



# GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

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## PART I: PROJECT INFORMATION

Project Title: Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola			
Country(ies):	Republic of Angola	GEF Project ID: <sup>1</sup>	5230
GEF Agency(ies):	UNEP, UNDP	GEF Agency Project ID:	01010 (UNEP) 5276 (UNDP)
Other Executing Partner(s):	Ministry of Environment	Submission Date:	05/01/2016
		Resubmission date:	08/03/2016
GEF Focal Area (s):	Climate Change Adaptation	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>		Corporate Program: SGP <input type="checkbox"/>
Name of Parent Program	[if applicable]	Agency fee (\$)	US\$ 492,100 (UNEP) US\$ 95,000 (UNDP)

## A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
CCA-1	Outcome 1.3	LDCF	1,500,000	6,161,467
CCA-2	Outcome 2.1	LDCF	3,680,000	3,150,000
CCA-3	Outcome 3.1	LDCF	1,000,000	3,000,000
<b>Total project costs</b>			<b>6,180,000</b>	<b>12,311,467</b>

## B. PROJECT DESCRIPTION SUMMARY

<b>Project Objective:</b> To reduce vulnerability to climate change of national government and coastal communities along the coast of Angola.						
Project Components/Programs	Financing Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in US\$)	
					GEF Project Financing	Confirmed Co-financing
Component 1	TA/Inv.	Outcome 1. Strengthened technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to coastal communities.	1.1 A set of detailed sectoral and localised vulnerability assessments for Angola's coastal zone.	LDCF	472,000	5,861,467
			1.2 Operational early warning system (EWS) developed in a Barra do Dande.	LDCF	1,096,000	
Component 2	Inv.	Outcome 2. EbA technologies and	2.1 EbA interventions, including mangrove and	LDCF	1,982,197	3,000,000

<sup>1</sup> Project ID number remains the same as the assigned PIF number.

<sup>2</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

		climate-resilient land management techniques transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability, and extreme events.	wetland rehabilitation, implemented in pilot sites in Chiloango, Barra do Dande, Longa and Bero.			
			2.2 Climate-resilient land management techniques appropriate to local conditions demonstrated in pilot communities in Chiloango, Barra do Dande, Longa and Bero.	LDCF	644,553	
			2.3 Pilot communities trained on EbA, climate-resilient agriculture, and early warning response plans.	LDCF	228,000	
			2.4 EbA project concept notes developed for private sector upscaling of EbA interventions.	LDCF	225,250	
Component 3	TA	Outcome 3. Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola.	3.1 Technical support and training provided to the Secretariat of the Inter-ministerial Committee for Biodiversity and Climate Change (CIBAC) and Climate Change Cabinet (GAC).	LDCF	230,000	2,850,000
			3.2 Policy briefs and technical guidelines produced to support the integration of climate change adaptation into relevant policies and plans, including their related budgets.	LDCF	233,537	
	TA	Outcome 4. Improved awareness about climate change impacts and adaptation among non-governmental stakeholders.	4.1 Public awareness programme undertaken to inform non-governmental stakeholders including NGOs, academia and private sector about climate risks and adaptation.	LDCF	514,463	
Monitoring and Evaluation				LDCF	140,000	
Subtotal					5,766,000	11,711,467
Project Management Cost (PMC) <sup>4</sup>				LDCF	414,000 <sup>5</sup>	600,000
<b>Total project costs</b>					6,180 000	12,311,467

<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

<sup>5</sup> To ensure the successful implementation of the LDCF project, project management costs have been increased from 5% of the project costs to 7.2% of the project costs. This is due primarily to the high cost of living in Angola. Luanda is consistently ranked as the most expensive city in Africa to live in and has amongst the highest salary post-adjustments for any country within the UN system. See Section A.1 for a further detailed description of PMC.

