Terminal Evaluation Report

November 2018

Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change in the Gambia

UNDP PIMS ID: 4782 GEF Project ID: 4724

Country: Gambia

Region: Africa

Focal Area: LDCF Climate Change

Implementing Agency: United Nations Development Programme

Executive: Office of the President **Implementing Partner:** Ministry of Environment

Project Timeframe: Jan 2014 – Dec 2018

Prepared by:

Richard Sobey, International Consultant / Team Leader **Marie Chorr Bah**, Project Implementation Unit, M&E

Terminal Evaluation Opening Page

Project Name: Enhancing Resilience of Vulnerable Coastal Areas and Communities to

the Impact of Climate Change in the Gambia

GEF Project ID: 4724

UNDP PIMS ID: 4782

Country: Gambia

Region: Africa

Focal Area: Climate Change Adaptation (LDCF / GEF-5)

FA Strategic Framework

Objectives:

CCA-1, CCA-2, CCA-3

GEF CEO Endorsement Date: Oct 2013

Project document Signature Nov 2013

Planned Timeframe: Start: Oct 2013 Closure: Oct 2017

Actual Timeframe: Nov 2013 Dec 2018

Executing Agency / Implementing Partner

Office of the President / Ministry of Environment, Climate Change & Natural Resources delegated to National Environment Agency

Implementation Modality: National Implementation

Other Responsible Parties: Ministry of Works, Transportation & Infrastructure

Project Cost: US\$ 48,460,000 (exc. PPG)

GEF PPG Grant: US\$ 890,000

GEF Project Grant: US\$ 8,900,000

Co-Financing: US\$ 39,560,000

 UNDP
 U\$\$1,600,000

 Government
 U\$\$25,500,000

 Other
 U\$\$12,460,000

TE Review Timeframe: Oct-Dec 2018

Evaluation Team: Richard Sobey, International Consultant / Team Leader

Marie Chorr Bah, Project M&E

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Disclaimer

The TE views were discussed with UNDP, Board members, the National Environment Agency, local government partners and other key stakeholders. There was a debriefing / stakeholder workshop held to present views and refine findings. NEA, PIU, UNDP and their RTA provided comment on the draft report before finalization.

The views held within this report are those of the TE team.

Acknowledgement

The evaluation team would like to acknowledge all project partners who supported the development of this TE. In particular, the TE team leader would like to thank: Marie Chorr Bah of the PIU who facilitated and joined the field phase of the mission; Dodou Trawally, the project team leader, and the UNDP CO staff who coordinated the Terminal Evaluation.

Abbreviations and Acronyms

AMAT Adaptation Monitoring and Assessment Tool (of GEF - LDCF/SCCF)

APR/PIR Annual Project Report / Project Implementation Report

ATLAS UNDP tracking system AWP Annual Work Plan

CMU Coastal Marine Unit (of NEA)

CPAP UNDP Country Programme Action Plan
CPD UN Country Programme Document
D&I Darsilami & Illiassa rice paddy schemes
DoA Department of Agriculture (as an RP)

DFPW Department of Forestry & Parks and Wildlife Management (as an RP)

DoF Department of Fisheries (as an RP)

EA Executing Agency (~IP)
GEF Global Environment Facility

HACT Harmonised Approach to Cash Transfers (i.e. Cooperation agreement between UNDP & the IP)

ICZM Inter-coastal Zone Management (An approach to coastal management)

IFS Integrated Farming Systems ("the rice-fish-salt schemes designed for Darsilami & Illiassa)

IP Project Implementing Partner (MECCNR / NEA)

LDCF/SCCF Least Developed Countries Fund / Special Climate Change Fund (administered by GEF)

M&E Monitoring and Evaluation

MECCNR Ministry of Environment, Climate Change and Natural Resources (as the IP)

MoFEA Ministry of Finance and Economic Affairs

MoWTI Ministry of Works, Transportation &Infrastructure (as the main RP)

MTR Mid-term Review

NAPA National Adaptation Programme of Action (document submitted to UNFCCC)

NARI National Agriculture Research Institute (as an RP)

NEA National Environment Agency (as the IP designated by MECCNR)

OoP Office of the President (as the EA)
PB Project Board (i.e. steering committee)

PIMS UNDP Project Information Management System

PIU Project Implementation Unit

PRF Project Results Framework (~logframe / Strategic Results Framework)
Prodoc UNDP GEF Coastal Resilience Project Document (i.e. its full design)

PSC Project Steering Committee

RP Responsible Party (ies) (implementing on behalf of the IP)

RTA Regional Technical Advisor (of UNDP)

SGKB Senegambia / Kololi Beach (hard infrastructure revetment scheme)
SMART Specific, Measurable, Achievable, Relevant and Time-bound
SRDIP Sea & River Defence Investment (& Management) Plan

SRDM Sea & River Defence Management (an approach to coastal and tidal river management)

TBDR Dyke & Revetment (the 2nd hard infrastructure scheme)

TE Terminal Evaluation (of the project)

TRAC Thematic Resources Assigned from the Core (UNDP)

UNDP United Nations Development Programme (GEF Implementing Agency, member of PSC)

UNDP CO UNDP Country Office

UNDSS UN Department for Safety and Security

UNFCCC United Nations Framework Convention on Climate Change

UNITS US\$ - US dollar; m - million or meters; ha - hectare (100 m x 100 metres); dalasi – national currency

Executive Summary

The executive summary is a eight-page summary of the the Terminal Evaluation (TE) report.

Project Title:	Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change			
UNDP Project ID (PIMS #):	4782	PIF Approva	1	Dec-11
GEF Project ID (PMIS #):	4724	CEO Endorse	ement	Oct-13
Award ID:	74214	Project Docu Signature	iment (ProDoc)	Nov-13
Country	Gambia	Project man	ager hired	Nov-13
Region:	Africa	Inception W	orkshop	Feb-14
Focal Area:	Climate Change	Terminal Eva	aluation	Nov-18
Strategic Programs:	CCA Closing Date		Dec-18	
Trust Fund:	LDCF Modality		NIM	
Executing Agency /	Office of the President / Ministry of Environment (National Environment			
Implementing Partner	Agency)			
Other Partners / Responsible Parties	Ministry of Works, Transport & Infrastructure			
Project Financing:	at CEO endorsement (USD) at		at Terminal Eva	aluation (USD)*
[1] GEF financing:	8,900,000)	8,22	6,851
[2] UNDP contribution:	1,600,000		1,015,299	
[3] Government:	25,500,00	0		*
[4] Other partners:	12,460,00	0		*
[5] Total cofinancing [2 + 3+ 4]:	39,560,000			*
PROJECT TOTAL COSTS [1 + 5]	48,460,000		9,24	2,150

Actual expenditures and co-financing contributions through 10 Dec 2018; *unconfirmed

Project Description

Problem to Solution

The goal of the project is to create policy and institutional arrangements for climate resilience development in the coastal zone, moving towards 'risk reduction' and 'resilience'. This is because there are more sea & river defences to be constructed than there is money or skills available. Without adopting this approach, the amount of sea & river defence works required in the coming years, could not break even. Thus, to address coastal adaptation, a new more cost-effective and planned approach is needed, with new decision-making tools, including a sea & river defence risk management programme.

Project Strategy

The strategy for: Outcome 1 was 'mainstreaming climate change into national development planning'; Outcome 2 was 'physical construction of coastal protection measures'; and Outcome 3 was 'strengthening livelihoods of coastal communities.' Cross-cutting strategies included: staff capacity building; strengthening national institutions and collaboration; increasing the resilience of local communities; & lessons learning.

Project Location

The project was located along the south shore coast at Senegambia; and along the Baobolong tributary (Darsilami, Illiassa) and Bintang Bolong tributary (Tendaba) of the Gambia River.

Project Description

The NAPA (2009) identified coastal zone management as the primary focal area (Priority 1). As result of this decision, this LDCF/GEF project proposal was formulated. The project is the first community-based adaptation project to be implemented by the government to deal with the adverse impacts of climate change with special focus on coastal erosion, sea-level rise, flooding, salinity / salt water intrusion and community livelihoods:

- The project will strengthen policies and institutions mandated to manage coastal areas
- The project will support the construction of coastal protection measures and the demonstration of sustainable coastal adaptation technologies
- The project will support the design and implementation of climate-resilient fisheries management, custom

- rules for fisheries access and community monitoring of quotas introduced to at least 25 vulnerable communities (including Oyster farming)
- The project will enhance food security and livelihoods in coastal & low-land agricultural areas in the Central River & Lower River Valley through the management of salt-intruded rice paddies.
- The project will support the restoration of 2,500 ha of mangrove forests

Purpose and Methodology

The objective of the TE was to gain an independent analysis of the results of the project. The TE focused on identifying project design issues, assessing progress towards the achievement of the project objective, and identifying lessons-learned about the action. Findings of this review are also incorporated as sections on sustainability and impact, as well as providing recommendations for the future. The project performance was measured based on the indicators from the project's strategic results framework and relevant GEF tracking tools. The TE was an evidence-based assessment and relied on a review of available documents and feedback from those involved in the project.

Evaluation Ratings Summary

GEF-financed UNDP-supported projects of this type require the TE to evaluate the implementation according to set parameters and ratings. The result of this TE is presented (see **Annex 10** for rating scale):

Monitoring & Evaluation Rating Implementing Agency (UNDP) & Rating **Executing Agency / Partner** (MECCNR) Execution Overall quality of M&E S Overall quality of Implementation / MS **Execution** M&E Design at entry MS Quality of UNDP Implementation MS HS Quality of Execution - MECCNR / NEA MU M&E Implementation 3. Assessment of Outcomes Rating 4. Sustainability Rating Overall Project Outcome (Objective) S **Overall Likelihood of Sustainability** MU Effectiveness of Outcome 1 MU Financial resources MU Effectiveness of Outcome 2 S Socio-economic MLEffectiveness of Outcome 3 S Institutional framework & governance MU Efficiency MU Environmental ML Relevance R 5. Impact Rating **Impact** Μ

Exhibit 2: TE Ratings Summary Table

Detailed ratings are tabulated below in Exhibit 3. A description of the scales is provided in section 1.5

Exhibit 3: TE Ratings and Achievement Summary Table					
Project: Enhand	Project: Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change				
in the Gambia (0	GEF Project ID: 4724; UNDP PIMS ID: 4782)				
TE Rating	Rating Achievement Description				
	Outcomes/ Results				
	Objective: To reduce Gambia's vulnerability to sea-level rise & associated impacts of climate change by improving coastal defences & enhancing adaptive capacities of coastal communities.				
Results Overall Project Objective	The overall objective indicator is 'Number of vulnerable people / communities with enhanced living conditions and sustainable livelihoods.' The grading at the project objective level depends on both the achievement of outcomes according to 'framework logic', and on the objective level indicators which separately consider the long-term impact.				
Achievement	The overall TE Rating at the Objective level is Satisfactory				
Satisfactory	There were two indicators individually rated				
	- Investment level in sea & river defences – Moderately Unsatisfactory				
	- Improvement of communities / sustainable livelihoods - Satisfactory				
	Justification: The community target is achieved with 1,506 families directly benefiting from				

the project. This includes 10 communities provided 80 canoes, two provided houses for rice machines, five provided community centres, and four communities provided four 7 larger boats with outboard engines. From 1,506 beneficiaries, 1,281 were women (85%). From the total, a project calculation of (x8) eight indirect beneficiaries benefitted would be equivalent to 12,048 persons. Investment is sea & river defence planning and construction has fallen. Outcome 1: Policies, institutions & individuals mandated to manage coastal areas strengthened to reduce the risk of climate change The **overall TE rating** for these three indicators is **Moderately Unsatisfactory** The three indicators are individually graded: - Capacity-building - The indicator had two targets which were rated as Moderately Unsatisfactory and Moderately Satisfactory - Coastal monitoring - The indicator had one target which was rated as Unsatisfactory Effectiveness -Outcome 1 - Sea & River Defence Investment Plan - The indicator had two targets which were both rated Achievement as Moderately Satisfactory Moderately Justification: Outcome 1 was complex and confusing, with a design that focussed on various Unsatisfactory physical outputs (approaches, reports, database), when it was strategic leadership and institutional change in coastal management that it was aiming for. A clear plan to articulate and deliver this under Outcome 1 was never put in place. This was due to a lack of political willpower (including within MECCNR and NEA), partly stemming from its technical complexity, and the skills / staffing gap required to realize it, but also due to a lack of complimentary government funding. It should have been clear after the series of consultant reports at the end of 2014, that Outcome 1, had reached an impasse and needed an institutional mechanism at the least. This was the CMEWG which the project failed to support or mobilise. Outcome 2: Vulnerability of coastal investments to climate risks reduced through the design, construction & maintenance of coastal protection measures The **overall TE rating** for these two indicators is: **Satisfactory** There are two indicators individually graded: - Hard & soft coastal protection schemes - The indicator had two targets which were rated Highly Satisfactory and Satisfactory - Number of households benefitting – Satisfactory Justification: Two hard protection schemes (SGKB revetment and Tanji Bridge dyke & Effectiveness revetment (TBDR) have been successfully constructed. Three soft protection schemes have Outcome 2 been successfully constructed: Achievement - Darsilami & Illiassa (D&I) integrated farming systems at with river defence dykes have been Satisfactory constructed. With further support of NARI, the salt-intruded rice paddy fields should become productive in the next 1-2 seasons. The salt-pans at Darsilami need technical support. The freshwater fish ponds at D&I have technical problems and are not successful. - Tendaba polder and sea dyke has been successfully constructed. With the repair of its dyke and run-off, the salt-intruded rice paddy at Tendaba is now back under rice production. - The total area of constructed rice paddy is 37.9 ha which is less than 5% of the project design target. - Mangrove restoration at various sites has been undertaken with 1,197 ha out of a target of 2,500 ha planted. Outcome 3: Rural livelihoods in the coastal zone enhanced & protected from the impacts of climate change through demonstration & transfer of coastal adaptation techniques & Effectiveness economic diversification Outcome 3 The **overall TE rating** for these two indicators is: **Satisfactory** Achievement There are two indicators individually graded: Satisfactory - Rice & fish production - There were four targets individually rated as: Satisfactory, Satisfactory, Satisfactory, and Highly Satisfactory

	- Extension service provision – Moderately Satisfactory Justification: Technical support was successfully provided to the paddy rice growing communities by NARI. The five community vegetable gardens with solar-powered freshwater boreholes are successful. The five community centres constructed are in good condition, but are yet to be fully utilized. Ten oyster farming communities have been supported, as well as four fishing communities.
	Efficiency
Efficiency MU	Efficiency Rating – Moderately Unsatisfactory There should have been a rationalisation with the GCCA project (both housed within NEA), but this didn't happen. This indicated the lack of leadership and direction within NEA to direct donor funds (of LDCF and EU) towards feasible outcomes. Instead, neither project has managed to support Gambia to develop an institutionally-based sea & river defence strategy. There were a high number of consultant reports commissioned, but they were rarely converted to project deliverables (i.e. developed from a report to a strategy or plan; or not linked to an institutional mechanism) or not approved for implementation by the PB. There was very limited oversight to link the various consultant reports to create an approach to coastal defence for Gambia.
	Relevance
	Relevance Rating – Relevant
Relevance R	The project was relevant to national environmental and developmental priorities and was in line with GEF / LDCF climate change priorities. It supported NAPA priorities. It remains relevant.
	Implementation - Execution
	Project Implementation: According to the given five categories (Implementing Agency - IA or Executive Agency - EA coordination & operational matters, partnership arrangements & stakeholder engagement, finance & co-finance, M&E systems (see next), and adaptive management (work planning, reporting & communications)
	Overall Rating: Moderately Satisfactory A and EA Coordination & Operational Management
	IA and EA Coordination & Operational Management IA (UNDP) – Moderately Satisfactory
	Outcome 1 was not completed, in part because it required in-house coastal engineering skills which NEA did not have nor did they recruit as promised, nor was the Coastal Marine Unit strengthened for the project. This should have been a red flag to UNDP, but was not mentioned or acted upon within their risk management system (Atlas). IP (MECCNR / NEA) – Moderately Unsatisfactory
Implemen-	
tation Moderately Satisfactory	Government involvement was considered high, with a government agency, the NEA as the delegated IP, but there were issues with the lack of collaboration across government offices. The TE, however felt that government ownership was low. There were no national level workshops to foster consensus, collaboration or ownership. There was no overall training plan produced, which would have highlighted the institutional capacity / skills gaps. The PIU stated that gaining appointments of skilled staff was an issue that the project could not solve, and this impacted on delivery of Outcomes 1 and 2.
	Partnership Arrangements & Stakeholder Engagement
	National partnerships were weak. The inter-ministerial CMEWG was not active thus neither benefited from the project nor provided any strategic direction. The MoU between the NEA and MoWTI was largely on paper only. There was some local liaison and training at the local government level, but no direct project role. The PIU <i>modus operandi</i> was to primarily work directly with local communities. However, where the project was able to involve state partners at a local level, they did so effectively in a number of cases – with technical support from NARI (rice), Department of Forestry (mangrove) and Department of Fisheries (oysters)

Finance

UNDP and the PIU / PB managed the finances fairly effectively, however the proportions allocated to the interventions were not sufficiently balanced in order that all the interventions could either be realized or reach their targets. This was particularly the case with funds over allocated to hard infrastructure, and office equipment (PIU / NEA), and not enough funds allocated to Outcome 1 - institutional capacity building; Outcome 2 - mangrove planting; Outcome 3 - oyster value chains

Even though verification was not possible, it was clear that co-financing was severely limited in comparison to the amounts promised.

Adaptive management (work planning, reporting & communications)

Work planning was acceptable, albeit the issues with budgeting, as mentioned. Quarterly reports were regular and more useful that the PIRs, which didn't fit with annual planning.

UNDP and PIU communications were good, however the PIU, despite being housed within NEA, didn't really manage to mobilise sufficient added input (and therefore results) from NEA. For example, the NEA as the designated IP should have been hosting workshops, gaining a consensus and working towards coastal policy approaches. There was little evidence of such leadership.

Monitoring & Evaluation

M&E Systems - Design & Implementation

Overall quality of M&E - Satisfactory

The PIU maintained a detailed Indicator Tracking Table which tabulated all beneficiaries of interventions (schemes, equipment, & training), although unfortunately not progress under Outcome 1, which concerned strategic planning and capacity-building

M&E Satisfactory

M&E at Design - Moderately Satisfactory

The prodoc design was standard, but didn't highlight the importance of tracking mainstreaming policy or institutional needs. i.e. there were moderate short-comings

<u>M&E Implementation</u> – **Highly Satisfactory**

The M&E officer dovetailed M&E activities with community mobilisation and activities, which made the work very efficient and effective

Sustainability

<u>Sustainability</u>: According to the four GEF risk categories (financial, socio-economic, institutional & governance and environmental), present status, and towards the future is assessed.

Overall Rating: Moderately Unlikely

Significant risk that key Outcomes will not carry on after project closure, although some outputs should carry on.

Financial Risks to Sustainability – Moderately Unlikely

Sustainability **MU**

Government funds are highly limited, but are needed for SRDM planning. At present SRDM planning is not high enough on the political agenda to warrant budgeting for activities. The lack of workshops in developing such a strategy was apparent as was government inertia in this sector.

Some of the advances made by the project are not sustainable without further donor funds. In spite of this, the project interventions in the field have less financial risk to their sustainability with either further investment being sought by UNDP for a breakwater scheme to protect SGKB; or the expected self-sustainability of the three rice paddy fields.

Socio-Economic Risks to Sustainability - Moderately Likely

The SGKB revetment heavily supports the SGKB hotels, with expected tax revenue to continue, however, the believe from cost-benefit analysis is that these private companies have largely benefitted from international donor development funds, without having to financially contribute.

The revised approach to the GCF finance proposal indicated that the breakwater scheme

would be classified as high risk and therefore not eligible to sole GCF financing, with redesign of the concept to include local communities and not just the tourist hotels at Kololi beach. In fact, this should have been a lesson learned from the GEF project — with the high benefit to the tourist hotels of the SGKB and TBDR works and with lessor benefit to more vulnerable communities.

The rice paddies should become sustainable, but this is only probable with the continued input of NARI for the next five years, especially for D&I.

The project missed a trick in not pursuing a market / value chain analysis for the oyster producers, however they are in a stronger position than pre-project, especially with the provision of new canoes.

Institutional Framework & Governance Risks to Sustainability – Moderately Unlikely

NEA were not supported sufficiently for this project, bearing in mind their serious lack of capacity and mandate to implement new institutional structures with new technical skills. There was also insufficient political willpower and leadership from MECCNR and the OoP. The clear lack of government direction in terms of allocated funding for sea and river defence made this apparent.

Due to the external contracting of works and services, the institutional and governance capacity of NEA and MoWTI in particular was not enhanced.

The Department of Forestry & Wildlife have enhanced their technical and social engagement skills with a fairly extensive mangrove restoration exercise in over 50 communities.

NARI enhanced their technical and social engagement skills in working with three paddy rice growing communities with technical challenges. These challenges in excessive salinity were largely overcome through physical and technical solutions

Environmental Risks to Sustainability - Moderately Likely

The sustainability of the SGKB revetment scheme is dependent on another breakwater scheme, which is currently at a project concept stage with the Green Climate Fund (GCF). It has been budgeted at US\$11.4m. The sustainability of the SGKB together with the 'breakwater scheme', with appropriate maintenance of both is estimated at 50 years.

For greater resilience to climate change (ecological functioning) additionally planting the larger *Avicennia* should be encouraged. This would strengthen the mangrove ecosystem from upstream (rainfed) flooding and downstream tidal sea level rise / surges. Another benefit of mangrove establishment is in providing nursery areas for fish and crustaceans and in providing other NTFPs products.

Government and public awareness of ecological system is not that high with for example road causeways having been constructed across tidal wetlands without EIAs undertaken or respected, and thus causing mangrove death.

Impact

<u>Impact:</u> According to the three GEF categories (Significant, Minimal or Negligible), present status and towards the future

Rating: Minimal

Reduction in stress on ecological systems

Impact Minimal

Early indications of 1,197 ha plus mangrove plantation are very positive. Oyster cultivation requires another project to develop a sustainable racking system as opposed to wild collection.

The stress of the beach washing away at SGKB has been reduced by the revetment, but this not considered sustainable until a further breakwater scheme is constructed. The TBDR has reduced stress on the river tributary sand bank and shoreline.

Regulatory & policy changes at national and local levels

The project was unable to effectively strengthen policies and institutions mandated to manage coastal areas. Indeed, the mandate to manage coastal areas remains cross-sectoral and confused, missing any overarching strategy. The OoP, MECCNR and NEA all went through

major appointment changes during the project lifetime, which didn't help their ability to support the project.

Catalytic Effect

<u>Scaling-up</u> - What has been key, is the learning curve to develop dyke / gate system for salt-intruded paddies. This can be scaled up and replicated. However, scaling-up of this still requires paddy management techniques (water flow and flushing practice) and the use of salt-tolerant rice varieties. This requires continued technical support by NARI.

<u>Replication</u> - SRDM planning is now at a consolidation stage. Capacity still needs to be built and government line-agencies need to be more involved – collaborative via an institutional mechanism. The various aspects need to be brought together. Sustainable oyster cultivation techniques still need to be introduced

<u>Demonstration</u> - In order for GCF to fund the breakwaters scheme, the concept needs to identify more local beneficiaries, however the overriding major beneficiary remain the private hotel operators along SGKB. At present, they are not expected to be significant contributors, outside standard taxation. This should be re-thought, through a public-private sector partnership (PPP) arrangement.

Production of a new technologies /approaches - The solar-powered water-supply systems are successful. The borehole at Illiassa should be used for both the community gardens and rice paddies flushing.

Conclusions

Outcome 1 was to provide the policy and institutional building blocks for coastal defence. In hindsight, it is easy to see that the expectations were far too high (Outcome 1, especially in creating the institutional backbone and the strategic approach), with the design far too complicated and excessive, and the personnel resources far too low.

In order to have fully achieved all expected results, the project needed much higher support from OoP, MECCNR and MoFEA with a strategic vision and commitment guaranteed. A draft SRDM policy was prepared early on, but there was little discussion on its merits. The project also needed a sharper PIU / NEA nexus with stronger leadership to simplify the actions down to appropriate manageability. Stronger oversight from UNDP in focusing on Outcome 1 also would have helped.

The project succeeded in implementing Outcome 2, although not at the targeted scale for hectares of rice paddy created or mangrove planted. The SGKB revetment and TBDR was constructed but at a cost which affected the scale of rice paddy and mangrove coverage. Furthermore, funding still needs to be secured for the SGKB breakwater scheme for the revetment to become sustainable.

These two hard infrastructure schemes enjoyed a much higher political interest and cozy relationship with the tourism industry operators, as well as having extensive international consultant guidance. The same level of interest, expertise and post-project supervision & maintenance was missing for the Darsilami and Illiassa rice paddies. However, the project (UNDP, PIU & NEA) maintained this 'second' focus on the soft engineering schemes (Darsilami, Illiassa and Tendaba), which proved important. The scale of the polder constructed at Tendaba was also impressive.

Under Outcome 3, livelihoods were enhanced with improved approaches. NARI support to the wet rice producers was excellent. Technical support to the fishing and oyster farming communities was acceptable, with limited inputs from the Department of Fisheries regarding sustainability regulations. The creation of the community vegetable gardens (with facilities and solar-powered borehole water) was successful. Local community mobilization and enthusiasm was high, which was an area that the PIU excelled in. PIU support was also excellent in the registration of village group associations, so that bank account saving and lending could be established. This allowed project equipment to transfer to the various groups and for the groups to save for future maintenance costs

The project effectively achieved many of its objectives, but with some real lessons learned. Lastly, the design bias towards supporting women was successful.

