consists of UNDP, SPA, and CORI, and is the main body providing guidance to the PM. The Executive Committee meets frequently, once a month on average,

and has also supported broader coordination between the Implementing and Executing Partners. The Follow-Up Committee, not anticipated in the Project Document and not active at the time of the Mid-Term Evaluation, was repurposed to focus on coordinating the implementing agencies involved in the pilot project activities. The Mid-Term Evaluation provides a useful analysis of how the Project's complex initial governance arrangements were streamlined in the Project's early years, and made further recommendations that have been implemented to positive effect.

81. All people interviewed during the evaluation exercise expressed strongly favourable views of the Project Manager, who conducts his work with diligence, thoughtfulness, and diplomacy, and brings a very high level of managerial and technical competence. Increasing political stability played a critical role in the Project's success after 2014, but it is no coincidence that the rate of progress towards objectives increased significantly after appointment of the current PM. Although streamlining of governance and management arrangements has no doubt had a beneficial effect, the PM's workload remains extremely high. While he is supported by competent administrative and finance staff, the lack of junior technical staff means the PM is unable to effectively delegate any substantial functions. The Project has recently budgeted for a communications specialist, a key area for such support to the PM that was not foreseen in the Project Document. However, recruiting a competent specialist has been challenging; a communications officer was hired for a year, but left the post after proving unable to meet expectations.

3.2.6 UNDP execution

82. The UNDP-CO Manager has been responsible for preparation of the Project Document, and has acted as GEF's Implementing Partner for the Project. He has been actively engaged throughout the Project's implementation, supervising contracting, procurement, and advising the PM and Implementing Partners. He maintains regular contact with the PM, frequently travelling to the PMU in Alexandria and pilot sites. He has a thorough understanding of the Project's broader context and objectives, detailed knowledge of its operations, and works effectively to support implementation. All stakeholders interviewed during the evaluation exercise expressed strongly favourable views of the UNDP-CO Manager, noting his central and critical role in the Project's success. The UNDP Regional Centre in Bratislava has also supported monitoring and evaluation of project implementation, with annual and quarterly reports reviewed by the Regional Technical Advisor, who has provided appropriate and constructive comments.

The Evaluator rates UNDP execution as 'Satisfactory'. The UNDP-CO Manager in particular has been highly effective. The rating reflects limited detail in financial reporting, and some challenges in the Project's implementation approach at formulation that might have been anticipated.

3.2.7 Stakeholder participation

83. The cross-sectoral nature of ICZM implies the significance of a broad range of other governmental stakeholders, particularly those involved in the governance of coastal land use. In the Nile Delta these include the Governorates (subnational administrative units), line ministries for agriculture, tourism housing and urban development, and the military, among others. These stakeholders were briefly identified in the Project Document, and elaborated on in two project

outputs: a stakeholder analysis (2010), and a legal analysis (2017). Following the 2010 stakeholder analysis, a series of workshops were held for coastal Governorates to raises awareness about climate change and ICZM. However, thereafter the Project did not make systematic attempts to manage relationships with these stakeholders, advocate for ICZM, or engage in ICZM planning with them. Rather, the Project appears to have taken an opportunistic approach to fostering interest in ICZM. For example, as Component 2 matured, the Governorates and other stakeholders, notably the Damietta Port Authority, were involved in the approval and implementation of pilot projects. Similarly, project activities supporting a plan for the north coast (Component 1) provided engagement opportunities. For example, the launch of the ICZM report by IH Cantabria in January 2017 was attended by the Governors of Beheira and Alexandria, as well as representatives of other key stakeholders.

- 84. Non-governmental stakeholders in the Nile Delta include the private sector, communities, and community-based organisations. The Project Document recognises the importance of engaging with local communities, to ensure their commitment to local adaptation measures. The Project Document also recognises limitations in Egypt's institutional capacity for engaging community participation in decision-making and planning. While the project did have some engagement with local people, this does not appear to have been to the extent envisioned in the Project Document, which posits that "community mobilisation and participation in design, implementation and monitoring of on the ground adaptation measures will be a project methodology".
- 85. The Project's focus on strengthening technical capacity, and identifying and implementing shoreline protection measures for climate change adaptation make the MWRI, through CoRI and SPA, a logical and appropriate key executing partner. The Project's ambition to address barriers limiting adoption of ICZM in Egypt made the EEAA a key stakeholder. Given the need for national leadership on ICZM, and the political and institutional instability in Egypt between 2011 and 2014, the Terminal Evaluation concludes that the Project's limited engagement with governmental stakeholders from outside the MWRI and EEAA was reasonable, as was the opportunistic strategy taken. The reported enthusiasm of Governorate officials for the anticipated GCF project is a marker of good progress, but the ambition of the Governorates for ICZM is as-vet untested. Similarly, the limited engagement of the Project with local communities is understandable in the context of a sometimes difficult security situation, and a limited institutional framework to facilitate such engagement. Crucially, the selected pilot sites for interventions are also relatively remote from local settlements, reducing the opportunities for engaging communities.

The Evaluator rates stakeholder participation as 'Moderately Satisfactory'. Engagement with key partners in MWRI, SPA and CORI was appropriate for a focus on shoreline protection, but engagement with key partners for ICZM was limited. Engagement with communities and the private sector did not play the key role envisioned in the Project Document, although this is most likely appropriate given the changes in pilot projects.

3.2.8 Replication Approach

86. The Mid-Term Evaluation noted the lack of a replication strategy in the Project Document, and recommended that a strategy be developed as a matter of urgency. Replication for the Project has focused on the development of what is effectively a Phase 2 project, to be funded by the Green Climate Fund (GCF). A

final proposal was submitted in September 2017 for \$ 31.38 million over 7 years, with co-financing of \$ 73.8 million from the Government of Egypt. The GCF board approved the grant in January 2018, with implementation expected to start in the summer of 2018. Implementation modalities will mirror those of the Project, with UNDP acting as Implementation Partner and MWRI acting as Executing Partner.

- 87. Entitled "Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt" (hereafter, "the GCF Project"), the GCF Project is a direct successor to the Project, and builds substantially on progress made to date. The GCF Project objective 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 the installation of 69 km of sand dune dikes along five vulnerability hotspots, outscaling both of the Project's pilot interventions. Output 2 focuses on developing 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 GCF Project objective and logical hierarchy reflects the more nuanced understanding of distinctions between shoreline protection, climate change adaptation and risk management, and ICZM developed during the Project. The extent of Government of Egypt co-financing indicates a very high level of commitment, and signals the dramatic changes in attitudes and behaviours facilitated by the Project.
- **88**. The GCF Project addresses objectives and outcomes that build logically on the achievements of the Project. The Terms of Reference for this evaluation exercise therefore stipulate that relevant lessons from the Project be identified to inform the GCF Project. A series of # recommendations are presented in Section 4.x, and the most salient points are summarised here:
 - a. The Evaluator considers that due to the Project's achievements, the foundations are now in place for rapid implementation of the extensive shoreline protection works. However, the PMU should carefully document lessons for obtaining permissions for shoreline research and implementation of works, and UNDP should ensure they are shared with the GCF Project PMU.
 - b. The ICZM component (Output 2) is likely to be more challenging. Activity 2 of Output 2 focuses on developing the regulatory and institutional framework, an ICZM master plan for the whole north coast, and a shoreline management plan, activities which presented the Project with significant challenges. The Evaluator strongly recommends that the GCF Project treat this as an exercise in advancing policy and institutional reform rather than a technical exercise. This will require adoption of suitable tools and approaches, such as political economy and institutional analysis, strategic communications, and ensuring the PMU has staff with appropriate skills and experience.
 - c. The significant challenges of advancing national-level reform entail risk to non-delivery. The Evaluator therefore strongly recommends the GCF Project balance top-down with bottom-up approaches to ICZM by piloting Local ICZM Committees and local ICZM plans in selected governorates. This would mitigate the risk of focusing solely at the national level, allow early delivery of smaller scale outputs to demonstrate relevance of and build consensus for ICZM,

and strengthen institutional experience and capacity for delivery of ICZM plans.