**C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE**

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
INAMET Strategic development Master Plan	Government of Angola	Grant	6,161,467
Support to the Fisheries Sector Project (FSSP)	African Development Bank	Grant	3,000,000
Angola Water Sector Institutional Project (PDISA)	International Development Association and Southern African Development Community	Grant	3,000,000
Building capacity for coastal EbA in SIDS	UNEP – European Commission	Grant	150,000
<b>Total Co-financing</b>			12,311,467

**D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS**

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee <sup>a)</sup> (b) <sup>2</sup>	Total (c)=a+b
UNEP	LDCF	Angola	Climate change	(select as applicable)	5,180,000	492,100	5,672,100
UNDP	LDCF	Angola	Climate change	(select as applicable)	1,000,000	95,000	1,095,000
<b>Total Grant Resources</b>					6,180,000	587,100	6,767,100

a ) Refer to the Fee Policy for GEF Partner Agencies

## PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>6</sup>

Provide the expected project targets as appropriate.

N/A

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF<sup>7</sup>**

A number of changes have been made in terms of the alignment of the LDCF project document with the original project design of the PIF. These changes were made based on stakeholder consultations carried out during the PPG phase, and reflect changing national circumstances since the PIF was developed. The following section summarises changes in terms of GEF Focal Area outcomes, project management costs, baseline projects, aligned projects and the LDCF project's outcomes/outputs:

The PIF was aligned with three GEF 5 Focal Area objectives – CCA-1, CCA-2 and CCA-3 – and eight outcomes under these objectives. Since the PIF was developed, the revised results framework for the GEF Adaptation Programme was introduced. The focal area objectives that the project aligns with have been revised so that these can be reported under the AMAT of GEF6. The LDCF project remains aligned with objectives CCA-1, CCA-2 and CCA-3, but the number of outcomes under these objectives has been reduced from eight to three. The LDCF project is now aligned with CCA-1: Outcome 1.3; CCA-2: Outcome 2.1; and CCA-3: Outcome 3.1<sup>8</sup>.

The PMU, and the duties it will perform, is essential for the successful implementation of the LDCF project. However, the costs related to establishing this unit – including staff salaries, office rent, office equipment and communication costs – will be more than the project management costs specified in the PIF for this project. This is due primarily to the high cost of living in Angola. Luanda is consistently ranked as the most expensive city in Africa to live in<sup>9</sup> and has amongst the highest salary post-adjustments for any country within the UN system. Despite efforts to reduce project management costs, such as cost sharing with the GEF/UNDP Cuvelai project (GEF ID: 5166), project management costs remain high. Therefore, to ensure the successful implementation of the LDCF project management costs have been increased from 5% of the project costs to 9.2% of the project costs (US\$510,000).

Two of the baseline projects identified in the PIF have been removed. After consulting with national stakeholders it became apparent that the **Environmental Sector Support Project** and **Local Development Project** were no longer appropriate baseline projects as: i) they had been used as co-financing for another GEF proposal; and ii) they were nearing completion. The **INAMET Strategic Development Master Plan** was deemed an appropriate replacement and identified as a new baseline project.

Other projects found relevant to the proposed project that were identified at the PIF stage have largely remained the same, and some have been added during the PPG phase. For instance some additional relevant GEF projects have been identified during the PPG phase, including *inter alia*: i) Assisting Least Developed Countries (LDCs) with Country driven Processes to Advance National Adaptation Plans (NAPs); ii) Expanding the Ongoing Support to Least Developed Countries (LDCs) with Country-driven Processes to Advance the National Adaptation Plans (NAPs); and (iii) Building capacity for LDCs to participate effectively in intergovernmental climate change processes.

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<sup>6</sup> Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

<sup>7</sup> For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

<sup>8</sup> CCA-1, Outcome 1.3: Climate-resilient technologies and practices adopted and scaled up – Indicator 4: Extent of adoption of climate-resilient practices; CCA-2, Outcome 2.1: Increased awareness of climate change impacts, vulnerability and adaptation – Indicator 5: Public awareness activities carried out and population reached; CCA-3, Outcome 3.1: Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes established and strengthened – Indicator 11: Institutional arrangements to lead, coordinate and support the integration of climate adaptation into relevant policies, plans and associated processes (see AMAT).

<sup>9</sup> Mercer 2014 Cost of Living Survey. <http://www.mercer.com/newsroom/cost-of-living-survey.html>. Accessed 16 March 2014.