Recommendations

Exhibit 4: Key Recommendations Table (with responsible entity)

- 1. The hard engineering schemes have a five-year defect liability period, during which MOWTI should be involved, so that they learn the required maintenance methods and build their internal capacity [UNDP letter to MoWTI, cc to NIRAS and NEA]
- 2. Formal handover of the soft engineering schemes and equipment to local communities needs to be completed. [UNDP and NEA]
- 3. The Darsilami and Illiassa schemes need to be formally handed over even if they are not 100% operational. The amount of further work that either UNDP or NEA could do is very limited. The communities here can only take responsibility, once such ownership is handed over. The communities can then continue to construct internal sub-plot bunds themselves to support gravity-based drainage / flushing of the salt-intruded paddies. However, the continued technical support of NARI is imperative, not least in the provision and testing of salt-tolerant seed. This needs to be funded. [UNDP]
- 4. The fish ponds were unsuccessful. The bolehole-pump-pipe system for the fish ponds at D&I should be re-directed to support salt-flushing of their rice paddies. The rice paddies are far more important for the community livelihoods, plus they also have new rice mills, provided by the project. The water pump for Illiassa needs to be delivered from NEA to the community so that it can be used for flushing the rice paddy. [NEA]
- 5. Tendaba polder is new public land. The project needs to handover to local government with an official community stakeholder committee to be established. This would be to balance the control of the Tendaba Camp owner in favour of all Tendaba villagers. The Right of Way along the complete polder must be maintained for the community. There was evidence of Tendaba camp workers throwing rubbish over the polder wall into mangroves where important wildlife forage (Western Red Colobus monkeys (IUCN Endangered). [OoP letter to the local government at Tendaba village authority copied to the district]
- 6. Oyster cultivation is at an early stage of development, however the opportunities to add market value are obvious in supplying the tourist hotels with fresh oysters. The project can easily support this beginning with a letter to the tourism board and hotel association indicating that they should meet the 10 oyster farming groups that the project has supported. The project should discuss with the 10 groups if they wish to form a cooperative, so that their marketing power is enhanced. [NEA letter]
- 7. A 10-year national mangrove restoration plan needs to be produced [Department of Forestry]
- 8. The government should consider a tourist tax to pay for urban coastal area protection; and a national green tax to contribute to river ecosystem-based adaptation (EbA) [OoP, MoFEA]

INTRODUCTION

1.1. The project

This UNDP-supported GEF-financed project was titled 'Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change in the Gambia, (PIMS 4782)'. The project was implemented in five districts - Kotu, Tanji, Bintang, Darsilami and Tendaba. The project started in October 2013 and ended implementation in December 2018, including a one-year extension. The 5-year project was under National Implementation Modality (NIM) with the Office of the President (OoP) as the Executing Agency, and the Ministry of Environment, Climate Change & Natural Resources (MECCNR) / National Environment Agency (NEA) as the Implementing Partner (IP). The project's main Responsible Parties included: Ministry of Works, Transportation &Infrastructure (MoWTI); National Agriculture Research Institute (NARI); Department of Forestry & Parks & Wildlife (DFPW); and Department of Fisheries (DoF). A Project Implementation Unit (PIU) was located within the NEA.

1.2. Purpose of the evaluation and report structure

Purpose

This is the Terminal Evaluation (TE) of the project. The objective of the TE was to gain an independent analysis of the achievement of the project at completion, as well as to assess its sustainability and impact. The report focuses on assessing outcomes and project management. The TE additionally considered accountability and transparency, and provided lessons-learned for future UNDP-supported GEF-financed projects, in terms of selection, design and implementation.

Structure

This report is in six sections - introduction, description, findings, sustainability, impact and conclusions / recommendations. The UNDP-GEF rating scales are described in section 1.5. The findings (section 3) are additionally divided into strategy and design, implementation and management, and results.

1.3. Scope and Methodology

Approach

The overall approach and methodology of the evaluation followed the guidelines outlined in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported GEF-financed Projects (2012). The TE was an evidence-based assessment and relied on feedback from persons who were involved in the design, implementation, and supervision of the project. The TE team reviewed available documents (Annex 7), conducted field visits and held interviews. The international consultant was the team leader and responsible for quality assurance and consolidation of the findings of the evaluation, and provided the TE report.

The field mission took place from $12^{th} - 23^{rd}$ Nov 2018, according to the itinerary compiled in **Annex 11**. The agreed upon agenda included a UNDP briefing on 13^{th} November and a stakeholder workshop on 22^{nd} November. There were no distinct security issues which affected the TE. Usual precautions were undertaken, with the project Landcruiser provided for the field travel.

Methods

The TE determined if the project's building blocks (technical, financial, management, legal) were put in place and then, if together these were catalysed sufficiently to make the project successful. The TE method was to utilise a 'multi-level mixed evaluation', which is useful when evaluating delivery of a new service or approach, being piloted by state institutions. The method allows for cross-referencing and is suitable for finding insights which are sensitive and informative. The rating scales are provided in **Annex 10.** Pro-forma questions on key themes such as those provided by the UNDP GEF guideline were updated by the TE (**Annex 14**).

Main partners and Stakeholder feedback

The TE interacted with the Project Implementation Unit (PIU), the UNDP Country Office as well as with technical staff in NEA, MoWTI, NARI, DFPW and others. The TE also visited the project regions to interact with local administrators, technical staff and beneficiaries. Gaining a representative view from local stakeholders was only limited by time. Additional telephone / email interviews with the stakeholders were arranged as necessary. **Annex 6** provides a list of people that the TE met and **Annex 11** is the mission schedule.

Ethics

The review was conducted in accordance with the UNEG Ethical Guidelines for Evaluators, and the reviewer has signed the Evaluation Consultant Code of Conduct Agreement form (Annex 15). In particular, the TE team ensures the anonymity and confidentiality of individuals who were interviewed and surveyed. In respect to the UN Declaration of Human Rights, results are presented in a manner that clearly respects stakeholders' dignity and self-worth.

2. PROJECT DESCRIPTION

2.1. Development Context

The GEF Focal Area Climate Change Adaptation objectives:

- CCA-1 (Reduce the vulnerability of people, livelihoods, physical assets & natural systems to the adverse

- effects of climate change) with its Outcome 1.1 (Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas) & Outcome 1.2 (Reduce vulnerability in development sectors)
- CCA-2 (Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level), with its Outcome 2.2 (Strengthened adaptive capacity to reduce risks to climate-induced economic losses)
- CCA-3 (Promote adoption of adaptation technology), with its Outcome 3.1 (Successful demonstration, deployment, and transfer of adaptation technology)

LDCF Eligibility Criteria:

- Within the framework of UN Vision 2020, and is aligned with the Poverty Reduction Strategy (2007-11), the NEA Gambia Environmental Action Plan (GEAP, 2010-19). In addition, it is in line with the goals and needs of NEA, MoWTI, and local authorities
- The National Adaptation Programme of Action (NAPA, which was submitted to UNFCCC in 2008) identified 10 priority projects classified as urgent and immediate
- The pilot interventions are country-driven

GEF Conformity:

The project was the first full-sized LDCF-funded project that pilots measures to reduce vulnerability to climate change in the coastal zone. It was important to the GEF portfolio to provide lessons in:

- Designing and implementing sea & river defence risk management at a national / regional scale within West Africa
- Adaptive capacity and/or reduce vulnerability to climate change drivers
- Systematic approach to integrating climate change risks into GEF focal areas such as biodiversity

Sector-wide linkage with the International Community

- The project directly contributes towards the 2016 Sustainable Development Goals (SDGs)¹ and their targets² in particular Goal 13 (take urgent action to combat climate change and its impacts) including its targets 13.1 (strengthen resilience and adaptive capacity to climate-related hazards & natural disasters) and 13.2 (integrate climate change measures into national policies, strategies and planning).
- National priorities with regard to climate change were taken into account in the NAPA, which was developed with government, rural & urban communities, non-government and civil society organisations (NGOs / CSOs), private sector, and the academic community
- The project addresses priorities under UN Development Assistance Framework (UNDAF, 2012-16):
 - o Result 4 (Sustainable management of environment, natural resources and land)
 - Outcome 3 (Environmental sustainability & Disaster Risk Reduction systems operationalized)
- The project is in line with the UNDP Country Programme Document (CPD, 2007-11) and the Country Programme Action Plan (CPAP)

Project linkage to National Planning

- The NAPA (2009) identified coastal zone management as the primary focal area (Priority 1). As result of this decision, this LDCF/GEF project proposal was formulated. The project is the first community-based adaptation project to be implemented by the government to deal with the adverse impacts of climate change with special focus on coastal erosion, sea-level rise, flooding, salinity / salt water intrusion and community livelihoods:
 - o The project will strengthen policies and institutions mandated to manage coastal areas.
 - o The project will support the construction of coastal protection measures and the demonstration of

¹ Report of the Inter-Agency & Expert Group on SDG Indicators (E/CN.3/2016/2/Rev.1), Annex IV, Final list of proposed SDG indicators https://sustainabledevelopment.un.org/content/documents/11803Official-List-of-Proposed-SDG-Indicators.pdf

² Originally the project was expected to contribute towards attainment of MDG 1 (eradicating extreme hunger & poverty), & MDG 7 (achieving environmental sustainability). MDG 1 corresponds with SDG target 1.1, and MDG 7 corresponds with SDG target 12.2 (by 2030, achieve the sustainable management and efficient use of natural resources).

- sustainable coastal adaptation technologies.
- The project will support the design and implementation of climate-resilient fisheries management, custom rules for fisheries access and community monitoring of quotas introduced to at least 25 vulnerable communities (including Oyster farming)
- The project will enhance food security and livelihoods in coastal & low-land agricultural areas in the Central River & Lower River Valley through the management of salt-intruded rice paddies.
- o The project will support the restoration of 2,500 ha of mangrove forests
- Gambia National Agricultural Investment Programme (GNAIP)
- Gambia Tourism Development Master Plan (2006)
- Physical Development Plan for the Greater Banjul Area (1984/5)
- Brikama Area Council Strategic Plan (2014 20)
- Kerewan Area Council 5 Year Strategic Plan (2010 15)
- ICZM Handbook for The Gambia (Haskoning, 2004)
- Gambia's 2nd National Communication under the UNFCCC (2012)
- Gambia Forestry Sub-sector Policy (2010-19) & Gambia Biodiversity and Wildlife Policy (2001)

Linkage to donor-projects

- Coordination with the LDCF Early Warning Project focuses on the networks of synoptic meteorological and hydrological stations to identify climate-related natural hazards (mainly drought, flooding, wind storms leading to wind erosion)
- EU Global Climate Change Alliance (GCCA) 'Integrated Coastal Zone Management & Mainstreaming of Climate Change' (co-financing of €3.86m)³. It compliments component 1 of the project (policy / institutional development for climate risk management); and was to provide studies to support Component 2 (coastal infrastructure). In 2016, with support from GCCA, the policy on climate change was finalized and approved by government
- The World Bank Mangrove Conservation Study (within the Biodiversity Management & Institutional Strengthening project), is to complete baseline scenarios on mangrove species and coverage areas and put in place an appropriate monitoring. The GEF project follows on from this with improving the understanding of mangrove death.

Institutional support to the project

- Department of Forestry & Parks & Wildlife (DFPW) supported the mangrove restoration programme, and bee hive development
- The Ministry of Agriculture's NARI supported the development of the salt-intruded rice paddies; and their Horticulture Unit supported the community gardens
- Department of Fisheries supported oyster rack development

2.2. Problems that the Project Sought to Address

There are stark climate change projections for the country. UNEP has placed Gambia as one of ten countries in most danger from sea level rise⁴. Much of the coastal hinterland is low lying so that the potential for flooding is significant. Jallow *et al.* (1996) used the 'aerial video-assisted vulnerability analysis' to predict that a one-meter rise in sea level will lead to permanent inundation of ~92 km² of land, meaning it will be lost to terrestrial farming and / or ecosystem resilience. (source Prodoc, p13)

Systemic weaknesses and Operational barriers

ΤE

³ GCCA was designed to support: An ICZM process; Identify priority coastal adaptation measures; Build adaptive capacity to climate change; Formulate national climate change policy; Rationalize institutional / coordination & response mechanisms. According GCCA MTR (2015), its main objectives were to create an ICZM planning framework & support a new climate change policy, however based on poor progress the project was cut short & ended mid-2016. The TE found little evidence of the above being realised

⁴ Coastal & Marine Environment Programme, NEA Brochure Series No. 10

Key barriers that needed to be addressed:

- There isn't an inter-agency or inter-ministerial entity that has the jurisdiction to develop an ICZM program. Each agency acts independently with regard to ICZM, which is at an initial stage of development in the country
- Conflicts between stakeholders who undertake the management of coastal resources such as fisheries, mining (sand, titanium ore), and forest products.
- Sea and river defence engineering is not planned or budgeted, which has caused increases in downstream erosion and mangrove death
- The country is in debt with little income generated, thus only donor projects in coastal engineering can be facilitated, but with limited government counterpart funding
- A lack of data on coastal processes and hydrodynamics linked to climate change. The lack of data makes it difficult for national agencies to set priorities and develop regulations
- A shortage of scientific engineering capacity, plus a limited understanding of low / medium cost coastal adaptation measures. Such capacity is needed to identify, plan, design and implement coastal defence works
- At the local level, due to low income, communities are risk-adverse, meaning that new schemes are not easily accepted
- A critical issue for Gambia is the absence of a planning system that would put in place practical policies to ensure coastal protection in a sustainable manner
- Legislation for the coastal zone remains fragmented. Responses would be better implemented within a formal sea & river defence policy that supports ICZM. Without this, any initiative to identify and address climate change measures is expected to be less than effective.

Problem to Solution

The project is designed to reduce vulnerability to sea-level rise and associated impacts of climate change by improving coastal defences:

- Component 1 Policy and institutional development for climate risk management in coastal zones
- Component 2 Physical Investments in coastal protection against climate change risks
- Component 3 Strengthening livelihood of coastal communities at risk from climate change.

The project will employ feedback between the three components and enable successful community-based adaptation to be replicated in other regions. The project is focused on:

- Revising national policies to enhance resilience to climate change impacts in coastal areas (Component 1)
- Enhancing the capacity of authorities & sectoral planners to understand climate risk dynamics to incorporate risk reduction measures into coastal area management (Components 1 and 3)
- Enhancing resilience of coastal communities & natural ecosystems through adaptation interventions (Components 2 & 3)

The goal of the project is to create policy and institutional arrangements for climate resilience development in the coastal zone, moving towards 'risk reduction' and 'resilience'.

This is because there are more sea & river defences to be constructed than there is money or skills available. Without adopting this approach, the amount of sea & river defence works required in the coming years, could not break even. Thus, to address coastal adaptation, a new more cost effective and planned approach is needed, with new decision-making tools, including a sea & river defence risk management programme.

2.3. Project Description and Strategy

The strategy for: Outcome 1 was 'mainstreaming climate change into national development planning'; Outcome 2 was 'physical construction of coastal protection measures'; and Outcome 3 was 'strengthening livelihoods of coastal communities.' Cross-cutting strategies included: staff capacity building; strengthening national institutions and collaboration; increasing the resilience of local communities; & lessons learning.

Project Location

The project was located along the south shore coast at Senegambia; and along the Baobolong tributary (Darsilami, Illiassa) and Bintang Bolong tributary (Tendaba) of the Gambia River.

Project Area Map

See Annex 13

Project Timing & Milestones

The project timing was from October 2013 until end 2018. The project document does not mention milestones or benchmarks either in relation to the outputs and their process indicators or otherwise⁵. This TE assesses outcome indicators (**Annex 1**) in order to determine gradings. However, outputs are also presented in **Annex 2** with their achievement reported and commented on by the TE.

Comparative Advantage

UNDP had a comparative advantage of capacity building, provision of technical support in the design and implementation of projects. UNDP also had an advantage working with government especially in strengthening institutional, policy and legislative mechanisms, in undertaking risk assessments, in mainstreaming climate change into development planning and harnessing best practices and community-based approaches across the thematic areas for climate change adaptation.

Replication

The prodoc mentions replication three times

- Engineering interventions (combination of hard and soft measures) will be constructed as pilots for future replication and up-scaling (Summary)
- Delivering and implementing adaptation measures (including soft engineering shoreline management techniques) that engage communities in their design, construction and monitoring and introduce strategies to encourage replication of practices in other parts of Gambia. (Concerning LDCF Alternative

 Vulnerable rice paddies - Output 2.2)
- Education & awareness training programme on coastal resilience, intervention options (e.g. polder design) and participatory wetland management programme approaches (Activity 3.4). This will be linked to UNDP-GEF's adaptation learning mechanism. (Replicability)

2.4. Implementation Arrangements

Project Management Structure

The project was steered by a Project Board (PB), chaired by the NEA director. The project established a Project Implementation Unit (PIU) of three staff – Project Manager, an M&E Officer and a Finance Officer – all hired through public competition.

2.5 Key Partners & Stakeholders

A full description of stakeholders – those who are responsible for implementation of the project and those associated with the project – is provided as **Annex 9**.

3. FINDINGS

3.1. Project Strategy

3.1.1 Project Design

Project Formulation

The project was prepared on behalf of MECCNR and their NEA. NEA had managed at least one similar project

⁵ The prodoc (page 28) does mention 'benchmarking' in relation to the national statistics office in their collection of gender disaggregated data which should be formalised.

and were considered transparent and competent. However, the NEA lacked accreditation to directly implement the project on behalf of UNDP, therefore a Project Implementation Unit (PIU) was established to act as the 'intermediary'. Partnership arrangements with allied responsible implementing partners were not clarified beyond the project document. Component 1 at the output and activity level was far from clear (Section prodoc, project workplan – outputs & activities, p52). Also, the NEA is primarily a 'regulatory institute' and not an implementing agency for infrastructure, especially one that is designed across sectors. The NEA's mandate covers EIA and it has a limited 'coastal programme'

The capacity of NEA to implement the project was considered at design through for example, secondment from NEA of a team leader and mangrove development officers, however UNDP rules on procurement precluded this. Instead the positions were advertised, NEA staff applied and were fortunately selected.

A 'project support team' was envisaged by the project design (Project Organisation Structure, prodoc, p64), with representatives from 10 sections of government. It was only active for first year, as it was considered an extra layer that was not technically effective and needed extra management by the PIU.

A 'project implementation technical support team' was also envisaged by the project design, with 12 added experts and / or project staff. These were partly hired to conduct consultant studies, although certain project staff positions were not created, e.g. for community liaison advisors (24 months x 4 staff).

3.1.2 Design Assumptions & Risks

The project design and perceived expectations were that the following would be achieved during implementation:

- The EU GCCA project would deliver a working database
- An NEA coastal engineer would be hired
- The mandates of sectoral offices would be clear and there would be a high degree of collaboration between these offices
- Capacity in coastal engineering would be progressively built / greatly enhanced
- Sea and river defence policy would be updated
- There would be a clear link with research institutes

These expectations were not realized.

Selected Assumptions and Risks from the results framework that proved to be correct / incorrect:

Assumption / Risk	TE Comment	
Objective		
 Assume that political and country status remains suitable for donor investment. Assume that the government maintains commitment to involved institutions and relevant policy to support coastal resilience at national and local (ward / village) level Assume that donor community maintains / increases funding in climate change adaptation Lack of sustainability of activity beyond funding cycle 	the standing and political willpower of MECCNR / NEA, as well as the transfer of contractor' equipment and materials from Senegal The portfolio of the MECCNR and leadership of NEA changed during the project The institutional support to the project was limited, which affected any interest in policy revision / mainstreaming	
Outcome 1		
 Adequate resourcing outside project for risk reduction implementation Limited proven capacity in NEA to collect and effectively store centralised monitoring data. Agreement between national bodies can be found to develop consistent SRD policy. 	 NEA capacity was over-stated NEA were unable to work effectively with other bodies concerning policy development – a national working group 	

⁶ www.nea.gm was not accessible during the production of this TE, in order to garner further background

Outcome 2	
 Coastal protection contracting by MoWTI is clearly defined and robust. Community maintain engagement with protection measures and livelihood interventions. 	accreditation to directly implement the project
Outcome 3	
 Fish production can be taken-up by community. Extreme climate phenomena (drought, floods) 	 Technical issues meant that the freshwater fish pools were not successful Affected rainfall to the rice paddies in 2018

There are two further risk tables - the UNDP Atlas Risk & Management Response and the PIR risk table (2018) in **Annex 8.**

3.1.3 Results Framework Indicators & Targets

The results framework with eight main indicators was mostly logical, practical and feasible within the project timeframe as originally designed, except for Outcome 1. Outcome 1 (policies & institutions strengthened) had three indicators which concerned: national and local capacity; coastal monitoring using a database; and sea & river defence investment plans (SRDIPs) financed⁷. The project maintained a focus on reporting against the eight main indicators, which was good, but it meant that other indicators, baselines & / or targets were not always reported against. However, the TE has reported against the complete logframe, and where there was only a baseline or target, the TE re-constructed the indicator⁸. One or two indicators were not so SMART (Specific, Measurable, Attributable, Realistic/Relative, Timebound). The main problem was that they were not easily measurable. The table below just gives an indication again the eight main indicators:

Indicators or targets	Issue		
Objective level			
No. of vulnerable people /	Sea & river defence is not recognized by MoFEA as an investment or spending category;		
communities with enhanced	Not easy to measure the baseline reports do not sufficiently aggregate data; no end-of-project		
living conditions	survey to verify		
Outcome 1			
No. of technicians trained	Over 200 technicians trained, however the quality of the national training providers was not clear,		
	nor the quality of training provided to key national staff / stakeholders		
Coastal monitoring database	Was dependent on the assumption that GCCA had produced such a database, which they didn't		
No. of SRDIPs financed	There were 3 targets, only one of which matched the indicator (see earlier footnote)		
Outcome 2			
No. of hard & soft coastal	2 hard, 3 soft – no issue		
protection schemes			
No. of families benefitting –	No issue - Target is 1,500 households, which includes communities provided canoes / boats,		
from design and built	houses for rice machines, community gardens / centres, and beehives		
structures			
Outcome 3			
No. of fish and rice growers	No issue - Target is 1,500 households (rice paddies) + 300 households (fish farming)		
that gain a sustainable income			
No. of farmers that receive	Only targets the 1,500 rice growers		
extension support			

3.1.4 Gender Design

'The project will focus on women and children living in and deriving an income from along the coastal zone' (prodoc, p21). Agriculture represents the main source of income for up to 90% of women (& 70% men), thus agricultural interventions are likely to be gender sensitive. Component 3 is designed to work towards women's empowerment and gender equality where socio-cultural practices weigh heavily on the social status of women and girls. The project is consistent with the Agricultural & Natural Resource (ANR) policy (2006-15) in terms of (i) including women in research & extension; (ii) targeting women in value chain

⁷ The logframe targets for the SRDIPs were: a SRD policy, SRDIPs; a code of practice (CoD) for coastal development; and a SRDIP for each coastal district prepared. The workplan for Outcome 1 (outputs & activities) was even more complicated and is difficult to fathom. For example, there are four outputs attached to Outcome 1, and together these four outputs had 14 activities.

⁸ e.g. investment levels reaching \$15m from zero – there was no indicator, so reconstructed to: 'level of investment reached'

approaches for selected commodities; (iii) encouraging the leadership of women in producers' organizations. The GNAIP (2001-15) has called for gender-sensitive rural financial services and facilitate land tenure and irrigation issues. The Bureau of Statistics is one of the few national statistics offices with an institutionalized gender unit, however they do not sufficiently apply a gender perspective in the collection & analysis of data.

Project Implementation 3.2.

3.2.1 IA and EA Coordination & Operational Management

UNDP were the GEF / LDCF Implementing Agency (IA). Office of the President was the Executing Agency (EA), with MECCNR as the Implementing Partner (IP). MECCNR delegated implementation to NEA who with the support of UNDP established a Project Implementation Unit (PIU) to operate under UNDP National Implementation Modality (NIM), including using UNDP procedures for the procurement of goods, works and services.

Coordination & Operational Management by Implementing Agency (UNDP)

- Risk management concerning the hard and soft engineering schemes was good, but took a disproportionate amount of time, which impacted on other aspects of the project. E.g. PB minutes indicate that issues were only being addressed across Outcomes 2 & 3, and not Outcome 1.
- An international consultant engineering firm was hired for the hard infrastructure designs, but only regional / local consultant engineering services were procured for the soft engineering schemes. The designs of the latter had technical faults which impacted on the contractors and their ability to complete the constructions to operational standard.
- The project design largely missed lack of government willpower⁹ and UNDP ability to successfully achieve all project outcomes, as risks (prodoc, p31), with some of the other key risks relegated to the prodoc annexes (Annex H, p142):
 - 'Limited capacity to effectively tackle all project components' for which the NEA / UNDP response was 'Constitution of a robust multi-disciplinary PIU supported with additional training.' This wasn't done or sufficient. The PIU was staffed by a team leader, an M&E officer and a finance officer, only.
 - 'Lack of technical skills & capacities (e.g. coastal engineering) available' for which the response was 'to reduce the gap via recruitment.' This happened in terms of external consultants, some of whom wrote reports of questionable value, but again not in terms of hire or secondment of an engineer to the NEA or PIU.
- Despite such management responses, these risks were not escalated nor acted upon, which resulted in the failures of Outcome 1 and the soft engineering schemes of Outcome 2, having issues.
- 'A key lesson learned from similar projects in Gambia, was that whilst using state agencies to support project activities was in line with the Paris Declaration, the identified agencies often lacked capacity and resources. In this regard, the NEA has been proactive in addressing this matter through the procurement of a Sea & River Defence Engineer' (prodoc, p37). The prodoc even produced a TOR for this position (Appendix I). Upon implementation, the project did not hire such an engineer. Despite being both a key risk and a key lesson, it was still ignored upon implementation.
- The GEF / LDCF 'intervention alternative' (prodoc, p24) is that the project would develop sea & river defence engineering skills among national and local institutions through producing a sea and river defence policy and investment plans. In practice, the engineering works, including the preparation of designs, and supervision were all out-sourced, leaving the 'lacking engineering skills' to produce policy and plans, and even the strategic investment plan (July, 2016) was out-sourced. Together with the perennial problem of UNDP projects unable to hire or pay for government (contribution) staff, capacity was not built.