d. The Evaluator strongly recommends that the GCF Project develop, resource and implement a robust communications and participation strategy. The strategy should aim to convince central and governorate level units of government, local communities, and the private sector of ICZM's value sustaining economic growth and mitigating hydroclimatic risks to people, infrastructure and investments.

3.3. Project results

3.3.1 Overall results

89. After seven years of implementation, the details of the Project are such that only a top-level analysis of outputs and outcomes is possible. This section assesses progress against each Outcome, before assessing progress against the Project's Objective.

3.3.1.1 Outcome 1

- 90. Outcome 1 is framed as "[a] strengthened Regulatory Framework and Institutional Capacity to improve resilience of coastal settlements and development infrastructure". The SRF sets out four Outputs; 1.1) a comprehensive regulatory and institutional framework for coastal adaptation built around ICZM principles and policies in place, 1.2) strengthened institutional and technical capacity of NICZMC to support climate risk mainstreaming and tools to deliver coastal adaptation, 1.3) information management system monitoring climate change impacts in coastal zones, and 1.4) budgetary planning of the SPA reflects adaptation needs. The Inception Report does not mention 1.4., although it is reported sporadically in some annual PIRs (e.g. 2016).
- 91. The end of project target for Output 1.1 was the finalisation of a national ICZM plan finalized, with an agency assigned responsibility for implementation, monitoring and evaluation. Project achievement against that target is moderately satisfactory. As noted in Section 3.1.1.1, the Project Document did not provide an adequate assessment of the institutional environment for ICZM, and therefore set an unrealistic level of ambition for this output. Initial progress was good, with a scoping study on legal and institutional arrangements in 2011 identifying the scale of the reform efforts needed. Ongoing political instability effectively obstructed the potential to pursue legal reform efforts, so the PMU sensibly elected to focus instead on advancing the ICZM masterplan. Quickly realising that the costs of developing the masterplan was greater than SCCF funding to the Project, the PMU - again sensibly - decided to seek additional funding. A proposal - with preparation financed in partnership with the Dutch-Egyptian Water Advisory Panel – was submitted to and accepted by the EU. A lengthy procurement process followed, and in July 2014 the EU cancelled the tender after the two leading bids were found to be non-compliant. Adapting to events, the Project then allocated \$ 300 000 for a scoping study on ICZM which. The resulting report, delivered by IH Cantabria in 2017, provides a detailed and comprehensive legal and institutional assessment that underlines the challenges faced in ICZM reform, and provides actionable recommendations. In parallel, the PMU, UNDP and NWRC prepared a funding proposal for GCF to address regulatory and institutional reforms for ICZM and scale out Project achievements. This proposal was submitted in 2017 and approved January 2018.

While the Project did not achieve the stated target or output, the Evaluator has provided a rating of Moderately Satisfactory as i) the Project Document framed the target at an unrealistic level of ambition, ii) the Project adapted to this realisation by pursuing alternative means of supporting the ultimate objective, and iii) the Project successfully secured significant GCF funding to do so.

- 92. Targets for Output 1.2 were i) the activation of the NICZMC, ii) SPA having a mandate and capacities to screen investments for climate risk, and iii) 30 personnel trained in climate risk assessments and economic valuation methods. Performance against this target was marginally unsatisfactory. Again, inadequate analysis of the institutional environment in the Project Document framed this Output at an unrealistic level of ambition, and ongoing political instability introduced new difficulties. Activation of the NICZMC would have been a highly challenging and deeply political reform process in any case, while institutional strengthening of the SPA was also problematic given rapid turnover in leadership and inconsistent commitment to the Project in the early years. Rather than devote significant resources to institutional capacity building with uncertain outcomes, the Project therefore largely focused on individual capacity building. Here it excelled, providing high quality introductory and advanced technical training courses on coastal engineering and climate risk assessment to 192 people over the course of the Project. This training has significantly contributed to the capacity base of staff at CORI, SPA and elsewhere, and has contributed to consensus around climate vulnerabilities and soft adaptation options. However, it remains to be seen whether enhanced individual capacities will be institutionalised.
- **93.** The target for Output 1.3 was the establishment of an information management system and data protocol for monitoring climate impacts in coastal zones within the first year of the Project. This Output has taken longer to achieve than anticipated, due to i) challenges in agreeing inter-agency protocols for data management and sharing, ii) the complexities of designing a comprehensive information management system, and, iii) challenges in procuring and securing installation permission for monitoring equipment. An international consultant submitted his final report in 2016, laying out a clear implementation plan in two phases. The Project has established a committee to oversee implementation of Phase 1, using the MWRI's existing information management system. The Committee is also responsible for establishing data sharing and quality control protocols. This Output is therefore rated as Satisfactory.

The Evaluator rates progress with Outcome 1 as 'Moderately Satisfactory'. Challenges arose from overly-ambitious targets and in adequate institutional analysis in the Project Document, and the reform agendas were challenged by ongoing political instability. However, the Project team adapted creatively, and used resources effectively to advance towards overall objectives.

3.3.1.2 Outcome 2

94. Outcome 2 is framed as "strategies and measures that facilitate adaptation to climate change impacts, SLR in particular, are implemented on the ground in vulnerable coastal areas". The SRF sets out three Outputs; 2.1) innovative adaptation pilots implemented in vulnerable coastal lagoons, 2.2) socio-economic assessments and appraisal of adaptation options, and, 2.3) introduction of climate risk assessment into ICZM systems for the Nile Delta. Reflecting changes to pilot interventions and sites identified in the inception phase, the Inception Report appropriately rephrased Output 2.1 as "the introduction and

implementation of innovative technologies and practices to improve the adaptive capacity of coastal management in pilot projects in appropriate coastal areas." This reframing does not imply a deviation from the stated Outcome. However, performance indicators in annual PIR monitoring continue to refer to the abandoned Living Shoreline Approach, and PIR monitoring of Outputs 2.2 and 2.3 is not apparent.