The wording of all four project Outcomes has been altered to make them more specific, however, they all remain based on the same underlying principles as in the PIF. Additionally, Outcome 3.1 and 3.2 from the PIF were combined, and the numbering of Outcome 3.3 was altered to become Outcome 4. These changes were made to streamline the project design while keeping the underlying deliverables the same. The changes of project outcomes are detailed and justified in the table below:

<b>PIF</b>	<b>PD/CEO</b>	<b>PD/CEO</b>
<b>Project component/ expected outcomes</b>	<b>Project component/ expected outcomes</b>	<b>Justification of the change to the PIF</b>
Outcome 1.1: Increased capacity of government staff to analyse, understand and predict climate change, access policy-relevant data and deliver relevant information to local communities.	Outcome 1: Strengthened technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to local communities.	Wording has been slightly altered to make the outcome more specific and measurable. The word 'respond' has been added to the outcome – the vulnerability assessments produced under Outcome 1 are designed to support the Government of Angola (GOA) to respond proactively to climate-related effects, such as floods, along the coast of Angola.
Outcome 2.1 Reduced vulnerability to increased droughts, rainfall variability and extreme events in Angola's coastal zone.	Outcome 2: EbA technologies and climate-resilient land management techniques transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability and extreme events.	Wording has been altered to make the outcome measurable in terms of technologies and techniques transferred to coastal communities. The EbA technologies and climate-resilient land management techniques to be implemented through this component remain focussed on reducing the vulnerability of coastal communities to climate change.
3.1 Strengthened inter-ministerial coordination to respond to climate change risks.  3.2 Increased policy capacity to address climate change including country capacity to formulate and execute large-scale adaptation projects.	Outcome 3: Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola.	Outcomes 3.1 and 3.2 in the PIF were combined to become Outcome 3. This alteration was made because there are strong synergies between the outputs under the two outcomes. For example, economic assessments of sectoral adaptation interventions produced under Outcome 3.1 can now be presented to relevant sectoral ministries during CIBAC training workshops under the same outcome.
3.3 Improved general knowledge and awareness about climate change impacts and adaptation among stakeholders.	Outcome 4: Improved awareness about climate change impacts and adaptation among non-governmental stakeholders.	The numbering of Outcome 3.3 has been changed to Outcome 4 to reflect the different themes of the two outcomes. Additionally, the recipients of the awareness raising activities have been identified as non-government stakeholders.

The project outputs have been contextualized to fit the current needs in Angola, following the consultations held during the PPG. The following table details the revisions to outputs under Component 1.

<b>PIF</b>	<b>PD/CEO</b>	<b>PD/CEO</b>
<b>Expected outputs<sup>10</sup></b>	<b>Expected outputs</b>	<b>Justification of the change to the PIF</b>

<sup>10</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund, no need to provide information for this table.

1.1.2 A set of detailed sectorial and localised vulnerability assessments.	1.1.1 A set of detailed sectorial and localised vulnerability assessments for Angola's coastal zone.	The order of Output 1.1.1 and 1.1.2 was switched in the LDCE project document. This alteration was made because the information provided by the vulnerability assessments is foundational for many other outputs. The wording of the revised Output 1.1.1 has been revised to make it more specific.
1.1.1 An operational forecasting and early warning system for climate-induced extreme events focusing on coastal areas, including science and technology (S&T) capacity for relevant government staff.	1.1.2 Operational early warning system developed in Barra do Dande.	The wording for this output has been simplified and now refers to a specific project site, selected during the PPG through site visits by the national consultants and stakeholder consultation. In the PIF, it was stated that the early warning system (EWS) should provide small-scale monitoring equipment to four pilot sites. Since the PIF was developed, a GEF-UNDP Cuvelai project (GEF ID:5166) <sup>11</sup> has been started which will enhance national level capacity to generate early warnings. This national-level capacity building provided by the Cuvelai project – including climate-forecasting and EWS software, data analysis and storage hardware, improved communication systems and training – will enhance the ability of INAMET to produce early warnings for coastal areas. It was therefore decided, by the GoA through stakeholder consultations during the PPG, that instead of developing small-scale and low-tech EWS at four project sites as originally planned in the PIF it would be more beneficial to pilot a robust and fully operational EWS in a single pilot site. This fully functional EWS will provide an operational model and lessons learned to inform the development of additional localised EWS's along the coast.