Coordination & Operational Management by Executing Agency (MECCNR / NEA)

PIU operational management & support to NEA

Partnerships arrangements were established for implementation, but these were driven by UNDP

TF

⁹ It is mentioned in the prodoc, Annex H, p142

(Environment Unit) under National Implementation Modality, using UNDP procurement for goods and services. Thus, the project was largely run by UNDP procuring, contracting and monitoring inputs / outputs, with PB endorsement. The Partnership between the PIU and NEA was not strong enough for component 1 Project Document Validation Workshop (Dec 2012)

During the plenary discussion it was mentioned:

- 37% of the budget was allocated to field and 53% to institutional aspects, whereas adaptation occurs in the field [TE comment strengthening institutional, policy, legislative and management aspects is largely where the project was not so successful]
- Too much money for office space and furniture [This occurred]
- Outcome 1 Content to accept the new term 'Sea & River Defence Risk Management' as a precursor to developing ICZM in Gambia [In practice, this wasn't the case, with the PIU lacking the strength to galvanise opinion and move policy forward]
- Outcome 2 Unknown why mangroves were dying and a study was needed¹⁰; Mangrove planting was already being undertaken, so funds could be diverted to Banjul [The importance of ecosystem-based adaptation and protecting rural coastal communities was not really appreciated]
- Outcome 3 Strengthen capacity in the Fisheries Department in the enforcement of fisheries legislation [For coastal livelihoods and biodiversity conservation this is a good suggestion, but this was only partly taken up by the project]

Project Inception Workshop & Inception Report

There was no inception workshop or report. This was a major failing as some of the main partners did not understand or accept their role. This was particularly the case with little responsibility for Outcome 1 wher there was a lack of accepted approach and strategy to implement¹¹.,

Project Board (PB)

The Project Board (PB) was established during two PB inception meetings (February 2014) with the following membership¹²: UNDP; PIU; Office of the President (OoP); MECCNR; NEA; MoWTI; Department of Forestry, Ministry of Fisheries; Department of Water Resources; Ministry of Land & Regional Government (MoL&RG); Ministry of Tourism; Hotel Association; Gambia Ports Authority; Association of NGOs; and UNFCCC Focal Point; with MECCNR as the Chair; and with a with Technical Advisory Team (TAT) that included Gambia Tourism Board.

The PB meetings were timely and regular, usually held two weeks after the end of the quarter. Annual workplans and budgets (AWPBs) as well as the PIU National Coordinator reports for the quarter were received ahead of PB meetings. Minutes of the PB meetings were prepared and signed by the PB chair. Previous Minutes were approved and cleared in the following period. Site supervision visits have been regular and problem solving with Outcome 2 and 3 very good. For Outcome 1, the last time it was discussed in a PB meeting was more or less Quarter 2, 2014, indicating there was no appetite for these activities. It could also be said that with the 'national importance of Outcome 2, its need for hands-on management, and the successes of associated Outcome 3, it was felt that Outcome 1 was largely 'a step too far' for this project. Outcome 1 was also closely allied with the EU GCCA project which was not successful and closed early. The following table indicates the level of support to the EA / IP and PIU by the PB.

History of selected key decisions by the Project Board

Date	Key Points	TE Comment
РВ	- PB Established (see before)	- The composition of the PB appeared weighted
Inception	- It was recommended that prior to next meeting, the PIUB visit	towards activities that supported Banjul-based
(Feb	EU GCCA to identify synergies,	tourism
2014)	- The procurement plan for 2014 was approved and some	- It appears that GCCA were not met, neither the
	amendments to the 2014 AWP made	implementing Audit office, nor the EU Delegation

¹⁰ Although die-back at Bintang Bolong is believed to have been caused by damming of the river in Senegal

¹¹ Apart from the PIU commissioning consultant reports which lacked institutional collaboration or ownership.

¹² During the project, the subject composition of a number of ministries changed. For simplicity, the structure as of the end of project is presented here, with comments only made if relevant to the implementation of the project

		0 11 144 1 0004
01651		Operational Manager for GCCA.
Q1 2014	- Regarding NEA appointing a coastal engineer, the PB instructed	- As per the promise in the prodoc of NEA hiring a
	NEA to liaise with the government personnel management office	coastal engineer, neither PB decision here
	- An NEA Agriculture Engineer be 're-trained by the project' to	facilitated this
	become a coastal engineer; with MoWTI as the focus for training	- The GEF project was not disaster-based in design
	in coastal engineering	
	- PB rcommended that Departments of Physical Survey & Land be	
	added to the TAT)	
	- PB recommended that the National Disaster Management	
	Agency be invited to join the PB	
Q2 2014	- Composition of meeting: UNDP; PIU; OoP; MECCNR; NEA;	- Composition of meeting weighted more in favour
	Department of Water Resources; Ministry of Tourism; Hotel	of coastal works with an ensuing key decision
	Association; Tourism Board; NGO Association	taken
	- The PB was informed that the GCCA had recommended that the $$	- The GCCA project was to develop an ICZM
	GEF project undertake a 'coastal zoning study' which the PB	framework / plan, whereas the GEF project was to
	agreed, on the condition that the EU project would produce the	develop district-based sea & river defence plans.
	related management plans, which the EU TA agreed to	Thus, the PB had made a key change in the GEF
	- The TAT was dissolved due to non-technical representation, in	project
	favour of UNDP, PIU and NEA technical assessment and request	- There was no (written) evidence of this new
	to individuals for advice	agreement with EU GCCA project which turned
	- A salt-production study tour was planned to inform re. Darsilami	around the roles of the EU and GEF project and re-
	and Illiassa	focused the GEF project away from the river
	- 3 bikes north bank, lower bank and west coast for activities	towards coast only development (& favouring the
		private coastal tourism industry.
		- The salt production study tour failed to happen. It
		should have helped in the design of the salt pans.
Q3 2014	- MoFEA requested \$50,000 for a training workshop	- This was not part of the project design, or
	- Alternative livelihoods – contractor identified for bee-keeping,	approved AWP, so PB did not really have the
	with 300 fibre-glass bee-hives ordered	mandate to agree this. UNDP should have
		negotiated a much smaller cost (e.g. a contribution
		of <\$10,000)
		- The suitability of the beehive design was not
		agreed by technical experts and ended up as a
		failure.
Q4 2014	- MoUs established with Department of Agriculture (Horticulture	- Good example of using and building local capacity
	Unit) - technical support to community gardens; Dept. of	and for continued technical support
	Forestry – bee-keeping training; Dept. of Parks & Wildlife -	
	technical support in mangrove restoration	
Q1 2015	- SGKB & Tanji Bridge dyke & revetment (TBDR) above budget	- nc
	- Four boats procured – being licensed for people and goods	
Q2 2015	- SGKB scheme – additional funding being sought from GCF	- This is the 'breakwaters' aspect
Q3 2015	- Pre-bids for SGKB and TBDR	- nc
Q4 2015	- Community bank accounts discussed and involvement of	- Procurement for major works on-going
	regional stakeholders (Area Councils, Governor's Offices, Dept.	
	of Community Development)	
	- PB kept upto date by PIU on status of major works - SGKB /	
	TBDR and D&I supervision consultants contracted	
Q1 2106	- Tendaba work in progress but issues – getting materials across	- Good adaptive management
	the river – PIU support for local sources	,
	- Certification of large boats pending provision of life jackets	
	- 45 canoes for 9 fishing (oyster collecting) communities	
Q2 2016	- D&I not on schedule – issues with contractor capacity	- nc
Q3 2016	- SGKB contract signed, but wrong stone supplied, with works	- nc
Q3 2010	now expected to start in 2017	110
04 2016		
Q4 2016	- MTR reported	- nc
Q1 2017	- Partnership with NARI – technical support and salt-tolerant	- Proved to be important to success of D&I &
	(halophytic) paddy rice seed	Tendaba
	- Equipment to Tanbi and Baobalon Wetland communities - to	- TE confirmed savings accounts of all local project
	make sustainable via saving for maintenance etc	- TE confirmed savings accounts of all local project communities met
Q2 2017	make sustainable via saving for maintenance etc - NIRAS reported SGKB – 176m out of 1,000m completed	
Q2 2017	make sustainable via saving for maintenance etc	communities met
Q2 2017 Q3 2017	make sustainable via saving for maintenance etc - NIRAS reported SGKB – 176m out of 1,000m completed	communities met

Nov 2017		issues
Q4 2017	 SGKB works continuing – problems being solved D&I mostly complete, but with defects No-cost extension approved until end 2018; final budget reviewed and contract extensions agreed 	 Adaptive management shown for SGKB, but not so easy to solve the D&I schemes Project extension needed for time to complete works
Q1 2018	- Not available	- Not reviewed
Q2 2018	 Dept. of Comm. Develop. fund request (for sustainability actions) rejected as project funds no longer available Fish and salt ponds not working 	- nc
Q3 2018	- Not available	- Not reviewed

(Nc - no comment)

3.2.2 Institutional Mechanisms

Project-level operational partnership arrangements are briefly described in the previous section, whereas this section considers state institutional mechanisms and capacity which are the backbone for delivering new policies and services. The section thereafter considers local partnerships.

Coastal & Marine Environment Working Group (CMEWG)

- The National Environmental Management Act (NEMA, 1994) is the Gambia's primary environmental legislation articulating management of the coastal zone and wetlands¹³, however there isn't an institution solely responsible for coastal zone management.
- NEMA stipulates that a Coastal & Marine Environment Working Group (CMEWG) advises the National Environment Management Council and NEA on coastal zone matters. The CMEWG is chaired by the NEA and coordinates a coastal & marine environment program. However, the TE could find no evidence of this group being operational at national level, at least since the project began in 2014. CMEWG has not been in session since 2014 and has not supported the project.¹⁴

National Environment Agency (NEA)

The general role of NEA includes enforcing compliance with environmental impact assessment (EIA) laws and following through to the application of requirements under ensuing construction plans. They support the national state of environment review, with the next one planned for 2019, and the national communications to UNFCCC.

The NEA has a Coastal & Marine Unit (CMU). Its role included supervising the project. It facilitated the transport of project materials from Senegal which was a particular bottleneck, and has ensured compliance of Gambia Tourism Board (GTB) with EIA environmental regulation. The CMU has three staff, although one is a field assistant and one is on study leave, so the unit has limited capacity. The NEA's CMU were not sufficiently active in support to the project

The project supervisory team included NEA, MoWTI, and the Dept of Forestry of MECCNR. The project paid DSA for field visits. The NEA's GIS section collected / collated project baseline information for the project (although its presence couldn't be verified by the TE.)

The NEA has a regional programme officer at each division primarily working as environmental inspectors. The project supplied extension motorbikes for project support and field work. The NEA also received computing equipment and two 4WD Landcruisers.

NEA and MoUs / Protocols

The MoU between NEA and MoWTI (prodoc, p145) was signed before the prodoc and outlined the following:

- The NEA is mandated by the National Environment Management Act (NEMA, 1994) for the management of coastal zone, rivers and wetlands

¹³ Besides the NEMA, policies to manage the coastal area exist sectorally. The policy objective of the Forestry sector is to maintain 30% of the total land area under forest cover; this includes mangroves - which are affected by inundation and varying salinity levels. The Fisheries Acts emphasizes maximizing yields and protecting the fish landing sites from flooding.

¹⁴ During the project lifespan, the project coordinator (PIU) who was seconded from the NEA, was not invited to any CMEWG meetings nor received any minutes of meetings

The MoWTI is designated by the government to oversee/supervise all infrastructural projects

And in relation to the project:

- NEA shall remain the coordinating agency for coastal zone management which includes planning and ICZM delivery in accordance the provisions of Article 30 of the NEMA 1994
- NEA as the IP shall, with the PIU, identify key environmental problems along the coast & estuary, and prepare a concept note for engineering interventions to be considered / undertaken by the MoWTI
- The NEA Sea & River Defence Engineer shall be the liaison between the two parties
- NEA will support building MoWTI capacity in sea & river defence engineering / risk management
- MoW shall be responsible for design, construction & supervision of engineering interventions along the coast and estuary
- At Inception, MoWTI shall recruit engineers to be trained to form the core of a future 'Sea & River Defence Unit' within the MoWTI¹⁵
- Based on the concept note, the MoWTI will prepare an intervention strategy which may include: the preparation of regional/district Sea & River Defence Investment Plans (SRDIPs); and specifications for
- Where the works require the hiring of consultant engineers, MoWTI shall prepare the ToRs.
- MoWTI shall be responsible for the supervision of the consultant engineers / contractors and upon completion shall hand over them to the NEA with a completion certificate

Whilst, in principle the protocol had merit, in practice it fell apart quite quickly due to the following issues:

- The NEA failed to hire a coastal engineer, which not only affected their ability to directly implement the project, but also their ability liaise with the MoWTI, and to build capacity specifically with the MoW
- The MoWTI 'failed' to train and develop a 'Seas & River Defence Unit' without the support of the NEA / project budget
- The preparation of sea & river defence plans was written as 'optional'
- As a government ministry, the MoWTI would be largely unable to receive UNDP project funding for construction, staffing – engineers for the defence unit, or services for the preparation of specifications or supervision of works – thus rendering their interest in such activities as reduced
- The NEA (as another government agency) and the PIU in particular did not see their role or mandate as supervisor to the MoW to undertake these actions

National Agriculture Research Institute (NARI)

NARI has provided technical support and salt-tolerant rice seed to Darsalami, Illiassa and Tendaba. The clay soils were noted to be fragile, due to the high sodium / sodium chloride levels. In order to reduce acidity / sodium levels, 'liming' has been undertaken, but needs to continue in conjunction with seasonal flushing out of the saline water from the rice paddies (open / close dykes). Ridging within the sub-plots was also advised.

In 2016/17, sixty-five varieties were tested at Illiassa with the best ten salt-tolerant varieties selected for multiplication. In 2017, seed was provided to Illiassa (550kg), to Darsalami (350kg) and to Tendaba (350kg). However, the 2017 rainy season was very short (less than 4 instead of the usual 6 months), thus there was insufficient rainwater to flush the salt out of the fields, which was one of the technical issues¹⁶. NARI visited all sites again in August 2018 and provided 150kg salt-tolerant rice varieties to each location¹⁷. NARI has also advised on integrated pest management (IPM).

Ministry of Works Transport & Infrastructure

- Have coastal & marine representative on PB
- Have agreement between the NEA and MoWTI re. enforcing the defect liability period

 $^{^{15}}$ Not done – It needed higher level government commitment for new civil service positions

¹⁶ All other technical issues mentioned in the results section of this report were confirmed by NARI - Meeting with TE (22nd Nov. 2018)

¹⁷ The 2018 rice seed was funded by the Africa Rice Fund not the UNDP project

- Greater Banjul Drainage & Sanitation Project proposal submitted to GCF
- New strategic plan (2019-23) in preparation

3.2.3 Local Partnerships / Stakeholder Engagement

Technical Advisory Committee (TAC)

Each regional government operates a Technical Advisory Committee (TAC)¹⁸, with the governor as the chief executive officer (as decreed by Local Government Act). Under the TAC, there is a multi-disciplinary facilitation team which plans and conducts the required activities of the TAC. The TAC membership includes public and civil bodies / CSOs. The public officials include a regional NEA officer, a regional national disaster management officer (under the OoP). Concerning sea & river defence at sub-national level, the TAC one of the main communication and coordination mechanisms.

Under the project selected TAC members, village development committee members and womens' groups received training in sea & river defence management / enhancing community resilience.

Gender Analysis

- The project has commendably focused on women and kept gender disaggregated statistics.
- As of June 2017, the project has reached more women (primary beneficiaries) than men:
 - o Through extension services / alternative livelihoods, the project has reached 1,370 direct beneficiaries (1,203 women; 167 men)
 - o Via support to rice growers & fish producers, 734 people directly benefited (570 women; 164 men)
- By sector, women tend to be more involved than men in: in paddy rice production; fruit & vegetable gardening; oyster collection / culture; and fish processing / preservation.
 - o Rice paddy production 150 beneficiaries (143 women; 7 men)
 - o Community gardens (fruit & vegetable production) 1,323 direct beneficiaries (1,186 women)
 - o Oyster collection, culture & sale 371 women directly benefiting
 - o Fishing (99 men); 58 men in crab fishing
- Mangrove restoration, more men are involved than women, although the TE disputes this as planting days were communal, although it is acknowledged that planting under a tidal flow can be dangerous.
- Training of Technicians and extension workers has shown that 169 men benefited as oppose to the 30 women. this is poor after clearly identifying the target group as women¹⁹.

The list of key stakeholders is described in Annex 9.

3.2.4 Finance & Co-finance

UNDP Financial management

UNDP financial support to the EA / IP and PIU was adequate, with UNDP providing a quarterly advance on expected expenditure, due to re-imbursement of invoices taking too long. UNDP was responsiveness to the IP, in terms of directly managing all procurement contracts, especially the hard infrastructure (SGKB revetment & TBDR), which UNDP CO needed to confirm with Addis and New York.

On top of construction costs, UNDP has committed an extra \$100,000 for consultant management of the contractor under the defect liability period (DLP) for the SGKB and TBDR infrastructures.

Finance

Up to 10th December 2018, US\$8,226,851 has been spent from a budget of US\$9.5m (including US\$0.6 cash UNDP). The breakdown of planned and actual expenditures by year is provided in **Annex 4**.

Due Diligence - Audit Reports

Annual audits were undertaken by the National Audit Office, 2014-2017. The 2017 report was reviewed:

¹⁸ The TAC is a regional devolvement of the coastal advisory group (CMEWG) to NEA under the NEMA Act. The TE met North Bank Region TAC members, who stated that coordination with the NEA's CMEWG or the CMU was not active.

¹⁹ Regions such as Lower River sent no female technician to the workshop and Upper River Region sent only one female

- According to the UNDP Combined Delivery Report (Statement of Expenditure) for 2017, expenditure was \$2.26m, with an AWP of \$3.72m. All payments were made via Request for Direct Cash Transfer or Request for Support Services (RSS). However, RSS payments were not checked as they were not considered part of the audit TOR.
- The statement of assets expenditure to date was \$586,000 The TE calculated this included over \$66,000 (\$43,000 for 8 items for PIU and \$23,000 for 3 items for MECCNR/NEA) spent on just office printers, scanners and photocopiers²⁰. (This excluded all computers, projectors, accessories for electronic equipment). This seems excessive. Comparable costs for other more appropriate equipment included: per laptop ~\$1,500, Toyota Prado ~\$32,450, Motorbike ~\$5,000, Rice milling machine ~\$3,000, Outboard Engine (15HP) ~\$2,750.
- Rate of delivery
 - SGKB 0.92km out of 1.04km of revetment & backfilling complete; TBDR dyke near complete
 - Livelihood support to 15 communities inc. Tanbi and Baobolon wetlands: rice farming equipment supplied to Darsilami, Illiassa and Tendaba; storehouses for machines and equipment constructed; capacity building (self-governance, saving schemes)²¹ undertaken; exchange visits not completed.

Co-financing

A breakdown of co-financing is provided as **Annex 3**. To note, co-financing contributions, either as direct support funds (grant or in-kind) or as complementary funds (e.g. linking up with similar project in a neighbouring area), are not usually accounted for under GEF methods, with only the GEF funds audited. With this lack of oversight of co-financed funds, the extent of co-financing could not be determined in terms of grant or in-kind funds (including concomitant physical inputs of stakeholders).

3.2.5 M&E Systems – Design & Implementation

The M&E officer made a commendable effort in identifying, mobilising and supporting communities. The officer put in a very high effort in not only in managing the M&E workload, but also working in a major community development role. The officer and has been central to success of project, especially in delivering the overall objective in terms of reducing the risk of vulnerable communities to climate change through enhancing and diversifying practices and raising income.

The M&E office maintained detailed spreadsheets of project progress, in terms of gender disaggregated beneficiary data, physical interventions and equipment for example. Some extracts are presented in **Annex 12** (Integrated farming system – D&I, Tendaba; Community vegetable gardens; households benefitting from physical interventions – facilities & equipment; support to fisheries and oyster collectors; mangrove restoration communities & areas planted).

MTR

The recommendations of the MTR were considered by UNDP / NEA and the PIU, but assessed as not warranting major change. Some recommendations were followed up: the preparation of an exit strategy. The TE concurred with the MTR recommendation: mixed species mangrove forest should be planted beginning with the nursery production of *Rhizophora*; and adding value to Outcome 1 (rewriting or simplifying policy guidelines / other mainstreaming documents and following through on their usability / integration in policy and planning, plus increase consultation with stakeholders)

Exit Strategy (August 2017) – an NEA / PIU memo to the NEA Director of Agriculture

- NEA to apportion responsibility for project sustainability to two of its units
 - o hard infrastructure (SGKB, TBDR and Tendeba Polder) works be taken up by the NEA's CMU
 - o IFS (D&I), Tendaba rice cultivation and fisheries, Horticulture in five communities, & Baobolon

²⁰ Added to the fact that maintenance and ink costs are high, paper requires trees to be cut (loss in carbon sink to reduce GHGs), that the reports were largely not distributed anywhere, the project should have made a conscious decision to move towards 'paperless' reporting and maybe bought a few more laptops for the communities for example.

²¹ At the time of the TE (Nov 2018), the paddy rice communities of D&I were still quite dependent and expectant on the project. The TE spent some time all each community gatherings (especially these two) to discuss ownership of project activities and equipment and self-governance by these communities, even where the activity was not complete or successful.

Fishermen Association) activities be taken up by NEA's Agriculture & Natural Resources (ANR) Unit

- NEA to ensure sustainable management of the project actions via MoUs between NEA and the stakeholders [TE comment – this is not a handover]
- For the ANR Unit Director to formally agree to the project board before Oct 2017.

However, the project was extended until end 2018, with no known update.

GEF Tracking Tool - AMAT

The GEF tracking tool is the Climate Change Adaptation - LDCF/SCCF Adaptation Monitoring and Assessment Tool (AMAT)²². Indicators for the tracking tool were identified in the prodoc, however not updated since.

3.2.6 Adaptive Management (Work planning, Reporting & Communications)

Work planning

AWPBs were prepared 2014-2018.

- AWPBs were approved by the PB Chair (& Permanent Secretary to MECCNR)
- AWPB 2018 is assessed: Total allocated resources: \$8,900,000, Total requested budget for 2018: \$1,499,245, UNDP TRAC contribution to 2018 budget: \$225,000, GEF Contribution to 2018 budget: \$1,274,245, Government contributions: In kind

Reporting

Project reports were prepared quarterly by the PIU (2014-mid-2018). Q2 2018 (pp3) detail:

- SGKB ongoing revetment fully laid at Kololi Beach with backfill and laying of armor stones still needed;
 no progress at TBDR since May 2018, supervision of coastal protection works ongoing
- Defects on IFS in D&I disputed by contractor with verification trip planned; Salt iodisation machine for Darsilami pending as salt pans are not operational; Pumping machine for aquaculture in Illiassa remains at NEA office [TE recommends its use for flushing salt water out of the rice paddy]
- D&I paddy field preparation is hampered by lack of tractors for pre-season ploughing with only a limited portion cultivated by project-supplied power tillers²³

The PIU Final report was not available to the TE.

Project Implementation Reviews (UNDP PIRs)

- There are a number of issues with PIRs: they are not easily readable in the format presented; PIRs should be produced July each year; the date of coverage is often very unclear with the same data often presented in subsequent years making understanding difficult; they are not harmonized with any other plans (cover July to June), reports or budgeting timeframes (of UNDP, GEF or of any other donor). There is little ownership of these reports with the PIU 'required' to fill-in on behalf of UNDP. The claims of progress are often exaggerated. The TE found all these standard problems with the project PIRs.
- TE accessed: June 2016 May 2017; and June 2017 May 2018 the gender analysis is good, although the same data is presented in both reports

Communications

UNDP and PIU communications were good, however the PIU, despite being housed within NEA, didn't really manage to mobilise sufficient added input (and therefore results) from NEA. For example, the NEA as the designated IP should have been hosting workshops, gaining a consensus and working towards coastal policy approaches. There was little evidence of such leadership. The M&E side of the PIU was rather shut-out' of this Outcome 1, which was disappointing when the M&E work, which included virtually all local community

TE (UNDP PIMS #4782) 23

²² www.oecd.org/env/cc/48332185.pdf

²³ The TE and NARI have advised that ploughing these salt-impregnated paddies will disturb & release high levels of salt through the growing season and make them infertile for paddy rice production. In later years, rice-field tillers may be able to be used, but not deep ploughing with tractors as this will disturb the salt that is being filtrated down through the soil profile and the tractors will damage the clayey soils by compaction

mobilisation was so successful for all other aspects of the project²⁴.

3.3. Project Results

The TE assessed the three levels of the project results framework - Objective, Outcome and Output. This was guided by the indicators and targets set at each level. Success is also built upon achievement of the Outputs, according to 'framework logic.' The Objective and Outcome levels include a rating according to UNDP GEF guidance as described in **Annex 10**.

The PIU provided two tables:

- Progress towards Objective and Outcomes (Indicator-based) which is described in Annex 1, and
- Progress towards Outputs which is described in Annex 2

According to TE guidance, these tables were rated and commented on. A detailed result-level analysis follows firstly of the Objective, Outcomes and Indicators, then secondly of the Outputs.

3.3.1 Overall Result – Achievement of Objective

Objective at the Objective Indicator Level (Overall Result)

Investment level in sea and river defences

(Baseline – No investment within government sector, minimal / sporadic in tourism sector; Target – an additional US\$15m for sea & river defences²⁵)

Sea & river defence spending is not recognized by Ministry of Finance & Economic Affairs (MoFEA) as an investment or spending category, thus they were not able to give an indication of the level of investment in sea and river protection. However, the TE was directed to the publications - 'Estimates of Revenue & Expenditure' for 2013 and for 2018 (MoFEA) - Departmental Recurrent & Development Budget includes loans, grants & government local funding (GLF)²⁶:

Ministry (Development & Recurrent – Approved Budget)	2012	2017
Ministry of Forestry & Environment (2013), MECCW (2018)	715,438	4,789,689
Ministry of Fisheries, Water Resources (2013, 2018)	7,273,469	318,667
Total (US\$)	7,988,906	5,108,356

The figures indicate a fall in investment in the environment and water sectors taken as a whole. The main investment at present appears to be this GEF / LCDF project with US\$8.9m committed & spent 2014-18 (5 years)

Number of vulnerable people / communities with enhanced living conditions and sustainable livelihoods

(Baseline – Zero, communities affected by negative climate impacts (socio-economic &/or environmental); Target - Communities / wards experience positive improvements and sustainable livelihoods)

Twenty-one communities were supported. Anecdotal interviews suggest an improvement in community incomes for oyster collectors and Tendaba rice farmers.

Added Indicator - Tons of 'Blue' Carbon stored

(Baseline – zero; Target 244,000 tons of carbon sequestrated over project period)

Blue carbon is the carbon stored and sequestered in coastal ecosystems such as mangrove forests, seagrass meadows or intertidal saltmarshes. These ecosystems can hold high carbon reservoirs; they sequester atmospheric CO² through primary production, and then deposit it in their sediments.