- 95. Targets for Output 2.1 are highly technical and quantified, and focus on interventions achieving certain heights above sea level and holding erosion to certain rates. The targets are not reported on in annual PIR monitoring. As discussed above (Section 3.1.1.2), challenges in negotiating agreement between SPA and CORI over proposed pilot interventions and sites caused extensive delays in progress with Output 2.1 However, once agreement was reached, implementation of the pilots progressed quickly. An initial experiment over 250 metres in Sidi Salem (Kafr el-Sheikh Governorate) compared the costs and effectiveness of 3 options; i) a clay core dike covered with sand and vegetation, ii) a geotube-core dike covered with sand and stones, and iii) a dike constructed from bamboo-fence sand traps inspired by the flood adaptations of local farmers. The findings of this experiment informed the design of a 4.5 km pilot at Metobas (Kafr el Sheikh), which placed the bamboo-fence sand traps atop a geotube-core. The pilots also contained areas topped with stone to facilitate access by fishermen, an important concession to the livelihoods of the poorest local residents. At the time of the evaluation mission construction was still ongoing, yet wind was accreting sand around the fences and contributing to dune rehabilitation, and the dike system was holding up well to winter storms. Interventions had been sited appropriately, and have the potential to contribute to dune habitat conservation as well as land reclamation and flood risk management. The beach nourishment intervention was sited near Damietta, and uses of materials dredged by the Damietta Port Authority (DPA). This represents a considerable cost saving with positive effects for financial sustainability, and the DPA also donated land to store the dredged materials. However, security and administrative issues delayed the construction of sediment basins on the donated land and contracting the transport of the dredged material to the pilot site. At the time of the evaluation mission the basins had been constructed and the contract issued, and the pilot intervention was expected to be complete by the end of the final Project extension. Despite the delays experienced during implementation of Output 2.1, the Evaluator finds the achievement Highly Satisfactory due to the innovative nature of the interventions, and highly entrepreneurial approach to supporting financial sustainability.
- 96. The only progress for Outputs 2.2 and 2.3 reported in annual PIR monitoring relate to workshops conducted by the MDG Fund Climate Change Risk Management Joint Programme in Egypt until 2013. This included the launch of an assessment report on the economic impacts of climate change in Egypt, to which the project supported the section on coastal zones. The Mid-Term Evaluation also notes collaboration with the IDRC project through CORI and the University of Alexandria which generated methodologies and data for economic and community-based evaluation of adaptation options. However, there is no indication that results from the IDRC project significantly affected Project implementation. The framing of Outputs 2.2 and 2.3 relates strongly to the initial Living Shoreline Approach and expected pilot implementation in lagoon areas, and also to the focus of Outcome 1 on ICZM. As the project adapted, it is reasonable that these Outputs were deprioritised. However, the lack of clarity in the SRF and PIR about activities and targets for these Outputs does challenge

attempts at evaluation. Although the reasons for non-completion may be justifiable, progress is rated as Unsatisfactory for both Outputs.

The Evaluator rates progress with Outcome 2 as 'Satisfactory'. Excellent achievement under Output 2.1 is balanced by non-completion of Outputs 2.2 and 2.3.

3.3.1.3 Outcome 3

- 97. Outcome 3 is framed as "Knowledge management: M&A framework and knowledge management system in place". The SRF sets out three Outputs; 3.1) M&E system with measurable indicators introduced, 3.2) lessons codified and disseminated through the Adaptation Learning Mechanism, and, 3.3) lessons disseminated throughout Egyptian institutions. No changes were made to the framing of these outputs in the Inception Report. Evaluating these outputs is complicated by a lack of clarity in the SRF and annual PIR monitoring reports.
- **98**. Output 3.1 is framed by the Project Document in terms of the Project's M&E system, and should properly therefore be considered as an element of Project Management. It is therefore irrelevant from a results perspective.
- **99.** Outputs 3.2 and 3.3 relate to Project external communications. Output 3.2 focuses on sharing 3 examples of best practice from the Project through the Adaptation Learning Mechanism portal. At the time of writing the Project has a profile on the ALM site, but no lessons or best practices have been shared. Similarly, the Project website has not been kept updated with reports and outputs produced, limiting the public goods benefit of research and studies conducted. Output 3.3 focuses on raising awareness among government stakeholders for ICZM and climate adaptation. Several one-day national and local multistakeholder workshops run by the Project have been organised around the launch of reports, including the 2017 report on ICZM. However, it is not clear that such events have a lasting effect on mobilising awareness or behavioural change, and are not a substitute for an effective, strategic and sustained communications programme. The Project has been attempting to recruit a communications specialist to bolster performance for these two Outputs, and swift action in this area could yet improve performance.

The Evaluator rates progress with Outcome 2 as 'Moderately Unsatisfactory' due to a lack of significant progress or demonstrable results.

3.3.1.4 Overall attainment of objectives

- 100. The Project objective is framed in the Project Document as "to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone (LECZ) in the Nile Delta'. Two Performance indicators for the objective are; O1) Enhanced resilience of Nile Delta coastal area on approximately 2,504 km2 due to adaptation measures, and O2) 10% per cent of Shoreline protection agency's budget includes coastal stabilization measures designed by the project.
- 101. O1 is set at a target of 2 504 km2 because of the inland area of the lagoons expected to be covered by the LSA. However, the indicator should have been revised following the change in the Output, as it was not realistic considering the final choice of pilot interventions and sites. Although the area protected by the Project is substantially less, the actual achievement in demonstrating the technical and cost effectiveness of innovative and environmentally sensitive soft

protection measures to mitigate climate risk in coastal zones is highly significant. Progress against this indicator is rated as Satisfactory.

102. O2 sets a target of 10 per cent of the SPA's budget to be earmarked for interventions piloted by the Project. This has been met through SPA commitments to the GCF project, which dedicate LE20 million per year to soft protection measures for the next seven years. Progress against this indicator is rated as Satisfactory.

The Evaluator rates progress against the Project's Objectives as 'Satisfactory'. Despite delays, and challenges in implementation with some Outputs due to framing at formulation, the key objectives of the Project have largely been met.

3.3.2 Sustainability

- 103. Prospects for sustainability of Project outcomes seems likely. The demonstrated success and cost-effectiveness of the pilot interventions has had a remarkable effect on the attitudes of SPA and its staff towards soft protections, as evidenced by co-financing commitments to the GCF Project. SPA's increased awareness of the potential for soft protections to enable coastal investment and land reclamation will also shape their interest in sustaining Project outcomes. However, the PMU should ensure that SPA is aware of over-selling to governorates the benefits of the pilot interventions until 6 to 18 months of monitoring have determined that the soft structures are stable and mitigate coastal flood risks appropriately.
- 104. The GCF Project increases confidence that Project outcomes will be sustained. A key success of the Project has been strengthened collaboration between SPA and CORI. The GCF Project provides an important opportunity to deepen the institutionalisation of that collaboration, as well as further developing the expertise and experience in implementing soft protection structures.

The Evaluator rates Sustainability as 'Likely' due to increased confidence of the Egyptian Government in soft protections, as evidenced by co-financing commitments of \$ 73.8 million to the GCF Project.