<sup>11</sup> GEF-UNDP Cuvelai project (GEF ID:5166) "Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin". This project will strengthen national capacity to generate early warning through its Outcome 1: Enhanced capacity of national and local hydro-meteorological services, civil authorities and environmental institutions to monitor extreme weather and climate change in the Cuvelai Basin. The indicator for this Outcome is: A flood forecasting and EWS that is useful to communities developed and forecasts disseminated to target communities.

The following table details the revisions to outputs under Component 2.

<b>PIF</b>	<b>PD/CEO</b>	<b>PD/CEO</b>
<b>Expected outputs<sup>12</sup></b>	<b>Expected outputs</b>	<b>Justification of the change to the PIF</b>
2.1.1 Rehabilitated and resilient productive coastal ecosystems (e.g. mangroves, rangelands, forests) in Luanda, Namibe, Cabinda and Bengo.	2.1 EbA interventions, including mangrove and wetland rehabilitation, implemented in pilot sites in Chiloango, Barra do Dande, Longa and Bero.	<p>The wording of this output has been altered to reflect the specific sites (not provinces) selected during the PPG phase. The original provinces identified for interventions were Luanda, Bengo, Namibe and Cabinda. Through the consultative process undertaken during the PPG phase, Luanda Province was exchanged for Kwanza Sul Province. This decision was based on site selection criteria in Appendix 7 of the UNEP project document and Annex 6 of the UNDP project document. The final sites selected are: Chiloango (Cabinda), Barra do Dande (Bengo), Longa (Kwanza Sul) and Bero (Namibe).</p> <p>Additionally, the wording of the output has been slightly altered to improve the measurability of the output.</p>
2.1.2 Resilient land management (SLM) techniques established in project-targeted demonstration sites (Luanda, Bengo, Namibe, Cabinda).	2.2: Climate-resilient land management techniques appropriate to local conditions demonstrated in selected communities in Chiloango, Barra do Dande, Longa and Bero.	<p>The term ‘resilient land management’ has been changed to ‘climate-resilient land management’ in this output and throughout the project to demonstrate the adaptation-focus of related interventions. Climate-resilient land management differs from sustainable land management in that interventions are designed specifically to increase the resilience of local communities to climate change.</p> <p>Additionally, the wording of this output has been altered to reflect the sites selected during the PPG phase.</p>
2.1.3 Increased capacity of local communities on the use of adaptation techniques demonstrated by the project and to integrate these into local practices.	2.3 Pilot communities trained on EbA, climate-resilient land management and early warning response plans.	The wording of this output has been altered to specify the topics of the various training sessions conducted and change language to focus more on outputs. In addition to training on EbA and climate-resilient land management, local communities will be trained on the early warning response plans developed under Output 1.2.
	2.4: EbA project concept notes developed for private sector upscaling of EbA interventions.	As requested by the GoA, an additional output has been added to support upscaling of EbA interventions in and around Chiloango, Barra do Dande, Longa and Bero. EbA project concept notes will be developed and presented to private sector stakeholders to encourage investment in EbA along the Angolan coast as part of CSR efforts.

The following table details the revisions to outputs under Component 3.

<b>PIF</b>	<b>PD</b>	<b>PD/CEO</b>
<b>Expected outputs<sup>13</sup></b>	<b>Expected outputs</b>	<b>Justification of the change to the PIF</b>

<sup>12</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund, no need to provide information for this table.

<sup>13</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund, no need to provide information for this table.

3.1.1 Inter-ministerial Committee for the Environment is strengthened by new mandate to address climate change adaptation.	3.1: Technical support and training provided to the Secretariat of the CIBAC and the GAC.	It was established during stakeholder consultations during the PPG phase that it is CIBAC rather than the Inter-ministerial Committee for the Environment that is the national forum for climate change in Angola. CIBAC already has a mandate and it was therefore more appropriate that its Secretariat should receive technical support from the LDCF project to improve its overall functioning of the committee.
3.1.2 Key policy documents revised to reflect climate change risks, with budget allocations.	3.2: Policy briefs and technical guidelines produced to support the integration of climate change adaptation into relevant policies and plans, including their related budgets.	The wording of this output was slightly altered for clarification. Specifically, policy briefs and technical guidelines will be produced for both national and sectoral documents, including <i>inter alia</i> : i) the Artisanal Fisheries Development Plan 2014–2017; ii) the National Policy on Forestry, Fauna and Areas of Conservation; and iii) the Strategic National Programme for the Water 2013–2017. The revised output therefore refers to ‘relevant policies, plans, including their related budgets’.
3.2.1 Non-governmental stakeholders including private sector are informed through workshops, seminars, interactive forum and community-based consultations about climate risks and adaptation.	4.1: Public awareness programme undertaken to inform non-governmental stakeholders including NGOs, academia and private sector about climate risks and adaptation.	The wording of this output has been altered to be more specific – it now refers to particular stakeholders targeted by the public awareness programmes.