The mangrove replanting areas contained very few or no mangroves at project start (~0 tons carbon held). It is likely to take 25 years to reach maturity (with a mixed *Rhizophora* ecosystem returning) to get to an

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²⁴ It was difficult to judge if, had the M&E Officer been invited to work on Outcome 1, if the results would have been different, due to the high workload under Outcome 2 and 3, and the general intransience of NEA re. taking Outcome 1 closer to its design expectations, which were also over-ambitious.

²⁵ The baseline and target for this indicator are outside the project control and would draw the overall project rating down if taken as a single measure.

²⁶ Approximate exchange rates: Aug 2017, 1US\$ = 45 Dalasi for the 2017 figures; and Aug 2013 1US\$ = 32 Dalasi for the 2012 figures

indicative figure of 937 tons carbon per hectare held²⁷. Thus, as the project planted 1,197 ha of mangrove the future value could be 1,121,589 tons of carbon sequestrated and held (in 25 years' time). This is more than four times the prodoc target which suggests a carbon sink capacity of over 244,000 tons of carbon over project's lifetime.

3.3.2 Effectiveness – Achievement of Outcomes 1-3

Effectiveness - Outcome 1 at the Outcome Indicator Level

Outcome 1: Policies, institutions and individuals mandated to manage coastal areas strengthened to reduce the risk of climate change (three indicators)

There have been significant short-comings under the implementation of this component, partly due to its over-reaching and confusing design, not least in setting off on another path (SRDM) when ICZM planning was also being attempted by NEA. There was the difficulty in bringing together the various types of planning (defence, disaster and investment) into a coherent policy, let alone management strategy. The lack of donor coordination between UNDP and EU is clear, especially if you consider the limited management and technical capacity of NEA²⁸.

Ten percent (US\$0.95m out of US\$9.50m) of the prodoc budget was allocated for Outcome 1. This should have been the largest single investment in project and NEA staff time to deliver the four outputs from this Outcome. However, the project only managed to spend half this amount (US\$482,985 ~51% of the plan)²⁹.

Consultant reports were produced covering institutional and policy requirements, however a practical / realistic 'simplified' plan of action was not created or taken up by NEA, or even advised by UNDP.

With the establishment of a PIU, NEA responsibility entered a void. Project design for Outcome 1 should have been streamlined at project preparation or inception, but it was just left to fester. By MTR time, it was too late.

Climate risk management, sea & river risk management and technical capacity in national / regional institutions

(Baseline - Negligible capacity except in NEA; Target - Capacity to implement climate risk management in national and regional institutions)

There was little evidence of how roles and responsibilities had been improved in key stakeholders such as the NEA, and their CMU, the National CMEWG or MoWTI. The was also little evidence of improved data sharing and collaboration between agencies. The PIU and NEA considered that they lacked any mandate to review the organizational structure of MoWTI in relation to improving technical expertise in SRDM.

(Baseline - As above; Target - 250 technicians trained (50 staff from national departments; 200 staff from regional agricultural, engineering, planning & fisheries offices)

There was no overall training plan developed, which should have linked with the required capacity development. The project trained 202 technicians (81% of the target), although it struggled to identify candidates from the relevant institutions or with the pre-requisite baseline knowledge.

Coastal monitoring undertaken, collated in database and accessible to support decision-making

(Baseline - Very limited monitoring database; Target - Monitoring data collected / stored in structured and accessible database)

The project was unable to upgrade the NEA GIS Unit to support a working database for SRDM, nor ensure the technical capacity to manage it. The assumption was that the GCCA project would develop the database

²⁷ Carbon sequestration in mangrove forests (D. Alongi, Volume 3, 2012 - Issue 3, pp313-322) - Most mangrove carbon is stored in the soil and dead roots. Mangroves are carbon-rich biomes, containing an average of 937 tC ha-1. Mangroves as coastal habitats they account for 14% of carbon sequestration by the global ocean. If mangrove carbon stocks are disturbed, resultant gas emissions may be very high. https://www.tandfonline.com/doi/abs/10.4155/cmt.12.20

²⁸ For the UNDP project, a PIU was required as NEA lacked the accreditation to directly implement a UNDP GEF project, and for the EU project, the National Audit Office was tasked with managing finances on behalf of NEA.

²⁹ Bearing in mind US\$4.57m was budget allocated for infrastructure sub-contracts (Outcome 2); and US\$1.48m for other sub-contracts (Outcome 3), together these two budget lines take US\$6.05m from the US\$9.50m (64% of the total project budget for outsourced services which should take less management time)

for project use, but this turned out to be false.

Number of Sea & River Defence Investment Plans (SRDIPs) financed

(Baseline – No SRDIPs; Target – A SRDIP for each coastal district)

With NEA support, the project produced one overarching Sea & River Defence Investment Plan (SRDIP, 2016), which covered the nine coastal cells, however it has yet to be distributed to government and partners apart from NEA. It was confusing that these cells only corresponded to the coastline³⁰ and not to the country's administrative districts or river defences, which is what the overall project design originally intended.

(Baseline - No SRDM Policy; Target – A policy produced)

A coastal policy framework (2014) was prepared. The report links ICZM with sea & river defence management

(Baseline – No Code of Practice (CoP) for Sea & River Defence & Coastal Development; Target - CoP developed)

A sea & river defence guidance manual (2014) was prepared. The report focuses on ecological zoning and the legal responsibilities.

Effectiveness - Outcome 2 at the Outcome Indicator Level

Outcome 2: Vulnerability of coastal investments to climate risks reduced through the design, construction & maintenance of coastal protection measures (two indicators)

Number of hard & soft coastal protection schemes implemented to reduce erosion risks

(Baseline - No functioning protection schemes at target sites; Target – Two hard and three soft protection schemes planned and constructed)

Hard protection schemes

The two schemes were: SGKB revetment (1035m long); and TBDR (80m long) and highway coastal works (120m long)³¹, with. They have successfully been completed.

Soft protection schemes

The three schemes were the:

- Darsilami and Illiassa (D&I) integrated farming systems at with river defence dykes have been constructed, but they have a number of internal (inside the dykes) problems to be now worked on by the communities
- Tendaba polder and sea dyke has been successfully constructed, although the future management remains an issue. The polder covered 3.7 ha, was 30-60m wide, shoreline length of 670m, section length of 760m, was 4m deep infilled, and a sea wall constructed
- Mangrove restoration at various sites From eroded and bare tidal coast areas, 1,197 ha of new mangroves have been planted and have been successfully maintained (out of a target 2,500ha - 48%)

Number of families benefiting from LDCF resources used for design & build structures

(Baseline - Vulnerable communities to climate change in coastal and estuarine areas are becoming in higher risk without adaptation measures; 1,500 families will benefit directly from protection measures)

The target is achieved with 1,506 families directly benefiting from the project. This includes four communities provided canoes, two provided houses for rice machines, five provided community centres, three provided four larger boats, and two provided beehives. From 1,506 beneficiaries, 1,281 were women (85%). The beneficiaries included 619 fishermen and oyster collectors / cultivators who have received direct project support in terms of equipment, including 433 women (70%). From the total, a project calculation of (x8) eight indirect beneficiaries benefitted which would be equivalent to 12,048 persons. (See **Annex 10** for

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³⁰ This appears to be because the project was partly designed to work with the EU GCCA project, which was focussing on investment proposals for nine coastal cells along the north and southern coastlines.

³¹ Tanji utilized 500m3 of boulders and 70m3 of gravel

the detailed breakdown)

Effectiveness - Outcome 3 at the Outcome Indicator Level

Outcome 3: Rural livelihoods in the coastal zone enhanced & protected from the impacts of climate change through demonstration of coastal adaptation technologies and economic diversification (two indicators)

Rice & fish pond production to produce sustainable income for local community

(Baseline - Uneconomic / degraded rice production and no fish farming in target communities;

(Target - Rice & fish production provides a sustainable income for 1,800 community members)

The number of rice growers and fish producers realizing a sustainable income is 1,278 from a target of 1,800 (1,500 rice farmers, and 300 freshwater pond fish farmers) (71%). The short-fall is linked to the 300 fish farmers at D&I not having freshwater fish pools that work, and the rice-paddies not being fully operational yet.

(Target - 20 wards in the Lower & Central Valleys)

Twenty-one wards in both the lower and central valleys were selected with activities undertaken.

(Target - 1,500 rice growers)

1,278 paddy rice farmers were supported out of a target of 1,500 (85%). The short-fall was due to the D&I schemes not yet being fully operational, including the salt pans at Darsilami

(Target - 300 horticulture producers diversity income)

The five community vegetable gardens with freshwater supply from solar-powered boreholes were operational. Five community meeting houses were constructed. Beneficiaries included 736 of which 663 were women (86%). With indirect beneficiaries (x8) estimated at 5,888.

Number of farmers that receive agricultural extension services and alternative livelihoods

(Baseline - No / negligible knowledge of farmers that will receive agricultural extension; Target 1,500 rice farmers to receive agriculture support)

- The project provided extension / alternative livelihoods training for 1,502 persons of which 1,289 were women (86%). With indirect beneficiaries calculated with a 'times eight' factor equaling 12,016.
 - Of which 1,303 farmers were trained in horticulture vegetable gardening (with composting, and IPM) and community facilities management
 - Other training included bee-keeping, agroforestry, community bank accounts, saving and book-keeping, dyke management, rice tiller / rotovator operation, rice threshing & milling machine operation, fish feed formulation, tie & dye batik
- Separately in fisheries, 174 persons received training in oyster wild collection, and managed cultivation, including 170 women (98%)
- Rice farmers received technical support from NARI in salt-intruded paddy rice production

3.3.3 Achievement of Outputs

Outcome 1 (Policies & institutions strengthened to reduce the risk of climate change to coastal areas) at the Output Level (4 Outputs)

Climate risk management capacity development for coastal areas

A number of quite different activities were designed for this output:

- The expectation was to support the CMEWG (which existed, but was not operational). This was not achieved.
- The output introduced 'sea & river defence risk management'. A consultancy on 'risk' management was undertaken, which examined 'disaster risk', however, the project design was about policy, planning and practical adaptation to climate change, i.e. strengthening coastal & river defences. It was not so much about 'disaster risk management'. In other words, the 'D' should have stood for 'Defence' and not 'Disaster'.

- A formal collaboration between the GCCA and GEF projects should have been established, but was not³². Collaboration with MoWTI was based on an MoU in the prodoc, but it was not developed further into a close relationship. Rather the MoWTI were called-up for supervision visits only, as opposed to being a key recipient of capacity building in coastal management and being responsible for implementing parts of Outcome 1 and 2³³.
- It was expected that the project would review the organizational structure of MoWTI (so that it could assist with SRDM), however the NEA deemed that without such a cross-sectoral mandate, they couldn't do this, but forgetting that this was a role for the project and PIU, not NEA³⁴. What was simply required was to identify and strengthen coastal engineering capacity.

Revision of National & Regional Development Plans

There were three main activities for this output:

- Design planning tools A key planning tool was to be 'integrated coastal zone management' (ICZM)³⁵, as developed by the EU GCCA project, but this didn't happen. Sea & River Defence Management (SRDM) planning was new to the institutions and the link to ICZM unclear³⁶.
- A Sea & River Defense Investment Plan (SRDIP, 2016) was prepared by the project. It is a useful starting point, although it has not been integrated with state and donor budgets, apart from the GCF 'breakwater scheme'. The SRDIP has a large budget proposal of €143m for 16 infrastructure-based solutions in the nine cells, however there are only nine organisations / other listed as financiers³⁷.
- The project prepared an environmental policy guideline to support SRDM (2014).³⁸ It focused on Sea and River Defence implications under the 1999 EIA regulations.

High-level institutional mechanism to guide climate change resilient development of coastal zones

There were two main activities for this output:

- Coastal policy framework (2014) was prepared the report links ICZM with sea and river defence risk management, but failed to really identify the institutional requirements.³⁹
- Institutional reform to support regional and district coordination in SRDM A number of consultancy reports were prepared (as described) but they largely missed the overarching point regarding 'institutional coordination'. The project design mainly concerned physical outputs (reports) and underestimated the institutional, leadership and strategic management needs to achieve a workable SRDM approach.

Coastal monitoring protocols and standards programme

There were three main activities:

³² The EU GCCA MTR was critical of the NEA lack of collaboration with the GEF UNDP project

³³ The relationship should have been developed much more by the PB with the support of the PIU and UNDP. The inability of projects to utilize government offices for implementation (as they can't be paid for services is a very common failing of projects which UNDP should have been aware, and found solutions for).

³⁴ This is a common misconception within project designs of not understanding institutional boundaries, but just expecting them to be malleable and developed for project implementation purposes. In addition, the mandate of MoWTI is 'construction' not 'planning or risk management' which would be in line more with that of NEA.

³⁵ Another relevant tool could have been integrated water resources management (IWRM). More recent tools could include ecosystem-based adaptation (EBA).

³⁶ One issue was that the former leadership of NEA was not on-board with the prodoc design in terms of its 'flagship' SRDM planning, especially when the similar ICZM approach was being started at the same time and they had obvious constraints (knowledge in integrated planning, significant skills gap in water engineering, and lack of worked examples in similar countries / situations that could be learnt from (i.e. models that could be copied). In fact, the prodoc design 'left it open' as exactly what or which 'tools' would be most appropriate. However, the former leadership retired in 2013 having validated the prodoc design just before he left

³⁷ International funders - GCF, GEF / SCCF / LCDF, Clean Development Mechanism (CDM), EU; Loan financing – WB, AfDB, IFAD; Others – Government of Gambia, Coastline property owners - hotels

³⁸ Mainstreaming of sea & river defense risk management: Environmental policy guidelines to help deliver sea & river defense risk management as part of existing regulatory framework (2014, 92pp)

³⁹ Mainstreaming of sea & river defense risk management: Policy framework for integrated coastal zone management & sea and river defense risk management (2014, pp72)

- A sea & river defence guidance manual (2014)⁴⁰ the report focuses on the academic side of ecological zones⁴¹ and the legal responsibilities. This activity was equivalent to the preparation of standards and protocols for SRDM (data). It covers the first step in this process
- Develop a database for SRDM It was expected that GCCA would provide a working database, however this was not the case⁴². The NEA GIS Unit was unable to present any coastal or sea and river defence database.⁴³
- Develop an R&D programme no funds were allocated for this as there wasn't an appropriate science programme in the country It was an excessive design request

Outcome 2: (Construction of coastal protection measures) at the Output Level (3 Outputs)

The outputs focused on the physical interventions in the field – the two hard schemes (SGKB / TBDR); and three soft schemes (paddy rice reclamation (with dykes at D&I and Tendaba and added polder at Tendaba, and mangrove plantation.) Environmental & Social Management Plans were prepared for SGKB, as well as for D&I and Tendaba.

A/ Hard coastal infrastructure designed & constructed considering sea level rise & climate-induced erosion

Coastal defence designs for Senegambia / Kololi Beach (SGKB) revetment and Tanji Bridge Dyke & Revetment (TBDR) were prepared and approved. By the end of 2018 construction was finished with handover imminent. For TBDR, the river revetment protects the river estuary from tidal outflow and inflow to a lesser extent. The contractors have a five-year Defect Liability Period (DLP) which is now being supervised by the consultant engineer (NIRAS, and funded by UNDP out of core funds). Both schemes have just about been signed-off as construction has been completed. After the DLP, the schemes will be handed over to MoWTI. Over the last five years, MoWTI has been somewhat marginalized in the process without sufficient hands-on capacity being built.

In 2014, the coastal engineering consultant (also NIRAS) prepared the design feasibility study, but with UNDP procurement and due diligence, it took until July 2016 for contract signature. Then the construction of the two revetments was expected to take eight months, however it took over two and a half years⁴⁴.

As a consequence of the SGKB revetment, the fruit & juice sellers were displaced at Senegambia away from much of the tourist footfall. A letter needs to be sent to the Tourism Board and Hotel Association for permission be re-granted for selling between Holiday Inn and Kololi hotels.

B/ Low cost infrastructure to protect 1,500 ha of vulnerable Rice-growing areas

The output concerned rice paddy reclamation at Darsilami, Illiassa and Tendaba, the IFS at Darsilami and Illiassa, and the polder at Tendaba.

Summary in numbers

Location	Area of Rice paddy (ha)	# of Rice Beds (sub-plots)	Before Dyke Length (m)	After Dyke Length (m)	Run off Canal Length (m)	Access Road (m)
Darsilami	19	45	0	1040	N/A	400
Illiassa	11.9	66	0	791.15	N/A	450
Tendaba	7	85	515	636	520	N/A
	37.9					

⁴⁰ Mainstreaming of sea & river defense risk management: Sea & river development guidance manual (2014, 88pp)

⁴¹ It indicates that the sea and river defence zone begins at the inter-tidal zone and ends on a terrestrial land boundary where the tidal influence has been negated.

⁴² This isn't explicit in the GCCA project design (logframe). The GCCA database within NEA was not operational (- it was not created with a data entry, filing, or access system).

⁴³ They indicated their involvement in the collation of baseline data for the project, (and possibly data support for the preparation of the 2nd & 3rd National Communications to UNFCCC (2012 and in-process). The project supported the mapping capabilities of the NEA GIS Unit with the provision of a large mapping plotter to support its use of ArcGIS software.

⁴⁴ Issues included: inferior stone delivered at the beginning, with replacement stone taking another four months to arrive; insufficient ferry capacity to bring the stone and contractor's (i.e. constructor's) equipment from Senegal; and a closed border with Senegal due to political upheaval. Changes in plans and agreement with the port authorities were made as a result. This was an example of adaptive management

B1/ Salt-intruded rice paddies

Darsilami was the most affected by salt intrusion, then Illiassa, with Tendaba much less so. Salt levels are being reduced to the extent that future paddy rice crop production is promising for all sites. At present, Darsilami is too salty, Illiassa is partly being utilised for rice production, and Tendaba is in full production. Further activities were integrated with these three salt-affected rice paddies. These are described afterwards.

Under this output, 1,500 ha of low-land rice paddies were expected to be protected through the installation of dykes and tidal gates. The project managed just under 3% of this target, however the project focused on protecting salt-intruded rice land only. There has also been a definite benefit of mangrove plantation to protecting vulnerable land from salt-intrusion, however, this has been difficult to quantify at present.

Darsilami Rice Paddy

An area of rice paddy (19 ha) has been constructed with a dyke system, but it is not yet operational. The internal bunding from high to lower sub-plots needs to be completed. A handover document to the responsible community is needed. Construction stopped in the rainy season and salty water was not drained or pumped out, thus it has now soaked through into the soil again. Some rice is being grown slightly more inland where freshwater seepage occurs. There is salt-tolerant rice being tested, but most of the site is currently too salty for rice production⁴⁵. At present, because saline water is not being drained, paddy rice farming can't begin. The saline water needs to be flushed out (after 1st & 2nd rains each season), by starting at higher-level plots and sequentially drained and / or pumped out.

Controlling the internal water flow / levels from the higher to lower plots before draining needs to be practiced. The paddy soil is expected to remain saline for a number of years, thus it needs to be managed with a continued seasonal regime of 'flush & drain' as well as planting salt-tolerant rice. As the level of the plots is uneven and the slice gate not constructed at the lowest point, it is important that the water pump (from the fish pond scheme) is redirected and utilised to remove the saline water that pools in certain areas. The pump will be needed for a number of seasons until the water flow / levels within the dyke are established for a sequential run-out. At present need weed management is needed here (and at Illiassa), which means the removal of rushes and sedges, especially each year before they set seed. Planting should be on the 3rd rains / flooding of the paddies. As mentioned by NARI, the rice paddies as acidic at present, thus liming is also advised.

The project also procured a rice-milling machine and constructed a warehouse for it⁴⁶. As with the rice scheme, the equipment also needs to be formally handed over.

Illiassa Rice Paddy

An area of 11.9 ha of rice paddy has been constructed with a dyke system, of which five hectares are functional as they receive a limited freshwater run in. The construction hasn't included sufficient time to create the internal bunded water-flow system from higher to lower plots. The community now need to create and practice a water flow flushing regime through the plots, ending at the lower sluice gate. At present the salty water does not drain, but instead pools in certain areas, thus as with Darsilami, a water pumping system needs to be used in tandem with the natural flow out method. At present, the water pump for Illiassa is still at the NEA offices and needs to be delivered and handed over as soon as possible to the community there. As with Darsilami, seasonal (1st and 2nd rains) flushing out of the salty water is needed. The water flow regime from plot to plot, based on gravity, is important because climate change is causing uncertain timing and extent of the rains, which already negated acceptable flushing in 2018.

The water pump may also be used to pump a limited volume of freshwater from the borehole to the highest level first few plots⁴⁷, with the water then used to support sequential flushing through and out of the scheme, with the pump maybe needed again at the lowest level if the sluice gate level is too high to allow all water out. In terms of soil management, with each flushing, the fresh water will also infiltrate (percolate) the soil,

 $^{^{45}}$ NARI took samples and identified that salt & iron levels were too high for paddy rice production

⁴⁶ Milling machine houses were constructed at Darsilami, Illiassa and Tendaba

⁴⁷ The freshwater borehole should not be extensively used for this, because overuse of the ground water is likely to cause seawater intrusion under the freshwater and contaminate it.

dissolving and draining the salt down through the soil profile. Conversely, the more the soils are disturbed (e.g. via deep ploughing), the more salt that will be released, so his should not be done⁴⁸, as confirmed by NARI. This management of the rice paddy involves a high level of community partnership and needs to be supported by NARI.

The Illiassa community are a registered association and have a bank account and have demonstrated responsible saving. Thus, there should be no reason for not handing over the scheme and all equipment, including the important new water pump. The rice milling machine urgently needs an exhaust pipe for the diesel engine emissions which at present are an obvious danger to health.

Tendaba Rice Paddy

An area of rice paddy (7 ha) was intruded by salt 20 years ago and has now been reclaimed by the project by the repair of the dyke (with a gravity system, sluice gate, and run-off canal) and seasonal flushing (1st and 2nd rains) of the soils for the last three years. With the support of the project and NARI as technical advisors and providers of salt-tolerant seed), the scheme is now fully operational.

The community has been provided a rice threshing machine. However, the rice milling / polishing machine is in urgent need of an exhaust pipe for health and safety reasons.

B2/ Integrated Farming Schemes (Dasilami and Illiassa)

The Integrated Farming Schemes (IFS) included paddy rice fields (already described), fish ponds (and salt pans in Darsilami) with supporting equipment and activities. There were a number of design and construction issues with the scheme which affected the project's ability to make each of the component parts operational at these two sites. This was despite the preparation of feasibility studies, detailed designs and contractor management by the PIU. The direct beneficiaries to the IFSs (rice paddy, fish pond and salt pan) is 785 of which 689 are women (88%).

Darsilami Integrated Farming Scheme

Fish Ponds

Five fish ponds have been constructed adjacent to the river bank, however there are significant design issues which can't easily be overcome. They are constructed below the saline water table with salt-water seepage into them. The latter is because they are not lined with clay to seal them. Also, the freshwater inlet pipes and pool drainage pipes are on the river shoreline at river brackish water level (<1m above) making filling and draining a problem, and certainly not climate-proofed from tidal surges, sea-level rise etc. The cost of bringing clay in and lining the pools would be too high⁴⁹. However, in the future if one of the pools is renovated under another project, then it would need to be partially refilled to gain height, need a clay lining and then aquatic plants to build up the freshwater pool ecosystem.

The TE recommends that the bolehole-pump-pipe system for fish ponds (which are effectively redundant) is re-directed to for use in the rice paddies for both Darsilami and Illiassa⁵⁰. The rice paddies are far more important for the community livelihoods, plus they also have working rice mills.

Salt pans

Twenty-one salt pans were constructed, but none work as water drains through their sandy substrate and salt cannot accrete on a clay layer. An understanding of soil physics was missing in the design. The problem may be rectified by testing the following methods for 1-2 salt pans to begin with:

- Dig to test if clay layer exists below the sand and remove sand layer and flood to see if the water pools and does not drain through
- Allow to settle one more year and smear a clay layer over the substrate and level after a rainy season

ΤE

⁴⁸ The Illiassa Government Chief wrong believes 'deep ploughing' these paddies and then draining is the solution. Time needs to be taken to educate him and bring him on-board. A field visit to the Tendaba rice growers would be beneficial. Note also that tractors are too heavy for rice fields and will damage the structure the clayey soils though compaction.

⁴⁹ Neither should cement be used, as it is a mix of limestone and clay but pulverised and then (unlike natural clay) is not flexible on setting and would be highly susceptible to cracking when costal erosion / sand movement occurs which it will.

⁵⁰ Either insert a new T-junction and section of pipe to the highest point of the rice paddies, or relay the existing pipe to the paddies

- Pump & flush water (fresh or salty) from a 'wet clayey area⁵¹' to get the 'dissolved' clay particles onto the salt-pan surface and allow to settle, then allow salt water to settle on the pan to see if it can accrete
- Send community representatives to a working salt pan farm, to learn the skills of construction ask for help from Department of Agriculture or other private farm

Because there are solutions for rectifying these salt pans, the planned purchase by UNDP of a salt iodization machine should go ahead.

Illiassa Integrated Farming Scheme

Fish Ponds

As with Darsilami, the same design faults exist. The ponds are permeable with saline / brackish water seeping in, partly because they were constructed too low compared with the saltwater table. The freshwater inlet pipes are at river shoreline level, which is too low. Most importantly, they lack a clay lining⁵² to hold water.

Community garden with borehole at Illiassa

The project supported the community garden with construction of a borehole and solar panels to run a pump. The panels were designed to be sufficient to pump $80m^3$ / day, however such high usage would definitely affect freshwater supply from the aquifer with added risk of salinity intruding. If there are any signs of salty water, the borehole use should be restricted until the following rainy season. In order to protect the garden and freshwater supply, the shoreline perimeter needs to be planted with mangrove to create a soil salinity and erosion buffer.

B3/ Tendaba Polder

The polder constructed at Tendeba is impressive. It has been infilled, it has a laterite topping and the seawall / riverbank is constructed of igneous ('volcanic' type) rock (~1.5 metre above high tide). It has saved and climate-proofed the whole village, the mosque and Tendaba resort.