3.3.3 Catalytic effect

- 105. The Project has had a substantial catalytic effect on capacity for climate adaptive shoreline protection in Egypt. Key achievements and contributions have been changed attitudes, behaviours and financial commitments of SPA staff to soft protections, strengthened collaborative relationships between CORI and SPA, and replication and scaling-up through the GCF Project. The catalytic effect on regulatory and institutional reform for ICZM has fallen short of the Project Document's vision, and achievements in promoting collaboration between SPA and CORI. However, the Project has advanced the consensus for ICZM and shoreline management as an ICZM component, and prepared the ground for further innovation.
- 106. 192 people received technical training through the project, 27 per cent of which were female. The majority were engineering staff from CORI and SPA, although staff from other NWRC institutes, the EEAA, the Marine Survey Authority, the National Authority for Remote Sensing, and university researchers also benefited. Courses were delivered by high quality international

instructors, including IH Cantabria and Delft, and focused on engineering principles, numerical modelling, geographical information systems, and climate and marine monitoring. A robust system of on-the-job follow-up training was incorporated for several of the more advanced courses, and was highly praised by the staff who had benefited. The GCF Project should consider developing a coherent training programme based on careful evaluation of need. Staff interviewed for this evaluation exercise highlighted the diversity of training needs between junior researchers, who needed a variety of shorter introductory courses, with more focused, intensive and on-the-job training for mid-career professionals.

The Evaluator rates the Project's catalytic effect as 'Satisfactory' due to the very significant shift in attitudes and commitment to soft protections found among SPA staff, improved collaborations between CORI and SPA, and the extensive technical training provided. This achievement is set against limited progress with ICZM and engagement with EEAA.

3.3.5 Conclusions

107. The Project has been a challenging enterprise in difficult circumstances. Substantial delays have required three no-cost extensions. Yet the Project has achieved a remarkable turn-around, particularly with respect to building consensus for - and commitment to - soft and environmentally sensitive climate adaptations.

Criterion	Summary	Rating	
Relevance	A significance intervention in a globally and national hotspot of vulnerability to climate change.		
Overall project formulation	Some conceptual inconsistencies and an inadequate assessment of the institutional environment hindered implementation.		
M&E	An overly complex M&E system and lack of clarity in implementation		
UNDP execution	Effective and supportive of Project partners and delivery	S	
Stakeholder participation	Strong engagement with core partners, but limited engagement with broader stakeholders	MS	
Efficiency	Delays in activating and accounting for co-financing, but significant leveraging of resources		
Outcome 1	Weak design, but the Project adapted creatively to use resources effectively to pursue objectives		
Outcome 2	Excellent achievement under the crucial area of Output 2.1, balanced by non-completion of Outputs 2.2 and 2.3		
Outcome 3	A lack of demonstrable results in this area, although swift action could ameliorate this.		
Attainment of objectives	Despite delays and challenges in implementation with some Outputs due to framing at formulation, the key objectives of the Project have been met.		
Sustainability	Institutional support to soft protections seems assured, evidenced by significant financial commitment		
Catalytic effect	A significant shift in attitudes, behaviours, and collaboration for soft protection, and extensive provision of technical training, is set against limited catalysis of ICZM and relationships with EEAA.	S	

Table 6. Terminal evaluation criteria and ratings

- 108. The Project is rated as 'Relevant' due to the significance of the Nile Delta coastal zone as a global hotspot of vulnerability to climate change, and the alignment of Project objectives with national policies and strategies for climate change adaptation and ICZM.
- **109.** The overall project formulation approach is rated as 'Moderately Satisfactory' due to conceptual inconsistencies and inadequate assessment of the institutional environment for ICZM.
- 110. Project M&E is rated as Moderately Satisfactory. The Project would have benefited from a less complex implementation system, and more consistency and clarity in implementation of the SRF would have supported clearer, objective appraisal of progress against objectives.
- 111. Execution by UNDP is rated as Satisfactory. The UNDP-CO Manager has been highly effective. The rating reflects limited detail in financial reporting, and some challenges in the Project's implementation approach at formulation that might have been anticipated.
- 112. Stakeholder participation is rated as Moderately Satisfactory. Engagement with key partners in MWRI, SPA and CORI was appropriate for a focus on shoreline protection, but engagement with key partners for ICZM was limited. Engagement with communities and the private sector did not play the key role envisioned in the Project Document, although this is most likely appropriate given the changes in pilot projects.
- **113**. Efficiency is rated as 'Satisfactory'. There were considerable delays in activating the co-financing aspect of the Project, and these are not transparently quantified. However once pilot interventions began financial performance improved rapidly, and the Project has demonstrable evidence of leveraging additional resources and for replication and out-scaling of results.
- 114. Progress with Outcome 1 is rated as 'Moderately Satisfactory'. Challenges arose from overly-ambitious targets and in adequate institutional analysis in the Project Document, and the reform agendas were challenged by ongoing political instability. However, the Project team adapted creatively, and used resources effectively to advance towards ultimate objectives. Progress with Outcome 2 is rated as "Satisfactory". Excellent achievement under the crucial and most financially significant area of Output 2.1 is balanced by non-completion of Outputs 2.2 and 2.3. Progress with Outcome 3 is rated as Moderately Unsatisfactory due a lack of demonstrable results in this area; swift action may yet improve performance in this area. Despite delays, and challenges in implementation with some Outputs due to framing at formulation, the key objectives of the Project have been met, and progress against Objectives is rated as "Satisfactory".
- **115.** Sustainability is judged to be 'Likely' due to increased confidence of the Egyptian Government in soft protections, as evidenced by co-financing commitments of \$ 73.8 million to the GCF Project, and the entrepreneurial approach to subsidising the maintenance of beach nourishment.
- **116.** The Project's catalytic effect is rated as 'Satisfactory' due to the very significant shift in attitudes and commitment to soft protections found among SPA staff, improved collaborations between CORI and SPA, and the extensive

technical training provided. This achievement is set against limited progress with ICZM and engagement with EEAA.

Based on these criteria, the Project's overall performance is judged to be "Satisfactory". Some areas of the Project did not reach the targets envisioned in the Project Document, notably regarding the activation of ICZM. However, and as noted in the Mid-Term Evaluation, this can be largely attributed to misconceptions about the conceptual relationship of ICZM and shoreline protection, and the institutional environment and mandates of SPA and EEAA at the time of Project formulation. Ongoing political instability starting in 2011 also severely constrained the Project team's ability to address institutional and regulatory reforms. Nonetheless, the Project successfully focused delivering significant achievements towards core objectives, and has had a catalytic effect on attitudes and behaviours towards soft protections and climate risk management in Egypt's coastal areas. The significant level of continuation funding secured from the GCF for outscaling and replication of interventions, and advancing towards the goal of ICZM reform, is a recognition of these achievements.

4. Recommendations

4.1. Corrective actions for the design, implementation, monitoring and evaluation of the Project

<u>Recommendation 1.</u> The PMU, Implementing and Executing Partners should maintain the current high rate of delivery, increasing it where possible, and prioritise the completion of the pilot implementations at Metobas and Damietta.

<u>Recommendation 2.</u> The Project should move swiftly to improve performance against Outputs 3.2 and 3.3. A short-term communications specialist should be hired as a matter of priority to document three lessons to share via the Adaptation Learning Mechanism and a communications package for national stakeholders.

<u>Recommendation 3.</u> The PMU should ensure technical reports from Project research and studies are uploaded on to the website to improve the public goods benefits and catalytic role of the Project.