**A.1. Project Description. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.**

*1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed*

Angola’s coastline is home to over 50% of the country’s population, where the combination of rapid population growth and inadequate urban planning has resulted in diverse socio-economic and environmental challenges. Such challenges include inadequate access to water and electricity, poor sanitation, and exposure to natural disasters such as flooding. Approximately two thirds of coastal Angolan communities are reliant on livelihoods such as agriculture and fishing for subsistence and employment. The livelihoods of these communities are therefore underpinned by the goods and services generated by functional, intact ecosystems. Despite this important contribution of Angola’s ecosystems to household income and national GDP, inappropriate management practices and sustained overexploitation has resulted in the widespread degradation of Angola’s coastal ecosystems. Impoverished households that are reliant on natural resource-based livelihoods are consequently becoming increasingly vulnerable to the negative effects of ecosystem degradation.

Under the current and predicted effects of climate change – including *inter alia* sea level rise and increases in the frequency and severity of both flood and drought events – it is likely that the poor living conditions of Angolan coastal communities will be exacerbated<sup>14</sup>. For example, increased frequency and severity of floods will increase the risk of damage to coastal infrastructure and housing, with implications for human health. Additionally, increased frequency and intensity of drought events are likely to affect agricultural yields negatively, thereby compounding food insecurity in the

<sup>14</sup> UNDP. Angola: Climate Change Country Profile



coastal region. In particular, the projected increase in the temperature of the Benguela Current – which has direct influences on the climate of Angola – will have implications for commercial and artisanal fisheries along the coast. For example, it is anticipated that the increased water temperature will disrupt the spawning migration of commercially valuable species. As a result, artisanal fishers will need to travel further distances to find traditional fishing species or alternatively shift their practices to focus on different target species (e.g. from demersal to small pelagic species such as mackerel and sardinella)<sup>15</sup>. Coastal ecosystems will also be negatively affected by climate-related changes to river flows, hydrology and water temperature. These changes will have a negative impact on fisheries and agricultural sectors. In summary, observed and predicted climate changes are likely to exacerbate the vulnerability of local communities in coastal areas of Angola<sup>16</sup>.

The problem that the project seeks to address is that national and local government and coastal communities have limited technical and institutional capacity to adapt to these negative effects of climate change. This is because of: i) insufficient scientific and technical capacity for planning adaptation in coastal zone areas; ii) limited demonstration of, and availability of technical capacity to implement, sustainable coastal adaptation interventions; and iii) poor institutional coordination and capacity for adaptation to climate change.

The preferred solution to the problem is to enhance national and community-level capacity to adapt to climate change along the coast of Angola by: i) building institutional, scientific and technical capacity to analyse climate change risks and to plan coastal adaptation interventions; and ii) demonstrating innovative and cost-effective approaches to climate change adaptation in coastal areas.

There are several barriers to achieving the preferred solution in Angola. By addressing the barriers to implementing these responses, the LDCF project will contribute to the achievement of the preferred solution. These barriers are listed below (see Section 1.3 in UNDP project document and Section 2.3 in UNEP project document for a full description of the barriers).

- Inadequate scientific data, historical climate information and monitoring networks/stations.
- Limited technical and scientific capacity to address climate change.
- Lack of inter-ministerial coordination with regards to planning for climate change adaptation.
- Limited understanding of climate change risks to coastal sectors.
- Limited knowledge of the value of ecosystems, EbA interventions and climate change.
- Lack of demonstration/proof of concept of EbA interventions and related protocols/tools.