The Tendaba resort footprint is comparatively large (15-20% of river front view at the far end of the polder with a separate entrance as well and a new bar built on the polder). At present there is an unequal balance between the resort and village. The resort supplies all village electricity and water without cost, but restricts it use to night time 7.30 PM to 7 AM, then shuts it all off all day. The resort is not nature conservation aware, despite running 'conservation trips for tourists. They are dumping rubbish over the polder wall into the mangrove area where IUCN-Endangered primates (Western Red Colobus monkeys) reside, and are burning rubbish here which is a high fire-risk to mature *Avicennia* mangrove and other forest trees which back-up the hill and around the village.

The project in constructing the polder has created a large area of new public land, however the project has not developed a handover and use agreement. A polder management stakeholder committee is needed, as is responsibility within local government. The villagers need community empowerment through: developing their own tourist income sources (e.g. Tendaba community hub and guest house for independent tourists with bird-watching); and siting on a polder committee.

The project supported the Tendaba Youth Association to register and set up a bank account. The project also bought three boats with outboard engines (15 Horse power - HP). which could be used for income generation via tourist bird-watching or fishing for example. They are prevented from doing this as no life jackets were supplied (although they were to other fishing communities under the project).

C/ Mangrove restored through regeneration & management (2,500 ha)

A strategic implementation plan for mangrove restoration (2015) was prepared with specific planting interventions at a number of sites. A national plan for mangrove management was not prepared.

The study to assess mangrove die-back determined that the primary reason for die-back (~death) was state damage to the environment, in restricting the flow and flushing of tidal waters (levels and salinity / nutrient

⁵¹ Clay soil is smooth to the touch, unlike silt or sand

 $^{^{52}}$ A clay lining would be expensive to fix. The ponds need to partly refilled (1.5 meters) and clay-lined (min 20cm) $^{\sim}$ surface area of pond x minimum 20 cm ($^{\sim}$ 8 lorry loads x 15 m3 at a very rough estimation, per pool)

mix) and also causing siltation and pollution overload. In particular the following were noted:

- Causeways without sufficient bridges and culverts at: Old Cape Road; Sting Corner (Tanbi Wetland complex, Kanifing Municipal Council⁵³)
- Bitang river tributary barrage Kalagi Road (since removed, but was the main cause of *Avicennia* sp. mangrove death in the project area

Unfortunately, the project selected the wrong target group to teach these lessons to. They should have selected the engineers and designers from MoWTI and local government planning officers from Kanifing Municipal Council, and Banjul City Council.

Plantation works

The project has planted 12,895,000 *Rhizophora* propagules covering 1,197 ha in areas that *Avicennia* previously grew in. This is because *Rhizophora* is easier to plant as it produces a propagule (~seed that pregerminates on the tree). The project planted the propagules in three areas (Tanbi Wetlands; Bintang Bolong Tributary; and Nuimi National Park) in 51 locations.

An example of the success for the Kantang Kunda mangrove plantation:

- Twenty years ago, an upstream barrage caused changes in the freshwater / salinity mix and killed 95% of the large *Avicennia*. Since removal of the barrage and three years of replanting with *Rhizophora*, the restoration has been successful.
- The Bintang Bolong River tributary was encroaching into rice fields, but with mangrove planting, this trend has been arrested.

Outcome 3 (Demonstration of coastal adaptation techniques & the introduction of economic diversification) at the Output Level (4 Outputs)

Outcome 3 was designed provide technical support to Outcome 2 interventions and provide alternative income and sustainability options to three main types of community (paddy-rice growers, fishing communities; and vegetable producers), as well as develop awareness and engagement in climate resilience. The project rationalised the interventions for Outcome 3 effectively.

Agricultural development in vulnerable saline areas

The work of NARI in support of the three communities with salt-intruded rice paddies has been presented (see sections on institutions and rice-paddies). These communities need the technical advice and salt-tolerant varieties from NARI, but also because D&I are not functional yet, it is important that UNDP and NEA identify a 'funded-method' to allow such support for five years.⁵⁴

Fishing communities in wetland areas

Two main types of fishing community were supported – inshore fishing and oyster collectors

Tanbi Oyster Collection & Farming Communities

- Eighty fibre-glass canoes (\$53,000) were provided for the 10 oyster farming communities (Annex 12).
 The communities were happy with canoes & equipment, but the equipment needed formal handover to them.
- The main issues:
 - Wood racks are not sustainable. The solution maybe Plastic cages (turned periodically to stop oyster attaching) on a permanent rack (galvanised steel poles) seems a common method now – disadvantage – mesh cages become very heavy so a strong rack is needed
 - Women need to find industrial gloves and rubber boots
 - o Marketing is the main issue there isn't a central oyster market with cold storage facilities. Support is needed via a new project to develop an oyster market close to the 10 producing communities.

⁵³ Tanbi Wetlands in Banjul, Kanifing, Brikama (6,304ha) is a Ramsar site, thus such inappropriate development should have been stopped.

⁵⁴ UNDP is paying for the supervision of the SGKB and Tanji Bridge works for five years

- Marketing live (as opposed to boiled or smoked) oysters to the large hotels and restaurants needs to be successful, if value chain linkages and margins are to increase. It is recommended that the PIU to write to Gambia Hotels Association to request their members visit the 10 oyster farming communities for possible contract to supply live oysters
- o It's recommended that the 10 groups form a cooperative company to market their products

Baobolon Fishing Communities

An example of the Conteh Kunda Niji Fishing Community:

- The project provided fibre-glass boats with engines and nets, although the nets have only lasted two years. The Baobolon fishermen have set up a bank account for saving and equipment maintenance. They have spent time to train the next generation of youths in their livelihood.
- Sustainable fishing has been respected with net 'pore' size limited and fish nursery areas closed for five months / year. River bank margins are also not damaged

Five communities were provided with seven larger fibre-glass boats with outboard engines (Annex 12)

Alternative livelihood implementation

Community vegetable gardens

Location – five communities (Bondali Tenda, Misera, Illiassa, Bintang and Tubakulon)

Freshwater supply systems (Borehole + solar)

In general, the 'borehole + solar panels + water tower + garden tanks' is a system that is working well. However, the communities do not at present have sufficient ownership of the interventions, thus standard maintenance is lacking. For efficiency, the solar panels need washing, and surrounding vegetation removed. Recording water extraction by taking a monthly meter reading is advised, especially if higher usage could lead to salinity issues.

Community multipurpose buildings

Multipurpose buildings were constructed at the five sites. Within these community meeting houses, there is a need for facility cleaning. There are some issues with electricity supply, such as the solar-fed 'deep-cycle' batteries are not charging or only one battery is present, thus it is not possible to switch over while other is charging. In one instance, for a freezer, the solar inverter and deep-cycle batteries have been disconnected (by UNDP) with the parts removed. These parts need to be put back on handover.

Kitchen Ovens

The wood-burning ovens in the meeting houses have a couple of design issues that are easily rectified. At present, they lack baffles and pan sizes do not fit the oven rim size. This results in cooking in a smoke-filled kitchen which is obviously unhealthy. The solutions are to:

- Place a baffle (stone) at start of flue (back of wood chamber) to direct heat to the pan and create a 'draw' for smoke over it and up the chimney
- Mould clay (yes clay again) around the oven pan rim to fit the community pan-size to make a seal (i.e. smaller than the base of the pan size so to restrict smoke escaping into kitchen. Also, the clay around the rim will protect the ceramic tiles from cracking, which they will do so, if not protected this way.

In general there is a need to strengthen the community committees to better manage their facilities, project resources and equipment and establish regular saved funds for maintenance costs.

Greenhouses, Compost Pits, Other

The greenhouses were poorly designed for a tropical climate with a severe lack of ventilation. The composting pits (concrete with no link to the soil microclimate or microfauna or aeration) were poorly designed with a lack of drainage.

Dissemination of practical livelihood diversification approaches

Beehives

The 300 fibreglass hives are too hot. They actually have a tin 'back', with no ventilation or inside lattice for

honey production. On handover, it's suggested to drill some drainage holes in the bottom and use as vegetable / flower planters. It is unlikely even if they covered with mud and, placed in cool place that they will work, but could be tried. Unless the village has bee-keeping experience (e.g. to bring the queen bee to these relocated hives where the mean temp is low enough) that the hives will be colonised.

Community flood management committees

The prodoc introduced here 'community flood management committees', however without a clear top-down institutional responsibility structure, this was never going to happen and didn't. As described earlier, the project design focussed on protection measures and adaptation. 'Disaster-risk management' was an add-on that confused and should be left for another project.

3.3.4 Efficiency

Efficiency Rating – Moderately Satisfactory

There should have been an overlap and rationalisation with the EU GCCA project (both housed within NEA), but this didn't happen. This indicated the lack of leadership and direction within NEA to direct donor funds (of GEF/LDCF and EU) towards feasible outcomes. Instead, neither project has managed to support Gambia to develop an institutionally-based sea & river defence strategy. The process remains highly donor-driven, highly expensive foreign investment (grant and loan) infrastructure-based, and largely without any in-country capacity built.

There were a high number high number of consultant reports commissioned, but in quite a few cases, their technical level and usefulness was limited. The latter was because they were written as consultant reports and not converted to project deliverables (e.g. a report and not a strategy or plan; or not linked to an institutional mechanism) and not approved for implementation by the PB⁵⁵. There was little oversight or strategic linkage of the various consultant reports (Outcome 1) to create an over-arching approach to coastal defence for the country.

3.3.5 Relevance

The project was based on NAPA priorities with coastal zone management at the forefront. The project design and implementation remained highly relevant, especially with climate change issues becoming more acute⁵⁶.

3.3.6 Country Ownership & Mainstreaming

The project was unable to deliver on mainstreaming. Whilst it produced a number of relevant reports, these were not converted into draft policies, presented at workshops or put out to consultation. There was little ownership of SRDM planning as practical approach. This was in part due to the project failing to deliver a coherent strategy or institutional mechanism. Th project did however produce a comprehensive report – A Policy framework for coastal management (2014).

Most of the larger interventions were undertaken by outside consultants and contractors, thus in-house capacity-building was not very successful.

4. SUSTAINABILITY

4.1. Financial Risks to Sustainability

Government funds are highly limited, but are needed for SRDM planning. At present SRDM planning is not high enough on the political agenda (e.g. the inter-ministerial CMEWG is not operational) of the OoP or MoFEA to warrant budgeting for activities. The project didn't manage to provide a cohesive SRDM strategy or institutional structure to go with it, despite some effort in developing the individual pieces on paper

⁵⁵ E.g. the consultancy on adapting coastal infrastructure to climate change - K. Kennedy, 2014) was somewhat useful in capacity building and gaining a better balance of ecological options vs. hard infrastructure options. However, the report did not link directly to the project design nor with SRDM or ICZM planning, and a further training manual by the consultant (2014) focused again on disaster risk, and not the projects core of coastal defence and adaptation.

⁵⁶ E.g. rainfall patterns include insufficient rains at rice pre-planting periods, which necessitate identifying shorter growth-cycle varieties, and / or using external water sources (boreholes).

(consultant reports). The lack of workshops in developing such a strategy was apparent as was government inertia in this sector.

The Atlas risk and the Risk log tables outline the risks (see section 3.1 project design). Some of the advances made by the project are not sustainable without further donor funds. In spite of this, the project interventions in the field have less financial risk to their sustainability with either further investment being sought by UNDP for a breakwater scheme to protect SGKB; or the expected self-sustainability of the three rice paddy fields.

The cost-benefit (environmental strength) of civil engineering falls over time (>15 years) against bioengineering solutions which increases, however benefit of the revetment works to the country is clear, in terms of maintaining a tourist industry and collecting tax revenue. Ecosystem-based solutions are often considered more cost-effective in the long term, however the port and tourist industry has already been built on the coast and needs protection. The tax returns of the tourist industry to the government do not cover the cost in the medium term.

4.2 Socio-economic Risks to Sustainability

The SGKB revetment heavily supports the SGKB hotels, with expected tax revenue to continue, however, the believe from cost-benefit analysis is that these private companies have largely benefitted from international donor development funds, without having to financially contribute. As the government, at project design stage, failed to gain agreement with these operators in levying a fee or a longer-term tax for the revetment, then it was too late thereafter⁵⁷.

The cost of sea defence infrastructure is high. The SGKB revetment (US\$3.2m) and planned breakwater scheme (US\$11.4m) together are expected to cost ~US\$14.6m. The revised approach to the GCF finance proposal⁵⁸ indicated that the breakwater scheme would be classified as high risk and therefore not eligible to sole GCF financing, with redesign of the concept to include local communities and not just the tourist hotels at Kololi beach. In fact, this should have been a lesson learned from the GEF project – with the high benefit to the tourist hotels of the SGKB and TBDR works and with lessor benefit to more vulnerable communities.

The rice paddies should become sustainable, but this is only probable with the continued input of NARI for the next five years, especially for D&I.

The project missed a trick in not pursuing a market / value chain analysis for the oyster producers, however they are in a stronger position than pre-project, especially with the provision of new canoes.

4.3. Institutional & Governance Risks to Sustainability

NEA were not supported sufficiently for this project, bearing in mind their serious lack of capacity and mandate to implement new institutional structures with new technical skills. There was also insufficient political willpower and leadership from MECCNR and the OoP. The clear lack of government direction in terms of allocated funding for sea and river defence made this apparent.

Due to the external contracting of works and services, the institutional and governance capacity of NEA and MoWTI in particular was not enhanced. Whilst the mandate of NEA includes coastal protection planning and monitoring, the MoWTI is responsible for coastal infrastructure. The NEA supported the project (and UNDP) to prepare the feasibility studies for the coastal infrastructure, and monitor the works, but thereafter their interest was limited. Their focus however should have been on Outcome 1 and building their capacity and capability in sea and river protection.

The Department of Forestry & Wildlife have enhanced their technical and social engagement skills with a fairly extensive mangrove restoration exercise (nearly 1,200 ha planted with nearly 13m propagules in over

TE

⁵⁷ The project attempted to get the tourist industry i.e. the large seafront hotels and Gambia Tourism Association to pay a maintenance fee of 1% (~\$30,000 year) for the Senegambia revetment, however they refused. Government obviously should set tax revenues to balance such costs to the country.

⁵⁸ Project internal discussion document (August 2018)

50 communities).

NARI enhanced their technical and social engagement skills in working with three paddy rice growing communities with technical challenges. These challenges in excessive salinity were largely overcome through physical solutions (dykes / bunding, desalination of soils via flushing) and agricultural solutions (improved salt-tolerant varieties).

The project design included a number of policies, plans, guidelines and a code of practice to be produced, however there wasn't a clear project design requirement for any of these policies or plans to be adopted by government. This was perhaps a project design fault, but at least an opportunity lost.

4.3. Environmental Risks to Sustainability

The sustainability of the SGKB revetment scheme is dependent on another breakwater scheme, which is currently at a project concept stage with the Green Climate Fund (GCF). It has been budgeted at US\$11.4m. Together with the 'breakwater scheme', and appropriate maintenance of both, the sustainability is estimated at 50 years⁵⁹.

Mangrove ecosystems differ depending on tidal flow and salinity, so the *Rhizophora* may not last in the longer term. Therefore, there is a need to pilot *Avicennia* self-seeding or produce in nurseries and plant

For greater resilience to climate change (ecological functioning) and wood supply, additionally planting the larger *Avicennia* from seedling should be encouraged with support of the Forestry Department. This would strengthen the mangrove ecosystem from upstream (rainfed) flooding and downstream tidal sea level rise / surges. Another benefit of mangrove establishment is in providing nursery areas for fish and crustaceans and in providing other NTFPs products.

Government and public awareness of ecological system is not that high with for example road causeways having been constructed across tidal wetlands without EIAs undertaken or respected, and thus causing mangrove death.

5. IMPACT & CATALYTIC EFFECT

5.1. Impact

Reduction in stress on ecological systems

Early indications of 1,197 ha plus mangrove plantation are very positive. Survival rates remain in the high nineties after 2-3 seasons of planting. Oyster cultivation requires another project to develop a sustainable racking system as opposed to wild collection, or racks being constructed out of mangrove (which rather defeats the objective).

The stress of the beach washing away at SGKB has been reduced by the revetment, but this not considered sustainable until a further breakwater scheme is constructed. The TBDR has reduce stress on the river tributary sand bank and shoreline.

Regulatory & policy changes at national and local levels

Whilst the project developed out of the 2009 NAPA plan which identified coastal zone management as its number one priority, the project was unable to effectively strengthen policies and institutions mandated to manage coastal areas. Indeed, the mandate to manage coastal areas remains cross-sectoral and confused, missing any overarching strategy or institutional mandate. In hindsight, the governmental level of NEA was too low to manage inter-ministerial environmental management issues, despite NEA being a semi-autonomous agency and appearing to be the correct choice. But the backing of the OoP and MECCNR was just not there. The OoP, MECCNR and NEA all went through major appointment changes during the project lifetime, which has not helped their own political standing, or ability to support the project.

 $^{^{\}rm 59}$ Pers comm. NIRAS meeting during the TE

5.2. Catalytic Effect

Scaling-up

What has been key, is the learning curve to develop dyke / gate system for salt-intruded paddies. This can be scaled up and replicated. However, scaling-up of this still requires paddy management techniques (water flow and flushing practice) and the use of salt-tolerant rice varieties, hence again the importance of the continued technical support by NARI.

Replication (outside of the project)

SRDM planning is now at a consolidation stage. Capacity still needs to be built and government line-agencies need to be more involved – collaborative via an institutional mechanism. The various aspects need to be brought together. Is the GCF project proposal the right vehicle for this?

Cross-over in skills in the West Africa region and / or further abroad are needed in oyster cultivation techniques. At present the wooden racks are not suitable or sustainable.

Demonstration

Lesson-learned - The project has been a clear demonstration of what works at present in the country. The concern is that the same mistakes will be made under the proposed GCF project, indeed this appears to be happening. In order for GCF to fund the breakwaters scheme, the concept needs to identify more local beneficiaries, however the overriding major beneficiary remain the private hotel operators along SGKB. Also at present, they are not expected to be significant contributors, outside standard taxation. This should be re-thought, through a public-private sector partnership (PPP) arrangement.

Production of a new technologies /approaches

The five solar-powered water-supply systems are successful. The boreholes can not only be used for the community gardens but for additional needs, such as flushing the rice paddy at Illiassa.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Two projects under NEA (GEF and EU) were expected to produce an integration of SRDM and ICZM methods, (with ICZM as the overall approach and SRDM as one of its applied techniques) and to support developing SRDIPs.

Outcome 1 was to provide the policy and institutional building blocks for coastal defence, however the design for this outcome was more akin to an early GEF tranche design in having so many separate activities, but lacking understanding of institutional strengths and government willpower. In hindsight, it is easy to see that the expectations were far too high (Outcome 1, especially in creating the institutional backbone and the strategic approach), with the design far too complicated and excessive, and the personnel resources far too low.

In order to have fully achieved all expected results, the project needed much higher support from OoP, MECCNR and MoFEA with a strategic vision and commitment guaranteed. A draft SRDM policy was prepared early on, but there was little discussion and no consensus on its merits. The project also needed a sharper PIU / NEA nexus with stronger leadership to simplify the actions down to appropriate manageability. Stronger oversight from UNDP in focusing on Outcome 1 also would have helped. This was an opportunity lost. In order to achieve results under Outcome 1 with its plethora of unrealistic requirements, an international consultant firm contract would have been useful.⁶⁰

The project succeeded in implementing Outcome 2, although not at the targeted scale for hectares of rice paddy created or mangrove planted. The SGKB revetment and TBDR was constructed but at a cost which affected the scale of rice paddy and mangrove coverage. Furthermore, funding still needs to be secured for the SGKB breakwater scheme for the revetment to become sustainable.

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⁶⁰ But accepting that Outcome 1 would have been simplified or left flexible at the TOR stage prior to procurement, with a technical proposal required as part of the Call for Proposals, linking a clear approach with a sustainable capacity building plan and institutional reform plan.

These two hard infrastructure schemes enjoyed a much higher political interest and cozy relationship with the tourism industry operators, as well as having extensive international consultant guidance. The same level of interest, expertise and post-project supervision & maintenance was missing for the Darsilami and Illiassa rice paddies. However, the project (UNDP, PIU & NEA) maintained this 'second' focus on the soft engineering schemes (Darsilami, Illiassa and Tendaba), which proved important. The scale of the polder constructed at Tendaba was also impressive.

The level of endeavour needed for the hard & soft engineering schemes (Outcome 2) impacted on other aspects of the project, including:

- Building in-house capacity of state agencies in sea & river defence planning; consensus building workshops on sea & river defence policy
- Implementing the pilot rice paddy with dyke schemes in a timely manner, so that scaling-up towards the target level could occur
- Less than 50% of the planned 2,500 ha planting of mangrove; and the lack of training government officials in the reasons for mangrove death
- The lack of value chain analysis for oyster production

Under Outcome 3, livelihoods were enhanced with improved approaches. NARI support to the wet rice producers was excellent. Technical support to the fishing and oyster farming communities was acceptable, with limited inputs from the Department of Fisheries regarding sustainability regulations. The creation of the community vegetable gardens (with facilities and solar-powered borehole water) was successful. Local community mobilization and enthusiasm was high, which was an area that the PIU excelled in. PIU support was also excellent in the registration of village group associations, so that bank account saving and lending could be established. This allowed project equipment to transfer to the various groups and for the groups to save for future maintenance costs.

In conclusion, the project has effectively achieved many of its objectives, but with some real lessons learned.

6.2. Recommendations

The recommendations are listed with the responsible party identified in brackets.

- 1. The hard engineering schemes have a five-year defect liability period, during which MOWTI should be involved, so that they learn the required maintenance methods and build their internal capacity [UNDP letter to MoWTI, cc to NIRAS and NEA]
- 2. Formal handover of the soft engineering schemes and equipment to local communities needs to be completed. [UNDP]
- 3. The Darsilami and Illiassa schemes need to be formally handed over even if they are not 100% operational. The amount of further work that either UNDP or NEA could do is very limited. The communities here can only take responsibility, once such ownership is handed over. The communities can then continue to construct internal sub-plot bunds themselves to support gravity-based drainage / flushing of the salt-intruded paddies. However, the continued technical support of NARI is imperative, not least in the provision and testing of salt-tolerant seed. This needs to be funded. [UNDP]
- 4. The fish ponds were unsuccessful. The bolehole-pump-pipe system for the fish ponds at D&I should be re-directed to support salt-flushing of their rice paddies. The rice paddies are far more important for the community livelihoods, plus they also have new rice mills, provided by the project. The water pump for Illiassa needs to be delivered from NEA to the community so that it can be used for flushing the rice paddy. [NEA]
- 5. Tendaba polder is new public land. The project needs to handover to local government with an official community stakeholder committee to be established. This would be to balance the control of the Tendaba Camp owner in favour of all Tendaba villagers. The Right of Way along the complete polder must be maintained for the community. There was evidence of Tendaba camp workers throwing rubbish over the polder wall into mangroves where important wildlife forage (Western Red Colobus monkeys (IUCN Endangered). [OoP letter to the local government at Tendaba District]

- 6. Oyster cultivation is at an early stage of development, however the opportunities to add market value are obvious in supplying the tourist hotels with fresh oysters. The project can easily support this beginning with a letter to the tourism board and hotel association indicating that they should meet the 10 oyster farming groups that the project has supported. The project should discuss with the 10 groups if they wish to form a cooperative, so that their marketing power is enhanced. [PIU letter]
- 7. A 10-year national mangrove restoration plan needs to be produced [Department of Forestry]
- 8. The government should consider a tourist tax to pay for urban coastal area protection; and a national green tax to contribute to river ecosystem-based adaptation (EbA) [OoP, MoFEA]

7. ANNEXES

Annex 1: Delivery of Project Objective and Outcomes against Performance Indicators

Assessment Key:

Green: Completed / Achieved Yellow: On target to be completed / achieved Red: Not on target to be completed / achieved

Extra	ted from project	document	IP filled out with their text on achievement. Colour code by TE	TE team	TE team
Indicator	Baseline	End of Project target	2018 End term Level & Assessment	Achieve ment Rating	Justification for Rating
Objective: Reduc	e vulnerability t	o sea-level rise & asso	ciated impacts of climate change by improving coastal defences & enhancing adaptiv	ve capaciti	es of coastal communities
1. Number of vulnerable people / communities with enhanced living conditions and sustainable livelihoods	Zero within government sector, minimal and sporadic in tourist sector.	Investment level reaches an additional USD \$15m for sea & river defenses allied to risk reduction approach.	As at 8 th November, 2018, Overall cumulative % achievement of the project currently stands at 95% based on the project's key performance indicators.	S	MU -Ministry of Finance was unable to provide disaggregated figures for coastal defences. The TE used general figures to show that investment in the sector was declining. (The target is not a good representation of the indicator)
2. As above	Zero – existing communities affected by negative climate impacts (socio- economic & / or environment)	All target communities / wards experience positive improvements and sustainable livelihoods.	As at 8 th November 2018, Overall cumulative % achievement of the project currently stands at 95% based on the projects key performance indicators. The project targeted 21 Communities for intervention based on a need assessments study in 2014. All these communities have already been reached. This indicator is also at impact level and determining the positive improvements and sustainable livelihoods of Project beneficiaries will be done through and impact assessment by the End Term Evaluator.		S - 21 communities were effectively support by the project

Outcome 1: Policies, institutions and individuals mandated to manage coastal areas strengthened to reduce the risk of climate change