<u>Recommendation 4.</u> The PMU and UNDP-CO should ensure the SRF captures progress against Outputs 2.2, 2.3 and Outcome 3 appropriately before the end of Project.

4.2. Actions to follow up or reinforce initial benefits from the project

<u>Recommendation 5.</u> SPA and CORI should continue monitoring interventions for 6-18 months to ensure that the structures are sustainable and have appropriately mitigated flood risk from overtopping, underflow, slumping and erosion.

Recommendation 6. The PMU should ensure SPA and CORI are aware of the risks of 'overselling' to stakeholders the potential commercial and investment opportunities identified during the project until intervention monitoring is complete and rigorous feasibility assessments and business cases are available.

<u>Recommendation 7.</u> As part of the project closure process, the PMU should carefully document lessons from CORI and SPA for obtaining permissions to execute research and interventions on the shoreline. UNDP-CO should ensure these lessons are available to the in-coming GCF Project team.

4.3. Proposals for the GCF project and other interventions in the sector

<u>Recommendation 8.</u> The GCF project, implementing and executing partners must prioritise the delivery of ICZM plans, strengthening and activation of institutional frameworks. If not, there are significant risks that, i) investments on the north coast over the next decade are not climate resilient, and ii) the lack of visible progress means national institutions and international sources of finance lose commitment to the long-term agenda.

Recommendation 9. The GCF PMU should approach the task of delivering ICZM plans and strengthening institutional frameworks as a complex policy and institutional reform process – i.e. a political process – rather than a technical project. Implementing and executing partners should ensure the PMU has the necessary expertise and experience to manage sophisticated, entrepreneurial and politically-sensitive approaches to reform. If not, there are significant risks of delay, underperforming outputs, or non-achievement of outputs.

<u>Recommendation 10.</u> The GCF PMU, supported by the implementing and executing partners, should prioritise collaboration with other initiatives, interventions and agencies advancing progress with ICZM in Egypt. If not, there are significant risks of duplication of effort and underachievement.

<u>Recommendation 11.</u> The GCF PMU should provide sufficient resources for strategic communications that promotes project objectives by aligning messages with the priorities of key national stakeholders (e.g. enabling mobilisation of and mitigating risks to jobs, infrastructure and investment). If not, there is a significant risk that the project and ICZM are not accorded a high priority by key stakeholders.

<u>Recommendation 12.</u> The GCF PMU should balance top-down approaches (activating the national ICZM committee, developing a ICZM masterplan) with bottom-up approaches (developing governorate ICZM institutions, developing local ICZM plans). Adopting parallel tracks should; i) mitigate the risk of delayed/blocked progress with larger-scale and more complex outputs by simultaneously developing smaller-scale outputs, ii) allow early delivery of smaller-scale outputs to demonstrate the benefits of the approach and build commitment to larger-scale outputs, and iii) strengthen experience and capacity in ICZM for the delivery of larger-scale outputs.

<u>Recommendation 13.</u> The GCF PMU should use bottom-up ICZM approaches with care, after careful evaluation of demand, capacities, and the appropriate intervention modalities in different governorates. While legal provisions for LICZMCs exist, interim arrangements through working groups of General Coordination Committees may be appropriate in some cases. Attempts to immediately develop a consistent set of institutional arrangements in each governorate risk delaying progress with the development of local ICZM plans.

<u>Recommendation 14.</u> The GCF PMU, UNDP-CO and Executing Partners should support reforms that place National and Local ICZM Committees under the guardianship of cross-sectoral authorities (i.e., Prime Minister's Office, Governors). The ability of ICZM to act as an institutional mechanism for multi-sector planning, coordination, and conflict resolution can be impaired if led by an institutional actor not regarded as impartial or without the authority to resolve disputes.

<u>Recommendation 15.</u> The GCF Project should promote multi-stakeholder platforms in parallel to ICZM committees, to inform local ICZM plans and processes. As trialled by the IDRC project, these can support integrated and structured analysis of development, coastal, and climate change challenges, ensure solutions address the needs of local people, and build consensus around ICZM plans and investments.

<u>Recommendation 16.</u> The GCF Project should support the development of strategic results frameworks to guide the work of National and Local ICZM Committees. These should include; i) vision and mission statements, ii) success indicators for multiple dimensions of sustainable, inclusive and climate resilient

economic development in coastal areas, iii) clear processes for managing trade-offs between different indicators and conflict between committee members, and iv) clear relationships, reporting lines, and division of responsibilities between national and local ICZM committees. If not, there is significant risk that the progress of ICZM Committees is impaired by conflict and a lack of direction and momentum.

<u>Recommendation 17.</u> The GCF Project should prioritise integration of the *integrated* and *climate adaption* elements of national and local ICZM plans and planning processes. TORs and implementation approaches for ICZM plans and institutions should incorporate i) coastal flood risk management from sea level rise and extreme events through shoreline protection, ii) adaptation to other impacts from climate change and sea level rise, including those of drainage and groundwater quality, iii) spatial planning and management of multiple resource uses, and iv) be oriented towards sustainable, inclusive and climate resilient economic development.

<u>Recommendation 18.</u> Areas protected by soft structures interventions under the current Project may be appropriate sites to trial the development of local ICZM plans. Kafr el Sheikh Governorate is interested in identifying and selecting commercial and job creation opportunities (e.g. fish farms) made possible by the shoreline protection works. An integrated planning process for the area could be launched early in the GCF Project, and used to garner experience and as a demonstration site for replication in other sites. The GCF PMU should explore this opportunity with Kafr el Sheikh governorate during the Inception Phase.

<u>Recommendation 19.</u> The GCF Project should evaluate the benefits of different flood risk management approaches in the Nile Delta coastal zone. Building on SLR risk assessments under the Third and Fourth National Communications to the UNFCCC, the GCF PMU should commission a study to inform the North Coast ICZM masterplan by i) identifying locations that require multiple, redundant layers in the dike system to protect inland and near-shore coastal areas, and ii) developing guidance on risk-informed land-use zoning.

4.4. Best and worst practices in addressing issues relating to relevance, performance and success

<u>Recommendation 20.</u> Future GEF investments should ensure that the conceptual underpinnings of the Strategic Results Framework are sound.

<u>Recommendation 21.</u> Future GEF and UNDP investments aimed at policy and institutional reform should ensure that project formulation is informed by sufficient analysis of institutional environments and political economy issues.

<u>Recommendation 22.</u> Future GEF and UNDP investments, particularly those aimed at policy and institutional reform, adopt appropriate monitoring and evaluation approaches. Tools such as Theory of Change and Outcome Mapping are more appropriate than activity and output monitoring to support adaptive management in such cases.

<u>Recommendation 23.</u> Future GEF and UNDP investments should also ensure that the PMU has sufficient staffing and resources to support effective monitoring and evaluation, strategic communications, management of stakeholder relationships, and technical and managerial tasks.