The LDCF project will increase the resilience of vulnerable coastal communities and economic sectors in Angola to the observed and predicted effects of climate change. The project will emphasise the demonstration of cost-effective, low-regret options for adaptation – including the demonstration of climate-resilient practices such as EbA and climate-resilient land management, and the establishment of a pilot EWS – to benefit impoverished rural communities as well as important economic sectors such as fisheries, agriculture, transport, energy, water and tourism. The objective of the proposed project will be achieved through multiple complementary measures that will include: i) increasing scientific and technical capacity of provincial and local-level government staff to deliver early warning information to residents of Barra do Dande; ii) demonstrating EbA and climate-resilient land management practices in participation with coastal communities; and iii) supporting the mainstreaming of climate change adaptation at inter-ministerial, policy and sectoral levels.

## 2) *Baseline scenario and associated baseline projects*

As described above, rapid population growth – coupled with poor land use planning – and associated environmental degradation is resulting in a range of social and environmental problems along the coast of Angola. Such problems include *inter alia*: i) environmental risks to human wellbeing, such as floods; ii) food and livelihood insecurity; and iii) insufficient access to clean water. These are the main problems that the baseline projects are seeking to address. Various

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<sup>15</sup> FAO/BCC. 2011. Climate change implications for fisheries of the Benguela current region: making the best of change. Available at: <http://www.fao.org/docrep/017/i3053e/i3053e.pdf>. Accessed on: 17 April 2015

<sup>16</sup> Angola: National Adaptation Programme of Action under the United Nations Framework Convention on Climate Change (2011).

national projects have been initiated to address these baseline issues, three of which have been included as baseline projects for this project. Specifically, the **INAMET's Strategic Development Master Plan (SDMP)** aims to improve the provision of climate information for planning and decision making nationally, provincially and locally. This includes improvements to the existing flood EWS, and links closely with Component 1 of the LDCF project. The **Support to the Fisheries Sector Project (FSSP)** is improving capacity and infrastructure for the artisanal fishing industry in order to improve the food security and livelihoods of coastal communities. The FSSP is a baseline project under Component 2 of the LDCF project. Finally, the **PDISA project** is upgrading water infrastructure and developing capacity within the water sector to improve provision of clean water in Angola, and reduce the spread of water-borne diseases. The capacity development objectives of the PDISA project link with activities under Component 3 of the LDCF project. However, the current and predicted effects of climate change – including *inter alia* increases in the frequency and severity of both flood and drought events – is likely to reduce the ability of these baseline projects to address the baseline problems.

The baseline scenario, as it relates to each component of the LDCF project and the associated baseline projects, is further described below.

### **COMPONENT 1: Enhanced scientific and technical capacity for adaptation in coastal zone areas.**

A climate change vulnerability assessment of Angola's coastal zone – including coastal sectors such as fisheries, agriculture, transport, energy, water and tourism – has not been conducted. This is because of: i) limited technical capacity to conduct such an assessment within National Civil Protection System (SNPC), National Institute of Meteorology (INAMET), local governments and line ministries; ii) limited availability of data necessary to undertake such an assessment; and iii) the dispersion of appropriate climatic and environmental data across various government departments and NGOs. One assessment, the ACEPA report, has collated some of this information, however it was an environmental and social sensitivity analysis aimed at prioritising sensitive areas along the coast for management in case of an oil spill and did not specifically include climate change considerations. The lack of detailed vulnerability assessments, combined with the overall limited understanding of the current and future effects of climate change along Angola's coast, means that coastal infrastructure is designed and constructed without consideration of potential climate change impacts. The lack of vulnerability assessments also continues to hinder the identification and planning of locally appropriate and cost-effective adaptation interventions for important coastal sectors.

In addition to vulnerability assessments, a functional weather monitoring and forecasting system is an important element for formulating an appropriate set of coastal adaptation measures. A functional forecasting system would also facilitate the development of an Early Warning System to prepare coastal communities for impending climate risks. However, the hydrometeorological monitoring network within Angola is limited and poorly maintained, and no functional EWS exists. Ongoing initiatives, such as INAMET's SDMP (described further below) aim to increase the coverage of the hydrometeorological monitoring network, but progress in this regard continues to be slow. Furthermore, there remain too few qualified meteorologists and hydrologists to manage the network of weather and hydrometric stations<sup>17</sup>. The availability of climate and weather information is further undermined by a 30-year gap in meteorological data, coinciding with the period of civil war, for many regions of Angola. As a result of limited infrastructure and insufficient human resources, INAMET will continue to be unable to consistently and efficiently generate and issue early warnings for extreme climate events such as floods and droughts<sup>18</sup>.