1.1: Climate risk management, sea and river risk management and technical capacity in national and regional institutions.	Negligible except in NEA and DWR.	Capacity to implement climate risk management in national institutions and target regional entities.	This is achieved by 100 % through Improving the roles, responsibilities, visibility and voice of key sectoral agencies (NEA, MoW and Coastal and Marine Environment Working Group (CMEWG)), in matters of Sea and River defence Risk Management (SRDRM) and Improve data sharing and collaboration between local agencies	MU	MU - Capacity-building was limited. The CMEWG was not mobilised or supported. No strategic engagement at a high level, nor institutional change
As above	As above	250 technicians trained (50 technical staff from national departments; 200 extension staff from regional agricultural, engineering, planning & fisheries)	Progress towards indicator target is on track and has been achieved by 81%. The project targeted 250 technicians and a total number of 202 technicians trained. The reason for the shortfall of target achievement is as a result of the selection criteria which required participants with the relevant technical knowledge; coupled with the limited number of institutions with technicians to select from.		MS - There was no training plan linked to capacity requirements, no training need assessment conducted; no new coastal engineers hired, or skills particularly enhanced.
1.2: Coastal monitoring procedure undertaken, collated in database and accessible to support decision-making	Very limited monitoring database.	Monitoring data collected and stored in structured and accessible database.	This indicator is 100% achieved because the Project has worked with a partner project (EU-GCCA project) to improve the coastal zone monitoring database at the NEA; the partner project built the database while this project supported the mapping capabilities of the GIS unit of the NEA that is highly involved in coastal zone monitoring with latest mapping software. It is noteworthy that this database is operational and supporting the decision-making process of the Coastal Zone Management unit of the NEA especially in the management of climate related coastal risks. It is currently in use to measure and record coastal erosion of selected profiles along the coast and the information use to guide mitigation measures and interventions.		U - No database was developed – Killer assumption that EU GCCA would provide
1.3: Number of Sea and River Defence Investment Plans actually financed	None	Sea & River Defence policy & investment management plans (SRDIMPs), including - one for each coastal district	Progress towards this Indicator achievement is 100%. The project partnered with EU-GCCA project in the production of SRDIMPS for the nine (9) coastal 'cells' along the north and southern coastlines of the country. The EU-GCCA produced designs for the control of coastal erosion in the nine cells and the project produced the SRDIMPS. The SRDIMPs defined coastal protection / adaptation measures for the nine (9) coastal cells/districts along the country's coastline.		MS - One overarching SRDIP was produced in 2016

As above Outcome 2: Vulne	As above	Code of Practice for Sea & River Defence Structures & Coastal Development developed	This project then developed investments plans for the measures that are delivered to NEA as the Gambia Government institution responsible for the coastal zone. This is achieved by 100 % through the preparation of a "Sea and River Defense" Policy for Gambia to formalize law and regulatory enforcement; preparation of a Draft Code of Practice for Sea and River Defense Structures & Coastal Development and the Integration of SRDRM and the GCCA ICZM Project activities (i.e. data management) to help develop SRDIMPs. This is achieved by 100 % through the design, construction & maintenance of coastal protects.	ion meas	MS - Guidelines were produced
2.1. Number of hard & soft coastal protection schemes implemented to reduce erosion risks	No functioning hard or soft protection structures	2 Hard protection schemes planned and implemented	This Indicator is achieved by 100% as the 2 hard Schemes Senegambia and Tanji Coastal Defense works have all been completed. The Coastal Defense works for Senegambia covers an area of 1035Km of Revetment works and Tanji coastal defense covers 120m on the Tanji Highway and 80m at Nyanya's Restaurant end;	S	HS – completed, now in the defect liability period which is managed by UNDP
As above	As above	3 soft protection schemes planned and implemented	The 3 Soft Protection Schemes Indicator registered an overall achievement of 82.5%. The reason for this performance are: 1) Mangrove restoration has only covered 1197 hectares of the targeted 2500ha which is 48% of the target. 2) The construction of the Illiassa/Darsilami Integrated Farming System (IFS) experienced serious implementation delays due to the poor organizational and task allocation skills demonstrated by the company awarded the contract. 3) The Polder and Anti-Salt Dyke at Tendaba is the only soft protection works that achieved 100% each.		S – Darsilami, Illiassa and Tendaba – all have salt dykes constructed. Tendaba has an added polder. Darsilami and Illiassa have some issues with internal bunding of rice paddies and flushing the salt-water out
2.2. Number of families benefiting from LDCF resources used for design & build structures	Vulnerable communities to CC in coast & estuaries are becoming in higher risk without	1,500 families will benefit directly from protection measures	This target is achieved by 100.4% with 1,506 families benefiting out of the targeted 1,500 families		S –

	adaptation measures				
	livelihoods in t	 he coastal zone enhan n of economic diversif	ced & protected from the impacts of climate change through the demonstration & traition	ansfer of	successful coastal adaptation
3.1: Rice and fish production to produce sustainable income for local community.	Uneconomic / degraded rice production and no fish ranching production in target communities	Rice & fish production represent economic sustainable livelihood activity for community members	This target is so far only achieved by 88% . Reason for this performance is directly linked to its dependent on the completion of the construction of the Integrated Farming System (IFS) at Darsilami & Illiassa by the Constructing Company Gai Enterprise. The Company demonstrated poor organizational and task allocation skills which caused serious implementation delays and as a result affects the full utilization of the rice fields by the project beneficiaries which in turn affects this Indicator performance	S	S - 38 hectares of salt-intruded rice paddy has been restored and / or created. Technical advice from NARI is excellent. The rice paddy was the main economic intervention The fish ponds are not successful. The salt pans at Darsilami need further testing
As above		20 wards - Lower & Central Valleys	This was achieved by 100% . Pilot sites for studies were selected in both the Lower and Central valleys for implementation.		S – see above
As above		1,500 rice growers	Achieved by 85% as there was a target shortfall of 222 rice growers due to the major delays experienced in completion of the works at the Integrated Farming Systems		S – see above
As above		300 horticulture producers diversity income	Achieved by 100%		HS – the community vegetable gardens are productive with borehole (solar-pumped) freshwater
3.2. # of farmers that will receive agricultural extension services and alternative livelihoods	Little knowledge on farmers that will receive agricultural extension		This target is achieved by 100.1% . Of the targeted 1,500 farmers , 1,502 have received agricultural extension services and livelihood supports in the areas such as Integrated Pest Management, horticulture nursery preparation ,Organic Compost making , Beekeeping and honey making Enterprise trainings. Likewise, basic skills on facility management, agro-forestry and financial records keeping.		MS – Apart from NARI and forestry / wildlife dept for mangroves, some of the technical advice has not been the best

Annex 2: Delivery of Outputs

Comment here may be limited to stating 'on target', 'partially on target' or 'not on target'. Details are reported under section 3 'Findings'

Outputs	Achievements Reported by IP	TE Comment				
	roject Objective: To reduce Gambia's vulnerability to sea-level rise & associated impacts of climate change by improving coastal defences & enhancing adaptive apacities of coastal communities					
Outcome 1: Policies, institut	ions and individuals mandated to manage coastal areas strengthened to reduce the risk of climate change					
1.1: Climate risk management capacity development programme for coastal areas	 Achieved through Improving roles, responsibilities, visibility and voice of key sectoral agencies (NEA, MoW and Coastal and Marine Environment Working Group (CMEWG) in matters of Sea and River defense Risk Management (SRDRM) and the Improving of data sharing and collaboration between local agencies. 	 Not really effective or achieved. Consultant reports were prepared but not presented or adopted 				
1.2: Review and Revision to National and Regional Development Plans.	 Achieved through the design of planning "tools" to help deliver sustainable coastal resilience practices preparation of Sea and River defense Investment Management Plans (SRDIMPs) for specific coastal Districts in Gambia with each defining sets of maintenance targets (aka "Infrastructure Investment Plans"); and to integrate recurrent and capital expenditures and Prepare "Coastal Development and Environmental Policy Guidelines" to help NEA to deliver SRDRMP as part of existing environmental regulatory frameworks 	 One SRDIP produced 				
1.3: High-level institutional mechanism to guide climate change resilient development of coastal zones.	 Achieved through the preparation of a "Sea and River Defense" Policy and a Code of Practice for Sea and River Defense Structures & Coastal Development for Gambia to formalize law and regulatory enforcement and the Integration of SRDRM and the GCCA ICZM Project activities (i.e. data management and research tasks) to help develop SRDIMPs. 	 CMEWG was not mobilised A policy framework was produced but not adopted 				
1.4: Coastal monitoring protocols and standards programme	 Achieved through the development of the Monitoring database by GCCA ICZM project and installed at the NEA's GIS centre; Improving the knowledge database for delivering SRDRM and the establish standards and protocols for the accurate and meaningful presentation of sea and river defense data. 	 A sea & river defence manual was produced, but no database 				
Outcome 2: Vulnerability of coastal investments to climate risks reduced through the design, construction & maintenance of coastal protection measures						
2.1: Hard coastal protection infrastructure measures are designed, constructed with	Achieved through the production of "hard engineering" Overview Acceptance Project Sites Report in coordination and cooperation with Competent Authorities;	 SGKB and TBDR schemes were constructed, after 				

Outputs	Achievements Reported by IP	TE Comment
additional redundancy against sea level rise and climate induced erosion	detailed Engineering Report – TBDR and Kololi Beach; detailed geotechnical, bathymetric and topographical investigation work for each pilot project area (for both Kololi and TBDR interventions); preparation of a detailed engineering specifications for each pilot project area (for both Kololi and TBDR); conduct EIAs and other permitting applications for each pilot project area (for both Kololi & TBDR interventions);	designs made and ESMPs prepared
2.2: Low cost infrastructure to protect up to 1,500 ha of vulnerable rice growing areas	 On track through the production of "soft engineering" Overview Acceptance Project Sites Reports in coordination and cooperation with Competent Authorities; detailed Engineering Report – Darsilami wetland management (Salt/fish/rice) scheme; detailed Engineering Report – Tendaba foreshore enhancement (polders); detailed geotechnical & topographical investigation work at proposed pilot study sites; preparation of a detailed engineering specifications of proposed pilot projects; conduct EIAs and other permitting applications for each pilot project area; produce a community involvement plans to aid in local engagement; 	 D&I and Tendaba rice paddies with dykes constructed, although still need one more year before operational (and will continue to need to flush salt water out) Polder at Tendaba constructed Salt-pan scheme at Darsilami has technical issues which need to be solved 7 D&I fish ponds not successful due to design issues
2.3: Up to 2,500 ha of mangroves forests restored through management plans and regeneration to withstand climate change in coastal areas	 On track through the conduct of study to assess mangrove "die-back"; production of a strategic implementation plan for mangrove planting; planting of mangrove seedlings exercise and monitoring of project performance. 	 1,197 ha planted in 51 locations A planting plan, but not country-wide strategic plan
	s in the coastal zone enhanced & protected from the impacts of climate change through the demonstration & tran I the introduction of economic diversification	sfer of successful coastal
3.1: Supporting agricultural development in vulnerable saline areas	 On track through the piloting of saline agriculture and desalinization pilot plots in collaboration with The Gambia National Agricultural Research Institute (NARI); 	NARI support excellent

Outputs	Outputs Achievements Reported by IP	
	 supporting financial savings mechanism established to replicate community-based measures in vulnerable saline areas; the identification of key lessons with wide applicability to fringing rice growing communities; 	
3.2: Supporting fishing communities in wetland community areas	s in wetland income generation of wetland fishing activities;	
3.3: Alternative livelihood implementation and feasibility assessment	 Achieved through conducting intervention communities engagement assessment and alternative livelihood viability assessment; introducing halophytic rice techniques; 	 5 Community vegetable gardens with facilities and borehole water supply
3.4: Dissemination of practical livelihood diversification approaches for The Gambia	 Achieved through conducting good practice alternative livelihoods; support the Community Management Committees (CMCs) to better organise, manage and sustain project resources; 	 Bee hives not successful CMC rather outside the design of the project

Annex 3: Co-financing Table

Sources of Cofinancing ¹	Name of Co-financer	Description of Co-financing	Type of Cofinancing ²	Confirmed at CEO Endorsement (US\$)	Amount Contributed at Stage of MTR	Expected Amount by Project Closure	Actual % of Expected Amount USD
	GFF	LDCF	Grant	\$8,900,000	4,188,505	\$8,226,851	92
GEF Partner	UNDP		Cash/Grant	\$1,600,000		\$1,015,299	63
	USAID	Baa Nafaa Project	Grant	\$1,000,000	*	*	*
Agencies	EU	GCCA Project	Grant	\$3,860,000	*	*	*
	EU	EU MDG Initiative	Grant	\$7,600,000	*	*	*
National	GAM Works	Gambian Agency for the Management of Public Works	Grant	\$4,000,000	*	*	*
National Government	GNAIP	Gambia National Agricultural and Natural Resources Investment Programme	Grant/In- kind	\$21,500,000	*	*	*
Total				\$48,460,000	*	*	*

- 1. Sources of Co-financing may include: Bilateral Aid Agencies, Foundation, GEF Partner Agency, Local Government, National Government, Civil Society Organization, Multi-lateral agencies, Private Sector, Other
- 2. Type of Co-financing may include: Grant, Soft Loan, Hard Loan, Guarantee, In-Kind, Other
- 3. Government funding was not audited by the project
- 4. Excludes PPG

Annex 4: Planned Budget and Expenditures at End-term

Outcome	2014 USD	2015 USD	2016 USD	2017 USD	2018 USD	Total USD
Indicative Breakdown of Project I	Budget in Project	Document:				
Year	Year 1	Year 2	Year 3	Year 4	n/a	
Outcome 1	\$96,270	\$243,175	\$323,185	\$282,810		\$945,440
Outcome 2	\$441,601	\$1,340,722	\$1,994,855	\$1,162,542		\$4,939,720
Outcome 3	\$318,650	\$747,550	\$906,750	\$788,890		\$2,761,840
Project Management	\$164,300	\$206,860	\$281,720	\$200,120		\$853,000
Total	\$1,020,821	\$2,538,307	\$3,506,510	\$2,434,362		\$9,500,000
Outcome	2014 USD	2015 USD	2016 USD	2017 USD	2018 USD	Cumulative Totals at Endterm date - Jan 2014 - 10 Dec 2018
Annual Work Plan Budgets and A	ctual Expenditure	es Incurred throug	gh Endterm:			
Outcome 1:						
Annual Work Plan						
Disbursed	\$125,238	\$174,792	\$182,955	\$0	\$0	\$482,985
Balance (AWP-Disbursed)						
Outcome 2:						
Annual Work Plan						
Disbursed	\$647,888	\$267,684	\$1,574,362	\$1,711,606	\$1,173,408	\$5,374,948
Balance (AWP-Disbursed)						
Outcome 3:						
Annual Work Plan						
Disbursed	\$795,224	\$598,492	\$776,800	\$198,402	\$0	\$2,368,918
Balance (AWP-Disbursed)						
Grand Totals:						1
Annual Work Plan						
Total Disbursed	\$1,568,350	\$1,040,968	\$2,534,117	\$1,910,008	\$1,173,408	\$8,226,851
Balance (AWP-Disbursed)						

Note – the prodoc breakdown includes UNDP Cash US\$0.6m

Annex 5: Brief review of Sectoral plans, Technical reports & Training materials

External Reports

EU GCCA MTR

- Classifies the project as 'less than satisfactory' in 8 out of 10 categories
- The MTR is critical of NEA's management and the lack of coordination with the UNDP GEF Coastal Resilience Project
- ICZM Framework and Climate Change Policy not yet produced
- Has set up a Coastal Forum (with 2 meetings held since the project start in August 2014 and March 2015)

Technical Reports

Sea and River Defence Policy

- Mainstreaming of Sea & River Defense Risk Management into Development planning: Sea & River Development Guidance Manual Nov. 2014
- Mainstreaming of Sea & River Defense Risk Management into Development planning: Policy Framework for Intergrated Coastal Zone Management & Sea and River Defense Risk Management for The Gambia Nov.2014
- Mainstreaming of Sea & River Defense Risk Management into Development planning: Environmental Policy Guideline to help deliver Sea & River Defense Risk Management as part of the existing Regulatory Framework Nov 2014
- Coastal Protection Study for Senegambia/Kololi Beach & TBDR:Design & cost specifications Report Feb.2015
- Coastal Protection Study for Senegambia/Kololi Beach & TBDR:Survey Report Feb. 2015
- Coastal Protection at Kololi Beach and TBDR: Final Survey Report February 2015
- Adapting Coastal Instrasture to Climate Change nov. 2014
- Assessing Institutional Needs for Sea & River Disaster Risk Management in The Gambia Nov 2014
- Developing Capacity in Climate Risk Management: Addressing Sea & River Defense Risk Management in Key National Laws and Policies Oct.2015
- Environmental and Social Management Plan: Construstion and Operation of Erosion Control Measures at Senegambia/Kololi and TBDR area June 2015
- Environmental and Social Management Plan: Construction and Operation of a polder at Tendaba village June 2015
- Design of a polder at Tendaba village: Designs and Specifications Report Nov.2014
- Design of a polder at Tendaba village: Survey Report: Bathymetric, Geotechnical & Topographic Nov. 2014
- SRDRM Training Report: Improving the roles of Key Institutions in Sea and River Disaster Risk Management Nov.2014

Mangrove Restoration

- Study to Assess Mangrove Dieback:
 - o A review of Mangrove Ecology in The Gambia Nov 2014
 - o Causes of Mangrove Dieback in The Gambia Nov. 2014
 - o Community Mangrove Restoration Training Manual Nov. 2014
 - Community Sensitizatio Workshops Nov 2015
 - Strategic Implementation Plan for Mangrove Restoration Jan. 2015

Integrated Farming System

Preliminary Studies for the Construction of Intergrated Farming System at Darsilamin and Illiassa: Designs & Specifications Nov 2014

Environmental & Social Management Plan: Construction and Operation of an Integrated Farming System in Illiassa & Darsilami June 2015

Alternative Livelihoods Interventions

Study on the Identification and trailing of Climate Change- Resilient Alternative Livelihoods Aug.2014 Community Engagement Plan August 2015

Support to Alternative Livelihoods:Baseline Income Status of Beneficiary Communities Dec 2014

Support to Fisheries ib Boabolong and Tanbi wetlands:Baseline Income Status of Beneficiary Communities Dec 2014

Support to Alternative Livelihoods: Value chain Analysis of Onion, Tomatoes, Pepper, Fish & Honey Dec 2014

Implementation of Climate- Resilient Alternative Livelihoods: Implementation Program & Plan Aug. 2015

Additionally reviewed

Support to alternative livelihoods: baseline income status of beneficiary communities (2014)

- The survey was undertaken by an external consultancy (Social Research for Capacity Enhancement for State & Non-State Actors). The data was insufficiently aggregated, especially income data. For Kurung Koto (Misera) Tendaba, Darsilami, Illiassa, Touba Kolong, Bintang, and Bundali Tenda the survey indicted an average dry season income of Dalasi 3,002 (mode or most common figure was D2,000) and wet season income of Dalasi 1,996 (mode unfortunately not presented), with 56% spent on food security.
- There weren't any indicative income levels of the target communities in the prodoc or its appendices.

Support to fisheries in bao bolong and tanbi wetlands: baseline income status of beneficiary communities (2014)

- The survey was undertaken by a different consultancy (Sahel Invest Management International) and used different methods.
- For Baobalon Wetland fishermen, the consultancy doesn't provide an average or modal income that they trust from their own survey figures (D824 / day for fishermen), which they discount saying 'experience has shown that income in these communities from fishing ranges from D150-700 / day, so we present an average daily income of D425!' – why the project accepted this and didn't ask them to go back and do the survey again is not clear.
- Tanbi Wetland Oyster producers daily income D50 to D600 with a mean of D195, although the report then states that the women go to the market, three times a week with an average income of D195 for each time, which suggests a lower daily income! Plus, wild oyster collection is only open 4 months a year. They have a 43% dependency on food security. The TE has the same comment about the collection and analysis of the data.
- Neither consultancy referenced income data from other surveys, nor official income statistics.

Community engagement plan (2014)

- The report is too general and does not link with the project's specific target group in any meaningful way Implementation of climate-resilient alternative livelihoods implementation program & plan (2014)
 - SCENSA consultancy. Less of a practical plan and more of a general report.
 - Discussed Value Chain Analysis This would have been useful to follow up for the oyster producers and sellers due to the different harvest (wild or rack), post-harvest preservation methods (boiling, smoke drying, freezing (?), and different selling techniques for a 'niche' product with a rich tourist presence and domestic consumption

Report - study on the identification and trialing of climate-resilient alternative livelihoods (2014)

SCENSA. Most of the report is baseline data again. Attempted to select 15 out of 25 communities for five key livelihood activities. For these five activities, the result in hindsight was: vegetable/orchards – taken up and successful due to linkage with freshwater boreholes; honey production (failed); fish processing (not followed up by the project); fish farming (failed); and handy craft skills (tried and failed)

Support to alternative livelihoods: value chain analysis of onion, tomato, pepper, fish & honey (2014, Scensa consultancy firm)

- Too general a baseline (and abstract) report for the project – largely not implemented. The PIU did not set up the staffing to create, implement and manage such initiatives. Opportunity missed with Oysters as mentioned.

Enhancing the income generation potential and environmental sustainability of fisheries activities in bao bolong and tanbi wetlands (2014, Sahel consultancy)

- Focus on Tanbi Wetlands – Oyster harvesting and the fishermen of Bao bolong – again covers much baseline data for example in presenting environmental impacts

- Baobalong and Tanbi fishermen use drag and seine nets which results in the capture of substantial quantities of juvenile fish and other invertebrates – this is against the fisheries regulation, especially in the wetland reserves
- Tanbi oyster industry the closed season management is clearly positive, in terms of larger oysters fetching higher prices, however the oyster populations decline rapidly once the season opens due to the high number of harvesters.
- Recommends the project at Old Jeshwang and Lamin join and / or co-finance the TRY Oyster project isn't providing infrastructure (sanitary facilities etc) – this doesn't address environmental sustainability.
- Plenty of proposed budgets, but lacks technical detail in environmentally sustainable methods

Annex 6: List of Persons Interviewed

	Name	Title / Position	Organization/unit
1.	Nessie Golakai-Gould	Deputy Resident Representative	UNDP
2.	Dr. Almamy Camara	Environmental Specialist/Analyst	UNDP
	Dodou Trawally	National Project Coordinator - UNDP GEF project	UNDP
3.	Momodou Jama Suwareh	Executive Director & GEF In-Country Focal Person	National Environment Agency (NEA)
4.	Lamin Komma	Head of Marine and Coastal Unit	National Environment Agency (NEA)
5.	Borry Mansa Demba	Regional Field Officer, Western Region	National Environment Agency (NEA)
6.	Sheikh Tijan Bah	Deputy Permanent Secretary	Ministry of Environment, Climate Change and Natural Resources (MECCNR)
7.	Salmina Jobe	Director, Central Project Coordination Unit Former Coordinator, GCCA Project	(MECCNR)
8.	Mustapha Darboe	Senior Engineer	Ministry of Works, Transportation and Infrastructure (MOTWI)
9.	Sulayman Gaye	Planner, Directorate of Planning	MOTWI
10.	Jan Dietrich	Chief Consultant in Hydraulics and Coastal Engineering; Project's Supervising Engineer, Coastal Defense works at Senegambia and Tanji	NIRAS
11.	Ebrima Dampha	Governor, North Bank Region	Governor's Office
12.	Lamin Jarju	Regional Programme Coordinator, North Bank Region	National Environment Agency (NEA)
13.	Alasana Keita	Development Officer, North Bank Region	Kerewan Area Council
14.	Momodou B.K. Ceesay	Regional Coordinator, North Bank Region	National Disaster Management (NDMA)
15	Darsilami Community		
	Kebba Fofana	Alkalo	Darsilami Village
	Kaka Fofana	Village Development Chairman (VDC)	Darsilami Village
	Project Beneficiaries (Focus Group)	Rice growers, Bee keepers, Mangrove Planters, Salt Miners and Labour saving machine Operators	Darsilami Village
16.	Conteh Kunda Niji Community		
	Kebba Suso	Village Development Chairman (VDC)	Conteh Kunda Niji village
	Mamadi Fatajo	Community Religious Leader	Conteh Kunda Niji village
	Project Beneficiaries (Focus Group)	Fishermen	Conteh Kunda Niji village
17.	Illiassa Community		
	Ebrima Jammeh	Chief of Upper Baddibu	Illiassa Village
	Yassin Kanyi	Horticulturist	Illiassa Village
	Bakary Jammeh	Community Focal Person	Illiassa Village
	Project Beneficiaries (Focus Group)	Horticulturists, Rice growers and Labour saving machine Operators	Illiassa Village
18.	Tendaba Community		
	Yassin Fadera	Labour saving machine Operator	Tendaba Village
	Mamie Sanyang	Solar Fridges Operator	Tendaba Village
	Nafi Yabo	Rice grower	Tendaba Village
	Sarjo Touray	Tendaba Camp Owner / Proprietor	Tendaba Village
	Project Beneficiaries (Focus Group)	Rice growers, Fishermen, Labour saving machine operators, solar fridges operators	Tendaba village
19.	Misera Community		
	Mariama Mbosse Manneh	Horticulturist Leader	Misera Village
	Project Beneficiaries (Focus Group)	Horticulturists and Bee keepers	Misera village
20.	Bondali Tenda Community		
	Alhaji Fatty	Alkalo	Bondali Tenda Village
	Metta Koita	Horticulturist Leader	Bondali Tenda Village
	Project Beneficiaries (Focus Group)	Horticulturists and Mangrove Planters	Bondali Tenda Village
21.	Bintang Community		
	Pa Joof	Community Focal Person	Bintang Village

	Project Beneficiaries (Focus Group)	Horticulturists	Bintang Village
22.	Lamin Jawara	Permanent Secretary	Ministry of Finance and Economic Affairs (MoFEA)
23.	Alagie Fadera	Director of Planning	MoFEA
24.	Abdou Salam Jatta	Planner	MoFEA
25.	Hatab Camara	Head of Marketing Analysis and Development	Department of Forestry & Parks and Wildlife Management (DFPW)
26.	Momodou Sabally	Assistant, Survey Unit	DFPW
27.	Cherno Gaye	Head, Participatory Forest Management Unit	DFPW
28.	Essa Drammeh	Senior Research Officer, Agronomics	National Research Institute (NARI)
29.	Baba Drammeh	Senior Research Officer, Cereals Programme	National Research Institute (NARI)
30.	Baboucarr Gibba	Research Officer, Agronomics	National Research Institute (NARI)
31.	Kebba Drammeh	Director, Crop Research (Legume Agronomics)	National Research Institute (NARI)
32	Jumbo Chorr	Assistant Research Officer, Cereals Programme	National Research Institute (NARI)

Locations visited

- 1. Kerewan
- 2. Darsilami (rice paddies, salt pans) IFS
- 3. Conteh Kunda Niji (fishing)
- 4. Baobolong (fishing)
- 5. Illiassa (rice paddies, vegetable garden)
- 6. Tendaba (rice paddy dyke, polder)
- 7. Misera (vegetable garden)
- 8. Kantong Kunda (mangrove)
- 9. Bondali Tenda (vegetable garden / water supply
- 10. Lamin, Abuko, Old Jeshwang (Oyster farmers)
- 11. Tanji coastal / river defence
- 12. Senegambia coastal defence

Annex 7: List of Documents Reviewed

- 1. Project Identification Form (PIF) and GEF FA strategic program objectives
- 2. UNDP Initiation Plan and Implementing/Executing partner arrangements / contract
- 3. UNDP Project Document and Logframe revisions
- 4. CEO Endorsement Request
- 5. UNDP Environmental and Social Screening results
- 6. Project Inception Report
- 7. Project Implementation Reports (PIRs)
- 8. Annual Project Reports
- 9. Minutes of the Project Board Meetings and other meetings (i.e. Project Appraisal Committee meetings)
- 10. Atlas Risk Register
- 11. Quarterly progress reports and work plans of the various implementation task teams
- 12. Annual Work Plans
- 13. Mid Term Review (MTR) Report
- 14. MTR Management Response
- 15. M&E Data management system
- 16. Audit reports
- 17. Tracking Tools
- 18. Oversight mission reports by the project manager, RTA, and others
- 19. Monitoring reports prepared by the project
- 20. Financial and Administration guidelines used by Project Team
- 21. Co-financing realized, itemized according to template provided by TE team
- 22. Financial expenditures, itemized according to template provided by TE team
- 23. Project operational guidelines, manuals and systems
- 24. UNDP Development Assistance Framework (UNDAF/ICF) and Evaluation
- 25. UNDP Country Programme Document (CPD) and Country Programme Action Plan (CPAP)
- 26. Project site location maps
- 27. Project activity maps with management actions and intervention
- 28. Technical consultancy reports
- 29. Training materials (PPTs etc.)
- 30. News and Awareness materials / Photo library / Video films about the projects
- 31. Project Summary PowerPoint files for the TE

Annex 8: Risk Tables

Atlas Risk Table (edited)

The Altas Risk table is taken from the UNDP management system. It identified 17 risks. A selection of three are presented here, with the TE comment.