Annex 1: Terms of Reference

FOR THE TERMINAL EVALUATION OF THE GEF SCCF PROJECT

Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management Project in Egypt (ACCNDP)

PURPOSE:

In accordance with applicable policies for UNDP/GEF projects, all GEFfunded projects implemented by UNDP are subjected to a mid-term and a Terminal independent evaluation. The purpose for this independent Terminal Evaluation (TE) is to undertake at the end of the last year of implementation an evaluation will determine whether the project has achieved its intended outcomes. The TE will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring actions for implementation of similar programmes; and will present the lessons learned about project design, implementation and management. Findings of this TE will be incorporated as recommendations for enhanced implementation of similar projects. The evaluation is to be undertaken in accordance with the "GEF Monitorina and Evaluation Policy" (see http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf and in accordance to UND ethical code of conduct. Annex 1

Project Description

The dominant feature of Egypt's Northern Coastal Zone is the low lying delta of the River Nile, with its large cities, industry, agriculture and tourism. The Delta and the narrow valley of the Nile comprise 5.5% of the total area of Egypt but over 95% of its people of which 25% live in the Low Elevation Coastal Zone (LECZ) areas. Due to the concentration of much of Egypt's infrastructure and development along the low coastal lands and the reliance on the Nile delta for prime agricultural land, coastal inundation or saline intrusion caused by anthropogenic climate change induced sea-level rise will have a direct and critical impact on Egypt's entire economy. In addition to the current trends, Egypt's Mediterranean coast and the Nile Delta have been identified as highly vulnerable to climate change induced Sea Level Rise (SLR). The GEF/SCCF project (ACCNDP) aimed to integrate the management of SLR risks into the development of Egypt's Low Elevation Coastal Zone (LECZ) in the Nile Delta by strengthening the regulatory framework and institutional capacity to improve resilience of coastal settlements and development infrastructure, implement innovative and environmentally friendly measures that facilitate/promote adaptation in the

Nile Delta, and establish a monitoring and assessment framework and knowledge management systems on adaptation

Evaluation Audience

This TE of the UNDP/SCCF/GEF Project is initiated by UNDP as the GEF Implementing Agency. It aims to determine the achievement of the intended outcomes. It aims to provide the Egyptian Implementing Agency, The Ministry of Water Resources and Irrigation, UNDP-Egypt Country Office and UNDP-GEF at all levels with strategy and policy options learnt for replicating and upscaling the results.

The TE will also highlight lessons learned about project design, implementation and management.

Evaluation objectives and scope

The overall purpose of the evaluation is to measure the effectiveness and efficiency of project activities in relation to the stated objective, identify lessons learnt and to produce possible recommendations on how to expand and upscale the best climate change adaptation practices. The TE serves as an agent of change and plays a critical role in supporting future climate change adaptation programming in the country. Its main objectives are:

- To document the lessons learnt on project management and monitoring functions of the climate change adaptation projects;
- To document the lessons learnt for enhancing accountability for the achievement of the climate change adaptation objectives;
- To enhance organizational and development learning;
- To enable informed decision-making for future climate change adaptation programming;

Particular emphasis should be put on the current project results and the extent of achieving all the outcomes in the given timeframe, taking into consideration the speed, at which the project is implemented. More specifically, the evaluation should assess:

1. Project design and its relevance The evaluator will assess the project design. S/he should review the problem addressed by the project and the project strategy, encompassing an assessment of the appropriateness of the objectives, outcomes, outputs, planned activities and inputs as compared to cost-effective alternatives. in relation to:

a) Development priorities at the national level;

b) Stakeholders – assess if the specific needs were met;

c) Country ownership / drivenness – participation and commitments of government, states, local authorities, and communities;

d) UNDP mission to promote assisting the country to build its capacities in the focal area of adaptation to climate change;

e) Meeting the SCCF adaptation guidelines: Demonstrating increases in adaptive capacity and resilience for climate change;

2. <u>Project outcomes, outputs and indicators</u>

The evaluation will assess the outcomes, outputs, and indicators achieved by the project as well as the likely inroads to sustainability of project results. This should encompass the following:

Attainment of objectives and planned results:

- Evaluate how, and to what extent, the stated project objectives are being achieved; taking into account the "achievement indicators". In addition, the team will assess the indicators matrix as to its utility for determining sustainability and replicability impact.
- Assess the level to which the project has followed guidelines of the SCCF Strategic Priority on Adaptation and recommend ways to further strengthen this linkage.

Achievement of outputs and activities:

- Assess the scope, quality and usefulness of the project outputs produced so far in relation to its expected results.
- Assess the feasibility and effectiveness of the work plan in implementing the components of the project.
- Assess the quality, appropriateness and timeliness of the project with regard to:
 - Satisfying the following GEF objectives;
 - o Delivering global environmental benefits; and
 - Achieving financial and environmental sustainability for the project intervention.

3. <u>Management arrangements</u> focused on project implementation:

 a) General implementation and management: evaluate the adequacy of the project, implementation structure, including the effectiveness of the Project Board, partnership strategy and stakeholder involvement from the aspect of compliance to UNDP/GEF requirements and also from the perspective of "good practice model" that could be used for replication;

Financial accountability and efficiency - assess efficiency against the so far achieved results, including an assessment of the National Implementation Modality and the cost effectiveness of the utilization of SCCF resources and actual UNDP co-financing for the achievement of project results; Assess the contribution of in-kind co-financing to project implementation and to what extend the project has been able to leverage additional funding so far.

- b) Monitoring and evaluation on project level: assess the adoption of the monitoring and evaluation system during the project implementation, focusing to relevance of the performance indicators, that are Specific; Measurable; Achievable and Attributable; Relevant and Realistic and time bound (SMART indicators)
- c) Assess to what extend the recommendations of the midterm review has been taken into consideration
- **<u>4.</u>** <u>**Timeframe:**</u> Assess the time taken for implementing the project's activities; Considering the difficulties faced project that delayed its implementation.

- Overall success of the project with regard to the following criteria:
 - a) Sustainability assessment of the prospects for benefits/activities continuing after the end of the project,
 - b) *Changes:* Assess any changes that may have resulted from the project implementation and its impact.
 - c) Contribution to capacity development extent to which the project has empowered target groups and have made possible for the government and local institutions to use the positive experiences; ownership of projects' results;
 - d) *Replication* analysis of replication potential of the project positive results in country and in the region,
 - e) *Synergies:* with other similar projects, funded by the government or other donors.

In addition to a descriptive assessment, all criteria should be rated using the following divisions: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), and Unsatisfactory (US) with an explanation of the rating.

Issues of special consideration

The Evaluation Report will present the experience and recommendations for the benefit of design and implementation of other climate change adaptation projects. Especially, the aspects of developing soft engineering solutions to complement hard structures for protection of low lying lands in the Nile Delta Coastal Zone including assessment of acceptance of the solutions, professional capacity built on design and implementation, rationale and performance for the piloted system, usefulness of ICZM planning as a tool for climate change adaptation of coastal zones, national observation system, shall be assessed

The Evaluation Report will present recommendations and lessons of broader applicability for follow-up and future support of UNDP and/or the Government, highlighting the best and worst practices in addressing issues relating to the evaluation scope.

5. Evaluation methodology

An outline of an evaluation approach is provided below; however it should be made clear that the evaluator is responsible for revising the approach as necessary. Any changes should be in-line with international criteria and professional norms and standards (as adopted by the UN Evaluation Group –, <u>http://www.uneval.org/document/detail/21</u>. They must be also cleared by UNDP before being applied by the evaluation team.