Data sharing between government departments continues to be a barrier to generating early warnings for coastal communities. Currently, data from the national hydrometeorological monitoring network is collected and analysed by INAMET. However, other government departments are also involved in the collection of climate-related data. For example: i) the Civil Protection Services and Fire Brigade (CNPCB) monitors precipitation; ii) CNPCB and National Water Directorate (DNA) monitor the level of rivers and streams; and iii) National Energy Production Company

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<sup>17</sup> For example, there are only 4 meteorologists at a national level.

<sup>18</sup> UNFCCC. (2011). Angola: National Adaptation Programme of Action. See: <http://unfccc.int/resource/docs/napa/ago01.pdf> Accessed 20 October 2014.

(PRODEL) monitors dam level<sup>19</sup>. These data remain siloed and are not shared with INAMET. This reduces the quality of any early warnings INAMET produces for coastal communities.

The lack of a functional EWS increases the vulnerability of coastal communities to extreme climate events. At present, residents of the coastal community Barra do Dande are particularly vulnerable to flooding because of the establishment of housing in high-risk areas around the Dande river mouth (see Section 2.6 and Appendix 15 of the UNEP project document). Flooding is already commonplace and is predicted to increase in frequency and intensity under conditions of climate change. Informal coping strategies include elevating valuable household possessions above the floor and temporary evacuation of homes when the level of the river rises or when there is heavy rain. However, in the event of a catastrophic flood event occur; the lives and property of people living in parts of the settlement are at risk in the absence of a functional EWS and early warning response plan. Climate change is also predicted to impact the fisheries-based livelihood activities of the ~ 1,540 residents of the Dande river mouth and ~24 000 people living within the vicinity. These informal coping strategies will continue to be used unless an adequate early warning system is set up that can give residents signals well in advance of predicted flood events.

To address the existing gaps in data, communication and capacity related to national climate forecasting and EWS, a GEF UNDP project entitled ‘Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola’s Cuvelai River Basin’ (Cuvelai project) was launched (2015–2019). The Cuvelai project will enhance the capacity of hydro-meteorological services and networks to predict climatic events and associated risks. It will also develop a more effective and targeted delivery of climate information including flood and drought early warnings in the Cuvelai River Basin. While this project will transfer appropriate technology, infrastructure and skills to national hydro-meteorological services and communities in Cunene province, other coastal communities will remain without an EWS and vulnerable to climate change impacts.

#### Component 1 baseline project

INAMET’s Strategic Development Master Plan (SDMP) (2014–2020) is a US\$50.6 million project financed by the Government of Angola<sup>20</sup> and implemented by INAMET, which will contribute a total co-financing of US\$6,161,467 to this project). The primary objective of the SDMP is to develop INAMET into a highly effective public institution in service of public safety and economic development. The SDMP has three overarching priorities: i) promoting good governance and strengthening INAMET’s technical capacity; ii) applying climate and geophysical data to support various socio-economic activities; and iii) designing INAMET’s human resources policy. Within each priority, a number of goals are defined. Under priority two, Goal 14 includes extending the hydro-meteorological information system of the Kwanza River basin to other basins. This includes the rehabilitation of the existing meteorological monitoring network and the installation of additional automatic weather stations in several provinces, including Cabinda, Bengo and Namibe (investments totalling US\$6,161,467). Through the extension of the meteorological monitoring network, this goal then also aims to extend the mechanism for an EWS as well as map climate change vulnerabilities of specific sectors – including agriculture and fisheries – along the Angolan coast. However, the number and location of the proposed automatic weather stations in Bengo province will not be adequate for an EWS in Barra do Dande. The investments in Bengo province also do not include capacity development for the management and maintenance of the meteorological monitoring network.