Identified Risk & Management Response (MR)	Category/ Level	TE comment (2018)
The EU coastal project which was to inform the implementation of the UNDP GEF project, started one year after the UNDP GEF project (1/10/14) MR – UNDP GEF project activities were readjusted / downsized to meet project schedule (26/08/15)	Op / Critical	These changes were not communicated via an updated logframe for example
Differing political agendas results in an inability of sectors to cooperate (19/12/13) MR – Taken into account with AWPB and contracting (11/8/17)	Op / Critical	The response written 4 years later did not address cross-sectoral collaboration, leadership and 'bridge-building' needed for Outcome 1, nor financial engagement of the coastal tourist hoteliers. However, the contracting to external firms removed political infighting, but meant national capacity wasn't built
Government support for poverty-reduction is higher on the agenda than climate change – sea / river defence (19/11/13) MR – Engage with local authorities / communities (11/8/17)	Political / Critical	Response 4 years later is too late and missed the point that national government needed to be canvassed (via workshops etc), and not local engagement which was very good

Risk Table (PIR 2017-18)

Risks identified / Mitigation/reduction measures undertaken	Category	TE Comment
2018 The main issues are two (2): Firstly, on the Senegambia/Tanji Coastal Defense works, organizational management of the Company could have been done better in terms of rocks transportation to and fro the deposit and work sites at Barra and Senegambia respectively. The Company after being faced with its initial issue of querries from the Supervising Engineer NIRAS ended up facing its biggest hurdle of stones transportation to deposit and work sites. This is a lesson to be learnt by UNDP that in future the awarding of a contract of such a magnitude should at least have a Transportation Plan as well as a risk mitigation plan in place to avert such situation of implementation delays. Secondly, the Company (Gai Enterprise) awarded the works for the Integrated Farming System at Illiassa and Darsilami has demonstrated poor organizational skill especially in areas of tasks allocation,compliance to agreed delivery timelines and respect of the set contract penalty clauses. In future, measure such as harsh penalties that involve pay cuts should be in place as a way of enforcing and ensuring compliance.	Ор	The project (PIU, UNDP and NEA) dealt effectively with finding solutions
It is important to note that the Integrated Farming System (IFS) experienced a serious delay due to poor organizational and task allocation skills demonstrated by the company (Gai Enterprise) awarded the contract. These caused some major programmatic delays which affected some of the key indicators such as "Number of Rice and Fish producers for sustainable income for local community in the lower and central valleys" whose poor performance is directly linked to its dependent on the completion of the construction of the IFS at Darsilami & Illiassa	Ор	The relationship with the contractor was not so good for the IFS, plus it suffered from design issues (poor TOR) which was not the contractor fault. Solutions were not completely found, but this TE report outlines solutions
The 2016/17 political impasse delayed implementation - some equipment were mobilized from Dakar and got stock at the border due to uncertainties, and as result work could not progress. As a remedial measure all the required machinery identified was assembled at the border awaiting for the right moment to cross. The project simply had to wait for the impasse to subside/ be resolved.	Political	From Sept-Dec 2016, the border was closed, with contractors' equipment and materials stuck in Senegal — affected SGKB construction; and Tendaba construction — excavator, compressors for the polder held. The impasse continued Jan-Feb 2017 with the uncertainty of the handover from the old president to the new.

Annex 9: Stakeholder List

Stakeholder	Roles and Responsibilities
Ministry of Forestry and Environment	The Ministry of Forestry and Environment through the National Environment Agency (NEA) will coordinate the overall project preparation and implementation. The NEA will host the Project Management Unit (PMU). It will participate in the design and the development of the capacity building activities. The Department of forestry will be responsible of the mangrove protection and regeneration activities. Both the NEA and the Department of Forestry will benefit directly from the project's institutional and human resources capacity building activities in climate change;
Ministry of Fisheries and Water Resources	The Ministry of Fisheries and Water Resources will contribute in the overall project leadership and will be the responsible for the mainstreaming of climate change in the fisheries management and policies, the design and implementation of the climate resilient fisheries and wetlands management plans and the activities for the rehabilitation and the protection against sea-level rise and coastal degradation of fish landing sites. The Ministry staff will also benefit from the project capacity building activities
Ministry of Agriculture	The Ministry of Agriculture will be responsible for the mainstreaming of climate change in the agriculture policy through the GNAIP office will be responsible party for the Components 2 and 3 on —implementation of coastal areas protection measures and —climate resilient rural livelihoods .
Ministry of Economy, Planning and Cooperation	It will assist in the mainstreaming of climate change risks and adaptation into the policy, local development planning and related budgets
University of The Gambia	The University of the Gambia will benefit from the capacity building activity and will also support the design of the training material, the codification of the experiences learnt from the project implementation and the capacity building activities
Ministry of Works	It will participate in the feasibility assessment and social and environmental screening (SES) of the coastal protection infrastructure during the project preparation. It will coordinate the supervision of coastal protection infrastructures design, building maintenance and ensure that they integrate the recommendation from the SES exercise. It will also participate in the monitoring and evaluation of the project activities
Local Government (North Bank, Western& Lower-River regions	Contribution to the implementation of the project's activities in the pilot sites and the mainstreaming of climate changes in the regional development plans. They will also benefit directly from the project's capacity building activities
Fishermen (inc. women) and farmers organizations	They will benefit from the capacity building activities and will participate in the design and the implementation of adaptation options and the maintenance of adaptations infrastructures
NGOs	Selected NGOs will benefit from the project capacity building activities and will be contracted to support communities in the implementation of community training activities and the other project activities pertaining to increase the climate resilience of the coastal communities livelihood (promotion of climate resilient rice growing, climate resilient wetland and fisheries management strategies, rural livelihoods diversification).

Source: PIF

Annex 10: Rating Scales

The following UNDP-GEF grading scales were applied in the evaluation

Evaluation Criteria

Criteria	Definition	
Effectiveness - Objective	- The extent to which an objective has been achieved or how likely it is to be achieved.	
Effectiveness - Outcomes	- Results include direct project outputs, short to medium-term outcomes	
Relevance	- The extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time.	
	- The extent to which the project is in line with the GEF Operational Programs or the strategic priorities under which the project was funded.	
	(Retrospectively, relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.)	
Efficiency	- The extent to which results have been delivered with the least costly resources possible; also called cost effectiveness or efficacy.	
Sustainability	The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion	
	- Projects need to be environmentally, as well as financially and socially sustainable	
Impact	- The positive and negative, foreseen and unforeseen changes to and effects produced by a development intervention.	
	- Longer term impact including global environmental benefits, replication effects and other local effects.	

Rating Scale for Outcomes (Overall, Effectiveness & Efficiency)

Highly Satisfactory (HS)	The project had no shortcomings in the achievement of its objectives in terms of effectiveness (outcomes), or efficiency. The project is expected or has achieved its global environmental objectives. The project can be presented as 'good practice'.
Satisfactory (S)	There were only minor shortcomings The project is expected or has achieved most of its global environmental objectives.
Moderately Satisfactory (MS)	There were moderate shortcomings The project is expected or has achieved most of its relevant objectives but with moderate / significant shortcomings or modest overall relevance. The project isn't going to achieve some of its key global environmental objectives
Moderately Unsatisfactory (MU)	The project had significant shortcomings The project is expected to achieve its global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.
Unsatisfactory (U)	There were major shortcomings in the achievement of project objectives in terms of effectiveness, or efficiency The project is not expected to achieve most of its global environment objectives
Highly Unsatisfactory (U)	The project had severe shortcomings The project has failed to achieve any of its major environment objectives

Or Not Applicable (N/A); Unable to Assess (U/A)

Note

Overall Outcome: Achievement of the project objective will be rated HS to U.

Effectiveness: Each of the project's three outcomes will be rated HS to U. The colour coding of the individual indicator targets in **Annex 1** will partially help determine the grade. Each of the outcome indicators will also each be given a grade (in the justification column), however the final rating for each of the three

that professional judgement of the TE team will also be a key consideration.

outcomes will be due to appropriate weighting in terms of attaining project objectives. This means

Efficiency:

An overall rating for cost-effectiveness will be provided

Rating Scale for Outcome (Relevance)

Relevant (R)	Not relevant (NR)
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Rating Scale for Implementing Agency (IA) and Executing Agency (EA) Execution

Highly Satisfactory (HS)	The agency had no shortcomings in the achievement of their objectives in terms of quality of implementation or execution. Implementation of all five given management categories – IA or EA coordination & operational matters, partnership arrangements & stakeholder engagement, finance & co-finance, M&E systems, and adaptive management (work planning, reporting & communications, including update to project design) – has led to an efficient and effective project implementation. The agency can be presented as providing 'good practice'
Satisfactory (S)	The agency had only minor shortcomings in terms of the quality of implementation or execution. Implementation of most of the five management categories has led to an efficient and effective project implementation
Moderately Satisfactory (MS)	The agency had moderate shortcomings Implementation of some of the five management categories has led to a moderately efficient and effective project implementation
Moderately Unsatisfactory (MU)	The agency had significant shortcomings Implementation of some of the five management categories has not led to efficient and effective project implementation
Unsatisfactory (U)	There agency had major shortcomings in the quality of implementation or execution Implementation of most of the five management categories had not led to efficient and effective project implementation
Highly Unsatisfactory (U)	The agency had severe shortcomings with poor management leading to inefficient and ineffective project implementation

Rating Scale for Monitoring & Evaluation

Highly Satisfactory (HS)	The M&E system – its design and implementation had no shortcomings in the support of achieving project objectives. The M&E system was highly effective and efficient and supported the achievement of major global environmental benefits. The M&E system and its implementation can be presented as 'good practice'.
Satisfactory (S)	The M&E system – its design and implementation had minor shortcomings in the support of achieving project objectives. The M&E system was effective and efficient and supported the achievement of most of the major global environmental benefits, with only minor shortcomings
Moderately Satisfactory (MS)	The M&E system – its design and implementation had moderate shortcomings in the support of achieving project objectives. The M&E system supported the achievement of most of the major relevant objectives, but had significant shortcomings or modest overall relevance
Moderately Unsatisfactory (MU)	The M&E system – its design and implementation had major shortcomings in the support of achieving project objectives. The M&E system supported the achievement of most of the major environmental objectives, but with modest relevance
Unsatisfactory (U)	The M&E system – its design and implementation had major shortcomings and did not support the achievement of most project objectives. The M&E system was not effective or efficient
Highly Unsatisfactory (HU)	The M&E system failed in its design and implementation in terms of being effective, efficient or supporting project environmental objectives or benefits.

Rating Scale for Sustainability

Likely (L) Negligible risks to sustainability with key Outcomes achieved by the project closure to continue into the foreseeable future	
Moderately Likely (ML) Moderate risks, but expectations that at least some Outcomes will be sustained	
Moderately Unlikely (MU)	Significant risk that key Outcomes will not carry on after project closure, although some outputs should carry on
Unlikely (U)	Severe risks that project Outcomes as well as key outputs will not be sustained

According to UNDP-GEF evaluation guidelines, all risk dimensions of sustainability are critical: i.e., the overall rating for sustainability is not higher than the lowest-rated dimension.

Ratings should take into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

Risk definitions:

- a) Whether financial resources will be available to continue activities resulting in continued benefits
- b) Whether sufficient public stakeholder awareness and support is present for the continuation of activities providing benefit
- c) Whether required systems for accountability / transparency & technical know-how are in place
- d) Whether environmental risks are present that can undermine the future flow of the project benefits.

Rating Scale for Impact

Significant (S)	Minimal (M)	Negligible (N)
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Project Impact is rated as Significant; Minimal or Negligible, but also the positive or negative aspect of the impact will be stated.

Concerning impact, the TE will consider the extent of

- a) Verifiable improvement in ecological status; and/or
- b) Verifiable reductions in stress on ecological systems
- c) Regulatory and policy changes at regional, national and/or local levels

Process indicators will be specified to demonstrate achievement of stress reduction and/or ecological improvement.

Part of the impact assessment, will concern catalytic effect. The TE will consider if the project exhibited

- a) Scaling up (to regional and national levels)
- b) Replication (outside of the project),
- c) Demonstration, and/or
- d) Production of a public good, such as new technologies /approaches)

Annex 11: Mission Itinerary

Date	Time	Activity	Participates / Contact
Monday 12th	Airport	Arrival SN203 @ 18.35PM	Picked up
Nov		UNDP collect & transfer to hotel	
Tuesday 13 th	0900	Collect from hotel and drop off at UNDP	Picked up
Nov	0900 – 0930	UNDP briefing	Dr. Almamy Camara, Environmental Specialist/Analyst, UNDP
	0930 – 1100	Meeting with the UNDP Unit, Deputy Country Director / UNDP Country Director (Technical / Programme side)	Nessie Golakai-Gould, Deputy Resident Representative, UNDP
	1100-1130	Administrative – Invoice approval (TEs) etc.	UNDP Financial Personnel
	1130-1140	Pick up and drop off at UNDP/GEF Project Office	Picked up
	1140 - 1200	Review the in-Country Consultation mission schedule	Dodou Trawally, National Project Coordinator, UNDP/GEF; Marie Chorr Bah, M&E
		Discuss the Inception Report, Inc. Itinerary, access to documentation, discussions with project implementation team	Officer, UNDP/GEF; Abdoulie Jabang, Finance Officer, UNDP/GEF
	1200-1300	Meeting with NEA Director/ GEF Operational Focal Person, NEA Team	Momodou Jama Suwareh, Executive Director; Lamin Komma, Head of Marine and Coastal Unit; Borry Mansa Demba, Regional Field Officer, Western Region, National Environment Agency (NEA)
	1300 – 1400	Meeting with the Ministry of Environment, Climate Change and Natural Resources	Sheikh Tijan Bah, Deputy Permanent Secretary; Salmina Jobe, Director, Central Project Coordination Unit, Ministry of Environment, Climate Change and Natural Resources (MECCNR)
	1400 -1600	Administrative – Project Financials Evaluation etc.	Abass Kinteh, Finance Associate (UNDP)
Wednesday 14 th Nov	0900 – 1100	Meeting with the Ministry of Transportation, Works and Infrastructure	Mustapha Darboe , Senior Engineer ; Sulayman Gaye, Planner, Directorate of Planning; Ministry of Works, Transportation and Infrastructure (MOTWI)
	1100-1500	Meeting NIRAS at UNDP	Chief Consultant in Hydraulics and Coastal Engineering & Project's Supervising
			Engineer ,Coastal Defense works at Senegambia and Tanji; NIRAS
	1400-1600	Meeting with the Coastal Monitoring Database Unit	Lamin Komma; Head of the Marine and Coastal Unit,NEA
Thursday 15 th	0800 – 1000	Ferry crossing to the North Bank Region of the Gambia	TE, M&E Officer & Driver
Nov	1000-1100	Travel to Kerewan Area Council	TE, M&E Officer & Driver
	1100-1130	Meeting with the Governor of North Bank Region (7 Districts) Lower Nuimi, Upper Nuimi, Jokadu, Lower Baddibu, Upper Baddibu, Central Baddibu and Sabah Sanjal	Ebrima Dampha, Governor of North Bank Region
	1130-1200	Meeting with TAC members	Momodou B.K.Ceesay, Regional Coordinator, North Bank Region, NDMA; Alasana Keita, Development Officer, North Bank Region, Kerewan Area Council; Lamin Jarju, Regional Officer Programme Officer (NEA)
	1200-1230	Travel to Darsilami	TE, M&E Officer & Driver
	1230-1300	Tour of the Rice fields, Salt and Fish ponds (Integrated Farming site)	Team and beneficiaries
	1300-1330	Tour of the Warehouse/Storage and Milling Complexes	Team and beneficiaries

	1330-1400	Visit to Restored Mangrove & Beekeeping sites	Team and beneficiaries
	1400-1700	Discussions (FGD) of the TE with the community of Darsilami	TE, village Alkalo, VDC and Project Beneficiaries
	1400 1700	Night stop, accommodation and meals sorting at Farafenni	TE, M&E Officer & Driver
		Sleepover at Farafenni	TE, M&E Officer & Driver
Friday 16 th	0900 – 0930	Travel from Farafenni to Conteh Kunda Niji	TE, M&E Officer & Driver
Nov	0930 – 1130	Discussions (FGD) with the community of Conteh Kunda Niji	TE, village Alkalo, VDC and Project Beneficiaries
	1130 – 1200	Visit Baobolong Fishing site (Boats & Fishing accessories)	Team and beneficiaries
	1200-1300	Travel to Illiassa	TE, M&E Officer & Driver
	1300-1345	Meeting with the Chief	Mr. Ebrima Jammeh, Chief of Upper Baddibu District
	1345-1430	Friday Prayers for Muslims and Lunch break for non-Muslims	
	1430-1500	Tour of the Rice fields and Fish ponds (Integrated Farming site)	Team and beneficiaries
	1500-1530	Tour of the Milling Complex	Team and beneficiaries
	1530-1600	Visit to Community Garden	Team and beneficiaries
	1600-1800	Discussions (FGD) of the TE with the community of Illiassa	TE, village Alkalo, VDC and Project Beneficiaries
		Night stop and meals sorting at Farafenni	TE, M&E Officer & Driver
Saturday 17 th	0900 – 1000	Ferry crossing to the South Bank Region of the Gambia	TE, M&E Officer & Driver
Nov	1000 - 1030	Travel from Farafenni to Tendaba	TE, M&E Officer & Driver
	1030-1100	Tour of the Rice fields at Tendaba	Team and beneficiaries
	1100-1130	Tour of the Milling Complex at Tendaba	Team and beneficiaries
	1130-1200	Tour of the Solar Freezers complex	Team and beneficiaries
	1200-1230	Tour of the Polder	Team and beneficiaries
	1230-1300	Visit Tendaba Fishing site (Boats & Fishing accessories)	Team and beneficiaries
	1300-1430	Lunch and Prayer break	TE, M&E Officer & Driver
	1430-1530	Accommodation and dinner sorting at Tendaba Camp	TE, M&E Officer & Driver
	1530-1730	Discussions (FGD) of the TE with the community of Tendaba	TE, village Alkalo, VDC, Camp Owner and Project Beneficiaries
		Sleepover at Tendaba	TE, M&E Officer & Driver
Sunday 18 th	0900-1000	Travel from Tendaba to Misera Community	TE, M&E Officer & Driver
Nov	1000 - 1030	Visit Misera Fishing site (Boat & Fishing accessories)	Team and beneficiaries
	1030-1045	Tour of the Solar Freezer complex	Team and beneficiaries
	1045-1100	Tour of Beekeeping site	Team and beneficiaries
	1130-1200	Visit to Community Garden	Team and beneficiaries
	1200-1345	Discussions (FGD) of the TE with the community of Misera	TE, village Alkalo, VDC and Project Beneficiaries
	1345-1430	Lunch, Prayer break & travel to Kantong Kunda	TE, M&E Officer & Driver
	1430-1530	Tour of Restored Mangrove sites at Kantong Kunda	Team and beneficiaries
	1530-1730	Discussions (FGD) of the TE with the community of Kantong Kunda	TE, village Alkalo, VDC and Project Beneficiaries
		Dinner sorting at Tendaba Camp	TE, M&E Officer & Driver
		Sleepover at Tendaba	TE, M&E Officer & Driver
Monday 19th	0900-1000	Travel from Tendaba to Bondali Tenda Community	TE, M&E Officer & Driver
Nov	1000 - 1100	Visit to Community Garden	Team and beneficiaries

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	1100 – 1300	Discussions (FGD) with the community of Bondali Tenda	TE, village Alkalo, VDC and Project Beneficiaries
	1300 - 1400	Lunch and Travel from Bondali Tenda to Bintang Community	TE, M&E Officer & Driver
	1430 - 1500	Visit to Community Garden	Team and beneficiaries
	1500-1700	Discussions (FGD) of the TE with the community of Bintang	TE and Project Beneficiaries
	1300 1700	Return to Banjul	TE, M&E Officer & Driver
Tuesday 20th	0900-1000	Travel from Hotel/Office to Lamin	TE, M&E Officer & Driver
Nov	1000 – 1200	Discussions (FGD) with the Oyster Collectors of Lamin	TE and Project Beneficiaries
	1200 - 1230	Assessment of Tie & Dye Fabrics and Tour of Canoes	Team and beneficiaries
	1230 – 1300	Travel from Lamin to Abuko	TE, M&E Officer & Driver
	1300 - 1500	Discussions (FGD) of the TE with the Oyster Collectors of Abuko	TE and Project Beneficiaries
	1500 - 1530	Travel from Abuko to Old Jeshwang	TE, M&E Officer & Driver
	1530-1700	Discussions (FGD) with the Oyster Collectors of Old Jeshwang	TE and Project Beneficiaries
		Return home/Hotel	TE, M&E Officer & Driver
Wednesday 21st Nov	0900-1000	Meeting with the Ministry of Finance	Lamin Jawara, Permanent Secretary; Alagie Fadera, Director of Planning; Abdou Salam Jatta, Planner, Ministry of Finance and Economic Affairs (MoFEA)
	1000 – 1100	Meeting with the Department of Forestry	Hatab Camara, Head of Marketing Analysis & Development; Momodou Sabally, Assistant, Survey Unit; Cherno Gaye, Head, Participatory Forest Management Unit, Department of Forestry & Parks and Wildlife Management (DPWM)
	1100 - 1200	Travel to Coastal Defense work site at Tanji and Senegambia	TE, M&E Officer & Driver
	1200-1300	Discussions (FGD) of the TE with Fruit Sellers and Juice Pressers	TE and Project Beneficiaries
	1300-1600	Meeting with NARI	Essa Drammeh, Senior Research Officer, Agronomics; Baba Drammeh, Senior Research Officer, Cereals Programme; Baboucarr Gibba, Research Officer, Agronomics; Kebba Drammeh, Director, Crop Research (Legume Agronomics); Jumbo Chorr, Assistant Research Officer, Cereals Programme, NARI.
Thursday 22 nd Nov	0900 - 1400	Banjul - Stakeholder seminar; Presentation of Field mission and preliminary findings. Including lunch	PIU,UNDP and NEA (Venue: NEA Project Documentation Center)
Friday 23 rd	0900 – 1100	Banjul - Project implementation team – GEF Questionnaire	TE and PIU
November	1000-1200	TE in UNDP – Exit debrief, Admin	Completed
	1400-1500	UNDP Senior Management (courtesy meeting 10 minutes)	Completed
	16:30 depart &	UNDP to transfer Mr Sobey - Int'l Consultant return	Picked up
	leave for airport	SN204 @20:20 Check in 18:00	r

Annex 12: Additional notes - PIU M&E System - Selected Extracts

Integrated Farming System

Zone	location	Baseli ne Dyke Lengt h (m)	Dyke Length (m)	Run off Canal Length (m)	Run off Canal Water Slope (%)	Access Road (m)	# of Rice Beds (sub- plots)	Area of rice pad dy Ha	# of Fish Ponds	Fish Pond Length (m)	Fish Pond Width (m)	Salt pans	Me n	Women	Total Direct Beneficiaries
BaoBolon															
g Tributary	Darsilami	0	1040	N/A	N/A	400	45	19	5	121	32	21	52	415	467
BaoBolon															
g Tributary	Illiassa	0	791.15	N/A	N/A	450	66	11.9	2	56	25	N/A	38	190	228
Bintang Bolong Tributary	Tendaba	515	636	520	3.82	N/A	85	7	N/A	N/A	N/A	N/A	6	84	90
Tributary	TEHUADA	313	030	320	3.02	IN/A	65		IN/A	IN/A	IN/A	IN/A	U	04	30
0	0							37.9	7			21	96	689	785

The five Community Vegetable Gardens

							Sı	upport t	o Horticultu	re									
Garden Supporte d	Supporte ion d		Life Wate Multi- Comp Tree r Stora ost Fenci Suppl ge Produ ng y Facilit ction ies			Organic Compost s making Training bar		Fence (galvani sed barbed wire)	(galvani sed Direct Beneficiaries barbed Garden Fencing			Integrated Pest Management Training			Green House Nurseries Training			Total Direct Benef iciari es	
		# of Lime trees plant ed	Pump capac ity / day in m ³		Cham bers - (35m3	Me n	Wo men	Tot al	Perimet er (m)	M en	Wo me n	Tota I	M en	Wom en	Total	Me n	Wo me n	Total	
Toubakol ong	Multi- Purpose Facility	1320	120m 3	1	1	2	18	20	1000	11	273	284	3	81	84	3	17	20	408
Illiassa	Reticulat ed Water Supply System	1020	80m ³	1	1	1	19	20	800	37	174	211	3	36	39	2	18	20	290
Bintang	As above	1320	80m³	1	1	4	16	20	1000	7	226	233	2	42	44	0	20	20	317
Bondali Tenda	As above	1020	80m³	1	1	3	18	21	800	20	83	103	4	20	24	4	16	20	168
Misera	As above	1320	80m³	1	1	1	19	20	1000	11	32	43	12	25	37	5	15	20	120
	l	6000		5	5	11	90	101	4600	86	788	874	24	204	228	14	86	100	1303