The evaluation must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and applicable to the remaining period of project duration.

The evaluation should provide as much gender disaggregated data as possible.

The Evaluator will take place mainly in the field. The evaluation team is expected to follow a participatory and consultative approach ensuring close engagement with the UNDP Country Office, Shore Protection Authority and

National Water Research Center, Egyptian Environmental Affairs Agency and other key stakeholders.

The Evaluator is expected to consult all relevant sources of information, such as the project document, project reports – incl. Annual Reports (PIRs), project budget revision, progress reports, project files, national strategic and legal documents, and any other material that the team may consider useful for evidence based assessment.

The Evaluator is expected to use interviews as a means of collecting data on the relevance, performance and success of the project. The evaluation team is also expected to visit the project sites.

The methodology to be used by the evaluation team should be presented in the report in detail. It shall include information on:

- Documentation reviewed;
- Interviews;
- Field visits;
- Questionnaires;
- Participatory techniques and other approaches for the gathering and analysis of data.

Although the evaluator should feel free to discuss with the authorities concerned, all matters relevant to its assignment, it is not authorized to make any commitment or statement on behalf of UNDP, GEF, SCCF or the project management.

The Evaluator should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

6. DELIVERABLES

The output of the mission will be the Evaluation Report in English. The length of the Report should not exceed 30 pages in total (not including the annexes).

Initial draft of the Evaluation Report will be circulated for comments to UNDP (both CO and Istanbul Regional Office), Ministry of Water Resources and Irrigation and the Project Manager. After incorporation of comments, the Evaluation Report will be finalized.

The Evaluation Report template following the GEF requirements is attached in <u>Annex 2</u> of this TOR.

<u>7.</u> TIMING AND DURATION

The evaluation will be conducted by one evaluator. The man-days of the evaluation will be 18 days, to start mid-October 2017 according to the following plan:

(i) 4 days preparation and pre-reading (ii) 7 working days on the mission, including travel (iii) 5 days report writing (iv) 2 day to amend and revise report

(Home based desk review (4 working days):

- Collection of and acquaintance with the project document and other relevant materials with information about the project;
- Familiarization with relevant coastal protection framework and climate change impacts in Egypt;

- Design the detailed evaluation scope and methodology (including the methods for data collection and analysis);
- Reading PIRs and other project relevant reports
- Set up the mission dates and detailed mission programme preparation in cooperation with the Project manager and UNDP CO. The Project manager will organize the schedule of the mission and will arrange transportation for the consultant; will arrange for translation/interpretation when necessary
- Communication with the project staff to clarify matters

a. Mission to Egypt (7 working days)

- Briefing with the PMU
- Visits to project sites
- Meeting with the National Project Manager, Project Board members and stakeholder groups
- Presentation of main findings to UNDP and project management on the final day of the field visit.
 - b. Elaboration of the draft report -home based:
- Additional desk review
 - c. The write of the Report (5+2 working days).
- Completing of the draft report
- Sharing the draft report for comments and suggestions
- Additional information and further clarification with UNDP, project management and Project staff
- Incorporation of comments and additional findings into the draft report
- Finalization of the report

The draft Evaluation report shall be submitted to UNDP for review within **15** working days after the mission. UNDP and the stakeholders will submit comments and suggestions within **15 working days** after receiving the draft.

<u>8.</u> REQUIRED QUALIFICATION

- University degree in civil/coastal engineering, or environment related issues;
- Recent experience with result-based management evaluation methodologies;
- Recent experience in evaluation of international donor driven projects;
- Recognized expertise in the field of climate change adaptation issues.
- Work experience in the above relevant areas for at least 8 years;
- Conceptual thinking and analytical skills;
- Project evaluation experiences within United Nations system will be considered an asset;
- Excellent English communication skills;
- Computer literacy;

The Evaluator must be independent from both the policy-making process and the delivery and management of assistance. Therefore applications will not be considered from evaluators who have had any direct involvement with the design or implementation of the project, or have conflict of interest with project related activities. This may apply equally to evaluators who are associated with organizations, or entities that are, or have been, involved in the delivery of the project. Any previous association with the project, the Executing of national implementing Agency or other partners/stakeholders must be disclosed in the application. This applies equally to firms submitting proposals as it does to individual evaluators.

If selected, failure to make the above disclosures will be considered as grounds for immediate contract termination, without recompense. In such circumstances, all notes, reports and other documentation produced by the evaluator will be retained by UNDP.

APPLICATION PROCESS

Applicants are requested to send in electronic versions:

Current and complete C.V. in English with indication of the e-mail and phone contact

Price offer indicating the total cost of the assignment (including the daily fee, per diem and travel costs)

to: Ms Heba Helmy Programme Assistant UNDP Egypt <u>heba.helmy@undp.org</u> Deadline: October 2, 2017

Due to the large number of applicants, UNDP regrets that it is unable to inform unsuccessful candidates about the outcome or status of the recruitment process.

UNDP is an equal opportunity employer and all qualified candidates are encouraged to apply.

EVALUATION REPORT: SAMPLE OUTLINE Minimum GEF Requirements

Executive summary

- Brief description of the project
- Context and purpose of the evaluation
- Main conclusions, recommendations and lessons learned

Introduction

- Project background
- Purpose of the evaluation
- Key issues addressed
- The outputs of the evaluation and how will they be used
- Methodology of the evaluation
- Structure of the evaluation

The Project and its development context

- Project start and its duration
- Implementation status
- Problems that the project seek to address
- Immediate and development objectives of the project
- Main stakeholders
- Results expected
- An analysis of the situation with regard to the outcomes, the outputs and the partnership strategy;

FINDINGS

Project formulation

- Implementation approach
- Analysis of Logical Framework Matrix- LFM (Project logic/strategy, indicators)
- Country ownership/Driveness
- Stakeholder participation
- Replication approach
- Cost-effectiveness
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Management arrangements

Implementation

- Implementation approach
- LFM used during implementation as a management and M&E tool
- Effective partnership arrangements established for implementation
- Feedback from M&E activities used for adaptive management
- Financial planning
- Monitoring and evaluation
- Execution and implementation modalities
- Management by the UNDP country office
- Coordination and operation issues
- Identification and management of risks (adaptive management)

Results

- Attainment of objective
- Prospects of sustainability
- Contribution to upgrading skills of the national staff

Conclusions and recommendations

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to strengthen or reinforce benefits from the project
- Proposals for future directions underlining main objectives
- Suggestions for strengthening ownership, management of potential risks

Lessons learned

- Good and bad practices and lessons learned in addressing issues relating to effectiveness, efficiency and relevance.

Annexes

- TOR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Questionnaire used and summary of results

Annex 2: Field Trip Itinerary

LIATE	Time	Meeting	Location
Date 14-1-2018	9:00-11:30	Kick off meeting	UNDP offices
	12:00 - 12:30	Meeting with the	The National
	12.00 - 12.30	ACCNDP Project	Water Research
		director	Centre
	12:30 - 15:00	Meeting with the	The Shore
	12.00 10.00	Shore Protection	Protection
		Authority president	Authority offices
		and staff	
15-1-2018	9:00 - 11:30	Meeting with the	the Hydraulics
		Hydraulics	Research Institute
		Research Institute	(El-qanater)
		director and staff	
	12:30 -13:30	Meeting with EEAA	
		staff	
	13:30-15:00	Meeting with EEAA	EEAA
		ICZM	
		representative.	
	7:00 - 10:00	Travel to Alexandria	
	10:00 – 13:00	Meeting with The	The Coastal
		Coastal Research	Research
16-1-2018		Institute director	
17-1-2018		and staff in Alex.	D
	13:00 – 16:00	Visit to the national	Rosetta
	(then stay	Observation system	
	overnight in Alex.)	station	
	8:00-9:00	Travel from Alex to	
	9:00 - 10:30	Motobas pilot site	Motobas
	9.00 - 10.30	Visit Motobas pilot site	MOLODAS
	10:30 - 11:00	Travel to Mastroo	
	10.50 - 11.00	pilot site	
	11:00-12:00	Visit Mastroo pilot	Mastroo
	11.00 12.00	site	Mastroo
	12:00 - 14:00	Travel to Damietta	
		pilot site	
	14:00 - 15:00	Visit Damietta pilot	Damietta
		site	
	15:00 - 20:00	Lunch and travel	
		back to Cairo	
18-1-2018	10:00 - 12:00	Wrap up meeting	The National
			Water Research
			Centre
	12:00 - 15:00	AOB	The National
			Water Research
			Centre

Annex 3: List of persons interviewed

- 1. Ms. Randa Aboul-Hosn, Egypt Country Director, UNDP, Cairo
- 2. Dr Mohamed Bayoumi, Assistant Resident Representitive, UNDP, Cairo
- 3. Dr Mohamed Ahmed, Project Manager, ACCND, Cairo
- 4. Dr Mohamed Abdel Motalib, President, National Water Research Centre, Cairo
- 5. Dr Alaa Abdel Motalib, Vice President, NWRC, Cairo
- 6. Dr Mohamed al Fitani, Researcher, Technical Office of the President, NWRC, Cairo
- 7. Eng. Ali Kamel, Chairman, Shoreline Protection Authority, Cairo
- 8. Eng. Ramzy el Shakaa, Head of Central Directorate for Maintenance and Implementation, SPA, Cairo
- 9. Eng Taha el Erian, Head of Design and Research Directorate, SPA, Cairo
- 10. Eng. Mohamed Hassan, General Manager, Project Design Department, SPA, Cairo
- 11. Prof Khaled Ramadan, Director, Hydraulic Research Institute, Cairo
- 12. Dr Saeed Maghoub, Deputy Director, HRI, Cairo
- 13. Dr Mohamed Bahgat, Researcher, HRI, Cairo
- 14. Eng. Mohamed Farouk, Head of Environmental Management Sector, Egyptian Environmental Affairs Agency, Cairo
- 15. Eng Hoda el Shanadfy, Head of GEF Unit, EEAA, Cairo
- 16. Eng. Ahmed Shata, Head of Central ICZM Department, EEAA, Cairo
- 17. Eng. Nagla Mohamed, Follow-Up Director, Climate Change Central Department, EEAA, Cairo
- 18. Eng. Maha Moawad, Marine Pollution Control Director, Central ICZM Department, EEAA, Cairo
- 19. Eng. Noha Samy, Director of Lakes, Central ICZM Department, EEAA, Cairo
- 20. Eng. Omeya Hegazy, Environmental Researcher, Climate Change Central Department, EEAA, Cairo
- 21. Dr. Mohamed Soliman, Director, Coastal Research Institute, Alexandria
- 22. Prof Ibrahim el Shinnawy, former Director, CORI, Alexandria
- 23. Eng. Dina Salah, Modeller, CORI, Alexandria
- 24. Eng. Shaimah Taha, Researcher, CORI, Alexandria
- 25. Eng. Ahmed Khalifa, Assistant Researcher, CORI, Alexandria
- 26. Eng. Goma'a Sa'ad Shamy, Director of Regional Office, SPA, Kafr el Sheikh
- 27. Eng. Mohamed Maki, Engineer, SPA, Kafr el Sheikh
- 28. Eng. Fayes el Shamly, Head of Environment Unit, Kafr el Sheikh Governorate, Kafr el Sheikh

Annex 5: List of documents reviewed

Core Project Documents

- Project Document, 2009
- Project Final Inception Report, 2011
- Project Implementation Reviews (PIR) between 2011 and 2017
- Mid-Term Evaluation, 2013
- Management Response to the Mid-Term Review, undated

Financial Data

• Combined Delivery Reports (CDR) for 2010 through to 2017

Technical Outputs, Studies and Working Documents

- Integrated Coastal Zone Management in the North Coast of Egypt: a scoping study. Annex IV: legal and institutional assessment. IH Cantabria & Environics, April 2017.
- Design of a National Observation System for the North Coast of Egypt. Final Design Report. David Aubrey, April 2016.
- Gender analysis and action plan. Annex XIIIc to the Green Climate Fund Funding Proposal. Undated.
- Stakeholder Analysis Report, 2011
- Coastal Protection Works on the Nile Delta: as seen on Google Earth, December 2010
- Climate change risks to coastal development and adaptation options in the Nile Delta, el Shinnawy, Borhan, el Raey, Dougherty & Fenci, January 2010.
- Evolution of the Sediment Budget along the Nile Delta coast, CORI, 2011

Other documents

- Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt, Green Climate Fund Funding Proposal, September 2017
- Report of the Inception Meeting
- Initial National Communication of Egypt to the UNFCCC, 1999
- Second National Communication of Egypt to the UNFCCC, 2010

Annex 6: Interview topic guide

- 1. To what extent the project is consistent with national and local policies and priorities and the needs of intended beneficiaries in Egypt?
- 2. How do the project's achievements compare to its intended results?
- 3. Do project's outputs, outcomes and impact represent good value for money?
- 4. Were all relevant national stakeholders (central government, local authorities, communities) sufficiently engaged in project design and implementation?
 - a. If not, what could have been done to enhance their engagement?
- 5. Do you expect Egypt to maintain its financial commitment to sustaining project outputs?
 - a. Does this represent a change in overall funding and/or change in priorities for shoreline protection?
- 6. Were project's objectives and components clear, practicable and feasible within its timeframe?
 - a. Would the project have been completed on time and with a higher level of attainment if not for the political changes since 2011?
- 7. Did the project design appropriately reflect the capacities of executing institution and national partners?
- 8. Were partnership arrangements, roles, and responsibilities properly identified and negotiated before the start of the project?
- 9. Were the management arrangements implemented and how efficient they are?

a. Do you consider the management arrangements employed to represent best practice?

- 10. How effective are project communications in keeping stakeholders and beneficiaries informed?
- 11. Assess the role of UNDP. Assess contribution to the project from UNDP "soft" assistance (i.e. policy advice & dialogue, advocacy, and coordination).
- 12. Were there any ways in which the project was misguided or performed poorly?
 - a. If yes, what were they?
 - b. What could have been done to mitigate these risks?



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