Housel	nolds benefitting fro	om LDCF R	esources fo	or Design & Construc	tion
Community	Type of LDCF				Grand Total
	Design &	Resources for Direct Beneficiaries LDCF Resources Design & for Design & Construction			Indirect Beneficiaries
	Construction	Men	Women	LDCF	
		IVICII	Women	Total	Resources for
					Design &
					Construction
Bakindic koto	Pirogues	18.00	35.00	53.00	424.00
Ebotown	Pirogues	10.00	45.00	55.00	440.00
Old Jeshwang	Pirogues	0.00	49.00	49.00	392.00
Kamaalo	Pirogues	3.00	49.00	52.00	416.00
Illiassa	Machine house	19.00	206.00	225.00	1800.00
Darsilami	Machine house	6.00	200.00	206.00	1648.00
Toubakolong	Multi-Storage	11.00	239.00	250.00	2000.00

Noo Kunda	Boat	18.00	0.00	18.00	144.00
Misera	Boat	8.00	2.00	10.00	80.00
Darsilami	Beehives	20.00	10.00	30.00	240.00
Misera	Beehives	10.00	7.00	17.00	136.00
Tendaba	Boats	40.00	15.00	55.00	440.00
Bintang	Multi-Storage	4.00	207.00	211.00	1688.00
Illiassa	Multi-Storage	33.00	147.00	180.00	1440.00
Misera	Multi-Storage	9.00	28.00	37.00	296.00
Bondali Tenda	Multi-Storage	16.00	42.00	58.00	464.00
		225.00	1281.00	1506.00	12048.00

			Suppor	t to Fisheries &	Oyster Collectors							
Name of community	Support	Type of Boat	# Boats	Type (s) of	Accessories	Sup	ort to Fish	eries	Oyste	r culture Ti	raining	
	Provided	(s) / Canoes	provided	Support to Fisheries	(Items) Provided	Direct Beneficiaries		aries	Direct Beneficiaries Oyster Culture Training			
						Men	Women	Total	Men	Women	Total	
Tendaba	Boats	Fiberglass	2	Fishing equipment	Yamaha Engines*	40	15	55	0	0	0	
Misera	Boats	Fiberglass	2	As above	as above	8	2	10	0	0	0	
Noo Kunda/Duntumalang (Boa Bolong Tributary)	Boat	Fiberglass	1	As above	as above	18	16	34	0	0	0	
Conteh Kunda Niji (Boa Bolong Tributary)	Boat	Fiberglass	1	As above	as above	16	14	30	0	0	0	
Juma Sare Koto (Boa Bolong Tributary)	Boat	Fiberglass	1	As above	as above	17	9	26	0	0	0	
Abuko Oyster Collectors	Canoes	Fiberglass	9	Oyster Collection equipment	Paddles, life jacks	12	44	56	0	20	20	
Lamin Oyster Collectors	Canoes	Fiberglass	15	As above	As above	6	56	62	0	43	43	
Kubuneh Oyster Collectors	Canoes	Fiberglass	9	As above	As above	9	35	44	0	18	18	
Faji Kunda Oyster Collectors	Canoes	Fiberglass	8	As above	As above	4	40	44	1	17	18	
Ndaagaan (Bond) Oyster Collectors	Canoes	Fiberglass	4	as above	as above	23	26	49	3	8	11	
Old Jeshwang	Canoes	Fiberglass	11	as above	as above	0	49	49	0	21	21	
Kamalo	Canoes	Fiberglass	10	as above	as above	3	49	52	0	20	20	
Ebo Town	Canoes	Fiberglass	10	as above	as above	12	43	55	0	15	15	
Kerewan/Daranka	Canoes	Fiberglass	2	as above	as above	0	0	0	0	8	8	
Bakindic Koto	Canoes	Fiberglass	2	as above	as above	18	35	53	0	0	0	
			87			186	433	619	4	170	174	

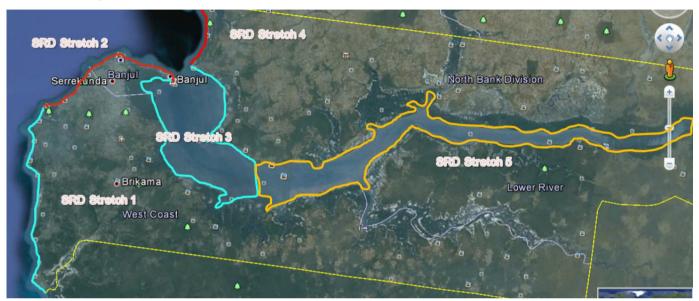
^{*} Full list - Yamaha engines, Bales & rolls of fishing nets, Ropes & twines, / threads, sea lights bulbs, Wellington boots, Fire extinguishers, Sacks of floaters, Ring support lifebuoys, Life jackets, Ice cooler boxes & Fishing wears

Mangrove Restoration

Identified Zones	Community	Planted area (ha)	Propagules planted (No.)		
	Bakau Wa Sulungkunda	1	22000		
	Abuko	1.5	33000		

Tanbi Wetlands	Faji Kunda	5.5	73000
Complex			
Bintang Bolong	Kassagne	7.5	160000
Tributary	Bintang	23.5	530000
	Tintiba	37.8	515000
	Bondali Jola	36.7	405000
	Bondali Tenda	41.8	365000
	Kangmanka	37.5	460000
	Jiffarong	43	530000
	Kantong Kunda	49	1000000
	Jattaba	40	400000
	Sandeng	40	400000
	Jali	5	50000
	Jamaru	38	380000
	Manduar	55	550000
	Keneba	65	650000
	Bajana	40	400000
	Bantosu	3	30000
	Bankuling	50	500000
	Kenokoto	5	50000
	Brikamanding	35	350000
	Jissay	5	50000
	Kuyang	3	30000
	Kartong	2	20000
	Sanyang	2	20000
	Sifoe	2	20000
	Faraba Bantang	7	70000
	Ndemban Tenda	5	50000
	Sutu Sinjang	4	40000
	Bantanjang	40	40000
	Bulanjorr	15	150000
	Misera	10	100000
	Buram	5	50000
	Juma Kunda	37	100000
	Bajiran Darrilami (Foni)	36	360000
	Darsilami (Foni)	35 35	350000
	Kayaborr		350000
	Kalimou	38	380000
	Joren Nemakuta	20	200000
	Burok	30	300000
	Jonyerr	45	315000
	Jifoni	35	350000
	Joren Bunda Kunda	35	350000
Nuimi National	Bakindik Koto	10.5	112000
Parks	Darsilami	16.8	205000
	Medina Kanuma	10	100000
	Sami	20	200000
	Bafuloto	12	120000
	Memeh	10	100000
	Jamagen	11	150000
	51	1197.1	12895000

Annex 13: Map



Proposed Sea & River Defence Boundaries (Sea & River Defence Manual, 2014)

Annex 14: Indicative TE Evaluation Matrix

This questionnaire was used as a general aid during the field visit with the results described in section 3. (Note there is no further information to be presented in the blank boxes.)

Evaluation Question	Response	Conclusion/
	/ Finding	Recommend
Relevance: How does the project relate to the main objectives of the GEF FA, and to the environment and development pri regional and national levels?	orities at the	local,
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?		
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?		
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining I	ong-term pro	ject results?
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stre	ss and / or im	proved
ecological status		
Findings discussion – 3 areas - Project formulation, project implementation, and project results.		
Project Strategy		
Project Design:		
To what extent is the project in line with national and local priorities?		
To what extent is the Project aligned to the main objectives of the GEF focal area?		
Have synergies with other projects and initiatives been incorporated in the design?		
Were lessons from other relevant projects properly incorporated into the project design?		
Decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect		
the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?		
Have issues materialized due to incorrect assumptions or changes to the context to achieving the project results as outlined		
in the Project Document?		
Results Framework:		
Are the project objective / outcomes clear, practicable, & feasible within its time frame?		
Were the project's logframe indicators and targets appropriate?		
How "SMART" were the midterm and end-of-project targets (Specific, Measurable, Attainable, Relevant, Time-bound)? Any		
amendments?		
Progress towards Results		
Progress towards Outcomes Analysis:	1	
Review the logframe indicators against delivery at end-of-project targets using the Results Matrix (see Annex).		
Compare and analyse the GEF Tracking Tool at the Baseline, MTR and End.		
Which barriers hindered achievement of the project objective		
PROJECT FORMULATION		
Were the project's objectives and components clear, practicable and feasible within its		
time frame?		
Were the capacities of the executing institution(s) and its counterparts properly considered when the project was designed?		
Were lessons from other relevant projects properly incorporated in the project design?		
Were the partnership arrangements properly identified and roles and responsibilities		
negotiated prior to project approval?		
Were counterpart resources (funding, staff, and facilities), enabling legislation, and		
adequate project management arrangements in place at project entry?		
Were the project assumptions and risks articulated in the PIF and project document?		
Whether the planned outcomes were SMART		
ASSUMPTIONS AND RISKS		
As per logframe - Logical and robust, and have helped to determine activities and planned outputs.		
Externalities (i.e. effects of climate change, global economic crisis, etc.) which are		
relevant to the findings.		
Project Implementation & Adaptive Management		
GEF Partner Agency / Implementing Entity – UNDP		
Has there been an appropriate focus on results?		
Has the UNDP support to the Executing Agency/Implementing Partner and Project Team been adequate?		
Has the quality and timeliness of technical support to the Executing Agency/ Implementing Partner and Project Team been		
adequate?		
How has the responsiveness of the managing parties to significant implementation problems (if any) been?		
Has overall risk management been proactive, participatory, and effective?		
Are there salient issues regarding project duration, for instance to note project delays? And, how have they affected project		
outcomes and sustainability?		
Candor and realism in annual reporting		
Executing Agency/ Implementing Partner Execution	1	
Were the capacities of the executing institution(s) and its counterparts properly considered when the Project was		
designed?		
Were partnership arrangements properly identified and roles and responsibilities negotiated prior to Project approval?		
Were counterpart resources, enabling legislation, and adequate project management arrangements in place at Project		
entry?	I	

Have management inputs and processes, including hudgeting and processes there advantage	
Have management inputs and processes, including budgeting and procurement been adequate? Has there been adequate mitigation and management of environmental and social risks as identified through the UNDP	<u> </u>
Environmental and Social screening procedure?	
Whether there was an appropriate focus on results and timeliness?	+ +
Quality of risk management?	
Candor and realism in reporting?	
Government ownership (when NEX) or level of support if 'in cooperation with' the IP.	
Work Planning / PROJECT IMPLEMENTATION	.ll
Effective partnerships arrangements established for implementation of the project	
with relevant stakeholders involved in the country/region, including the formation of a	
Project Board.	
Lessons from other relevant projects incorporated into project implementation.	
Feedback from M&E activities used for adaptive management.	
Has the project experienced delays in start-up and/or implementation? What were the causes of the delays? And, have the	
issues been resolved?	
Were work-planning processes results-based?	
Did the project team use the results framework/ logframe as an M&E and a management tool?	
Were there any changes to the logframe since project start, and have these changes been documented and approved by the	
project board?	<u> </u>
FINANCE & CO-FINANCE	
Prodoc	
Did the prodoc identify potential sources of co-financing as well as leveraged and associated financing?	
Prodoc include strong financial controls that allowed the project management to make informed decisions regarding the budget, allow for the timely flow of funds and for the payment of project deliverables	
Did the prodoc demonstrate due diligence in the management of funds, including periodic audits.	
Sufficient clarity in the reported co-financing to substantiate in-kind and cash co-financing from all listed sources.	+ +
The reasons for differences in the level of expected and actual co-financing.	
The extent to which project components supported by external funders were integrated into the overall project.	
Effect on project outcomes and/or sustainability from the extent of materialization	
of co-financing.	
Evidence of additional, leveraged resources that have been committed as a result of the project.	
(Leveraged resources can be financial or in-kind and may be from other donors, NGOs, foundations, governments,	
communities or the private sector)	
Cost-effective factors	
Compliance with the incremental cost criteria and securing co-funding and associated	
funding.	
Project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of Global	
Environmental and Development Objectives according to schedule, and as cost-effective as initially planned.	
The project used either a benchmark approach or a comparison approach (did not	
exceed the costs levels of similar projects in similar contexts)?	
Standard Finance questions (see MTR)	
Have strong financial controls been established allow the project management to make informed decisions regarding the	
budget at any time, and allow for the timely flow of funds and the payment of satisfactory project deliverables? Are there variances between planned and actual expenditures? If yes, what are the reasons behind these variances?	+
	+
Has the project demonstrated due diligence in the management of funds, including annual audits?	+
Have there been any changes made to the fund allocations as a result of budget revisions? Assess the appropriateness and relevance of such revisions.	
Has pledged cofinancing materialized? If not, what are the reasons behind the cofinancing not materializing or falling short	+ +
of targets?	
Project-level Monitoring and Evaluation Systems	
The quality of the Monitoring and Evaluation (M&E) plan's design and implementation:	T
An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems,	
MTR, TE, and adequate funding for M&E activities.	
M&E plan at project start up, considering whether baseline conditions, methodology and roles and responsibilities are well	1
articulated. Is the M&E plan appreciated? Is it articulated sufficiently to monitor results and track progress toward achieving	
objectives?	
Were sufficient resources allocated effectively to M&E?	
Were there changes to project implementation / M&E as a result of the MTR recommendations?	
Are the M&E systems appropriate to the project's specific context? - effectiveness of monitoring indicators from the project	
document for measuring progress and performance	
Do the monitoring tools provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed	
with national systems? Do they use existing information? Are they efficient? Are they cost-effective?	
To what extent has the Project Team been using inclusive, innovative, and participatory monitoring systems?	
To what extent have follow-up actions, and/or adaptive management measures, been taken in response to the PIRs?	
Check to see whether APR/PIR self-evaluation ratings were consistent with the MTR and TE findings. If not, were these	
discrepancies identified by the project steering committee and addressed?	
	1
Compliance with the progress and financial reporting requirements/ schedule, including quality and timeliness of reports	+ + + + + + + + + + + + + + + + + + + +
Compliance with the progress and financial reporting requirements/ schedule, including quality and timeliness of reports The value and effectiveness of the monitoring reports and evidence that these were discussed with stakeholders and project staff	

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The extent to which development objectives are built into monitoring systems: How are perspectives of women and mer	1
involved and affected by the project monitored and assessed?	
How are relevant groups' (including women, indigenous peoples, children, elderly, disabled, and poor) involvement with the	2
project and the impact on them monitored?	
Has there been adequate mitigation and management of environmental and social risks as identified through the UNDP	
Environmental and Social screening procedure?	
STAKEHOLDER ENGAGEMENT	
Are the interactions as per the prodoc? Stakeholder interactions include information dissemination, consultation, and active	
participation in the project.	-
Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and	
tangential stakeholders?	
Participation and country-driven processes: Do local and national government stakeholders support the objectives of the	
project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?	•
Participation and public awareness: How has stakeholder involvement and public awareness contributed to the progress	+
towards achievement of project objectives?	
Are there any limitations to stakeholder awareness of project outcomes or to stakeholder participation in project activities?	
Is there invested interest of stakeholders in the project's long-term success and sustainability?	
Reporting:	
How have adaptive management changes been reported by the Project Team and shared with the Project Board?	
How well have the Project Team and partners undertaken and fulfil GEF reporting requirements (i.e. how have they addressed	1
poorly-rated PIRs?), and suggest trainings etc. if needed?	
How have PIRs been shared with the Project Board and other key stakeholders?	
How have lessons derived from the adaptive management process been documented, shared with key partners and	1
internalized by partners, and incorporated into project implementation?	
Communication:	
Internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left	t l
out of communication? Are there feedback mechanisms when communication is received? Does this communication with	
stakeholders contribute to their awareness of project outcomes and activities and long-term investment in the sustainability	
of project results?	
External project communication: Are proper means of communication established or being established to express the project	t
progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate	
outreach and public awareness campaigns?)	
Are there possibilities for expansion of educational or awareness aspects of the project to solidify a communications program,	,
with mention of proper funding for education and awareness activities?	
What aspects of the project might yield excellent communications material, if applicable?	
ADAPTIVE MANAGEMENT	
Changes in the environmental and development objectives of the project during implementation, why these changes were	
made and what was the approval process. Causes for adaptive management:	
a) original objectives were not sufficiently articulated;	
b) exogenous conditions changed, due to which a change in objectives was needed;	
c) project was restructured because original objectives were overambitious;	
d) project was restructured because of a lack of progress;	
How these changes were instigated and how these changes affected project results: - Did the project undergo significant changes as a result of recommendations from the MTR? Or as a result of other review procedures? Explain the process and	
implications.	'
- If the changes were extensive, did they materially change the expected project outcomes?	
- Were the project changes articulated in writing and then considered and approved by the project steering committee?	
PROJECT RESULTS	
A 'result' is defined as a describable or measurable development change resulting from a cause-and-effect relationship. In	1
GEF terms, results include direct project outputs, short- to medium-term outcomes, and longer-term impact including global	
environmental benefits, replication effects, and other local effects. Assess the results based management (RBM) chain, from	n
inputs to activities, to outputs, outcomes and impacts.	
Assess the project results using indicators and relevant tracking tools	
BROADER ASPECTS OF PROJECT OUTCOMES	
Country Ownership	
Project concept had its origin within the national sectoral and development plans?	
Have Outcomes (or potential outcomes) from the project have been incorporated into the national sectoral and development	
plans? Has the government enacted legislation and/or developed policies and regulations in line with the project's objectives?	
Relevant country representatives (e.g., governmental official, civil society, etc.) were actively involved in project	t
identification, planning and/or implementation, part of steering committee?	
Was an intergovernmental committee given responsibility to liaise with the project team, recognizing that more than one	
ministry should be involved?	
The recipient government has maintained financial commitment to the project?	1 1
	+
Mainstreaming (Broader Development and Gender)	
Mainstreaming (Broader Development and Gender) Whether broader development and gender issues had been taken into account in project design and implementation?	
Mainstreaming (Broader Development and Gender) Whether broader development and gender issues had been taken into account in project design and implementation? In what way has the project contributed to greater consideration of gender aspects, (i.e. project team composition, gender-	-
Mainstreaming (Broader Development and Gender) Whether broader development and gender issues had been taken into account in project design and implementation? In what way has the project contributed to greater consideration of gender aspects, (i.e. project team composition, gender-related aspects of environmental impacts, stakeholder outreach to women's groups, etc). If so, indicate how.	
Mainstreaming (Broader Development and Gender) Whether broader development and gender issues had been taken into account in project design and implementation? In what way has the project contributed to greater consideration of gender aspects, (i.e. project team composition, gender-	

UNDP GEF Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change in the Gambia

1. Whether it is possible to identify and define positive or negative effects of the project on local populations (e.g. income		
generation/ job creation, improved natural resource management arrangements with local groups, improvement in policy		
frameworks for resource allocation and distribution, regeneration of natural resources for long term sustainability).		
2. If the project objectives conform to agreed priorities in the UNDP country programme document (CPD) and country		
programme action plan (CPAP).		
3. Whether there is evidence that the project outcomes have contributed to better preparations to cope with natural		
disasters.		
The mainstreaming assessment should take note of the points of convergence between UNDP environment-related and other		
development programming.		
Sustainability		
Risk Management		
Are the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module the		
most important? And, are the risk ratings applied appropriate and up to date? If not, explain why.		
Financial Risks to Sustainability (of the project outcomes)	1	
What is the likelihood of financial and economic resources not being available once the GEF assistance ends?		
(This might include funding through government - in the form of direct subsidies, or tax incentives, it may involve support		
from other donors, and also the private sector. The analysis could also point to macroeconomic factors.)		
What opportunities for financial sustainability exist?		
What additional factors are needed to create an enabling environment for continued financing?		
Has there been the establishment of financial and economic instruments and mechanisms to ensure the ongoing flow of		
benefits once the GEF assistance ends (i.e. from the public and private sectors, income generating activities, and market		
transformations to promote the project's objectives)?		
Socio-Economic Risks to Sustainability:		
Are there social or political risks that may threaten the sustainability of project outcomes?		
What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders)		
will be insufficient to allow for the project outcomes/benefits to be sustained?		
Do the various key stakeholders see that it is in their interest that the project benefits continue to flow?		
Is there sufficient public/ stakeholder awareness in support of the project's long-term objectives?		
Have lessons learned been documented by the Project Team on a continual basis?		
Are the project's successful aspects being transferred to appropriate parties, potential future beneficiaries, and others who		
could learn from the project and potentially replicate and/or scale it in the future?		
Institutional Framework and Governance Risks to Sustainability:		
Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize project benefits?		
Has the project put in place frameworks, policies, governance structures and processes that will create mechanisms for		
accountability, transparency, and technical knowledge transfer after the project's closure?		
How has the project developed appropriate institutional capacity (systems, structures, staff, expertise, etc.) that will be		
self-sufficient after the project closure date?		
How has the project identified and involved champions (i.e. individuals in government and civil society) who can promote		
sustainability of project outcomes?		
Has the project achieved stakeholders' (including government stakeholders') consensus regarding courses of action on		
project activities after the project's closure date?		
Does the project leadership have the ability to respond to future institutional and governance changes (i.e. foreseeable		
changes to local or national political leadership)? Can the project strategies effectively be incorporated/mainstreamed into		
future planning?		
Environmental Risks to Sustainability:		
Are there environmental factors that could undermine and reverse the project's outcomes and results, including factors that		
have been identified by project stakeholders? E.g. climate change risk to biodiversity	<u> </u>	
Impact - Progress towards the achievement of impacts		
Verifiable improvements in ecological status (or via process indicators to show it is likely in the future)?		
Verifiable reductions in stress on ecological systems (via process indicators)?		
E.g. as a result of the project, there have been regulatory and policy changes at regional, national and/or local levels?		
(Use tracking tools and indications from baseline to target)		
Identify the mechanisms at work (i.e. the causal links to project outputs and outcomes);		
Assess the extent to which changes are taking place at scales commensurate to natural system boundaries; and		
Assess the likely permanence (long lasting nature) of the impacts.		
On the basis of the outcome and sustainability analyses, identify key missing elements as that are likely to obstruct further		
progress.		
<u>Theory of Change</u> – Identify project intended impacts – verify logic – analyse project outcome to impact pathway		
Based on the theory of change (building blocks, catalysts etc), has the progress towards impact has been significant, minimal		
or negligible.	<u> </u>	
<u>Catalytic role</u>		
Scaling up - Approaches developed through the project are taken up on a regional / national scale, becoming widely accepted,		
and perhaps legally required		
Replication - Activities, demonstrations, and/or techniques are repeated within or outside the project, nationally or		
internationally		
Demonstration - Steps have been taken to catalyze the public good, for instance through the development of demonstration		
sites, successful information dissemination and training		
Producing a public good – (a) The lowest level of catalytic result including for instance development of new technologies and approaches		
(a) The lowest level of catalytic result, including for instance development of new technologies and approaches.		
(b) No significant actions were taken to build on this achievement, so the catalytic effect is left to 'market forces'		

Annex 15: Signed UNDP Code of Conduct Agreement Form

Evaluators:

- 1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
- 2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
- 3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and: respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
- 4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
- 5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
- 6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/ or oral presentation of study limitations, findings and recommendations.
- 7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Richard Sobey

We confirm that we have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signature:

Signed in _1st Oct 2018,

Signed in UK on 1st Oct 2018, UK

RS

Richard Sobey

National Consultant / Team Specialist

International Consultant, Team Leader

Annex 16: Signed TE Final Report Clearance Form

Terminal Evaluation Report Reviewed and Cleared By:	
Commissioning Unit	
Name:	
Signature:	Date:
UNDP-GEF Regional Technical Advisor	
Name:	
Signature:	Date:

Annex 17: Terms of Reference

Terminal Evaluation for UNDP/GEF Project on "Enhanceing Resilience Vulnerable Coastal Arears

Location: Banjul, GAMBIA

Application Deadline: 30-Jun-18 (Midnight New York, USA)

Time left: 12d 13h 36m

Type of Contract: Individual Contract

Post Level: International Consultant

Languages Required: English

Starting Date : 16-Jul-2018 (date when the selected candidate is expected to start)

Duration of Initial Contract : 25 working days
Expected Duration of Assignment : 25 working days

REFER A FRIEND APPLY NOW

Background

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the project "Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change in The Gambia" (UNDP PIMS# 4782). The Goal of the project is to enhance resilience of vulnerable coastal areas and communities to climate change in the Republic of Gambia.

The project was designed to: Reduce Gambia's vulnerability to sea-level rise and associated impacts of climate change by improving coastal defenses and enhancing adaptive capacities of coastal communities. The project aims drawing together climate change adaptation and economic development, through introducing a new national programme of "Sea and River Defense Risk Management – SRDRM) that address flood and erosion concerns and that will help manage the impact of climate change.

Duties and Responsibilities

The Technical Evaluation will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

The Goal of the project is to enhance resilience of vulnerable coastal areas and communities to climate change in the Republic of Gambia

Competencies

- Demonstrated ability to assess complex situations, succinctly distils critical issues, and draw forward-looking conclusions and recommendations:
- knowledgeable of GEF and UNDP-GEF monitoring and evaluation policies procedures an advantage;
- · Knowledge of UNDP and GEF;
- · Technical knowledge in the targeted focal area(s);
- · Familiarity with Gambia.

Required Skills and Experience

Education:

Master degree in social sciences.

Experience:

- · Minimum 10 years of relevant professional experience in the Terminal Evaluation of GEF and environment related projects;
- · At least 5 years' experience in conducting knowledge sharing workshop on monitoring and evaluation;
- · At least 5 years' experience in results-based monitoring and evaluation methodologies.

Language skills:

· Fluency in English both written and spoken.