Component 1 of the LDCF project will build on the second SDMP priority, which includes the installation of additional hydro-meteorological infrastructure. By installing automatic weather stations and hydrological monitoring equipment, and piloting a well-designed case study that takes into consideration the effects of climate change on coastal communities, the LDCF project will: i) extend the hydro-meteorological monitoring system of INAMET in Bengo province; and ii) develop a best practice climate monitoring and EWS model that can be replicated in other vulnerable coastal areas. Consequently, INAMET will have improved capacity to monitor climate change.

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<sup>19</sup> For example: i) the CNPCB monitors precipitation; ii) CNPCB and National Directorate of Water Supply and Sanitation (DNAAS) monitor the level of rivers and streams; and iii) National Energy Production Company (PRODEL) monitors dam levels.

<sup>20</sup> In the framework of the Presidential Decree 17/2014, the GoA will be financing the rehabilitation of the whole Meteorological Monitoring Network with installation of Automatic Weather Stations.

The LDCF project, through Outcome 1.1, will also undertake a detailed climate change vulnerability assessment for Angola's coastal zone. In addition to an overall vulnerability assessment, assessments will be provided for fisheries, agriculture, water, energy and tourism sectors. Appropriate government staff – including employees of INAMET and CNPCB – will also be trained to understand, interpret and replicate the climate change vulnerability assessments produced under Outcome 1. The vulnerability assessments and improved technical capacity of government staff will contribute to SDMP objectives, particularly under priority two. The SDMP will contribute co-financing of US\$6,161,467 to this LDCF project.

## **COMPONENT 2: Local demonstrations and capacity building interventions on ecosystem rehabilitation and adaptation measures in coastal areas.**

Coastal communities in Chiloango (Cabinda), Barra do Dande (Bengo), Longa (Kwanza Sul) and Bero (Namibe) depend strongly on artisanal fishing, supplemented by subsistence agriculture, for their livelihoods. The location of the four project sites are shown in Figure 1 below. These livelihood practices are underpinned by ecosystem services, such as: i) maintenance of fish spawning grounds; ii) nutrient cycling; and iii) crop pollination. However, ongoing environmental degradation<sup>21</sup>, exacerbated by the negative effects of climate change, is reducing the capacity of coastal ecosystems to provide these services and consequently threatens the livelihoods of these coastal communities. Ongoing poverty, low levels of education, a lack of alternative livelihood options and the limited integration of climate change adaptation into coastal development plans means that the environmental degradation and climate change impacts will remain threats to the livelihoods of these coastal communities.



Figure 1: Map of Angola detailing selected LDCF intervention sites

There are a few initiatives underway to develop the livelihoods of selected communities living along the Angolan coast. These include the FSSP and a COSPE<sup>22</sup> project for the *Protection and Development of Angolan Coastal Forests*. The

<sup>21</sup> Environmental degradation is being caused by *inter alia*: i) destruction of natural ecosystems as urban centres expand; ii) poor land uses practices resulting in overgrazing and erosion; iii) degradation of forest and woodland for fuelwood and charcoal production resulting in increased erosion and decreased water supply; and iv) pollution from nearby settlements.

<sup>22</sup> Cooperation for the Development of Emerging Countries

FSSP is developing artisanal fishing livelihoods through investments in transport, waste management and infrastructure, while the COSPE project is promoting livelihoods<sup>23</sup> derived from forest products. Both of these projects are being implemented in areas within and outside of the project's targeted intervention sites.

There are also land management projects taking place in coastal regions of Angola. For instance, in Namibe Province<sup>24</sup>, an FAO-funded project *Integrating climate resilience into agricultural and agro pastoral production systems through soil fertility management in key productive and vulnerable areas using the farmers field school approach* is training smallholder livestock farmers to mitigate the impact of land degradation. In general, these land management projects are promoting climate-resilient agriculture and the integration of related interventions into existing agricultural practices. However, no previous or ongoing initiatives implement EbA, and therefore the approach remains poorly demonstrated in Angola's coastal areas. As a result, an understanding of the benefits of EbA among coastal communities – including those living in Chiloango, Barra do Dande, Longa and Bero – will remain limited. Moreover, such communities have not received formal training on planning and implementing this approach. Consequently, there will remain limited opportunities for these communities to maximise the benefits of ecosystem restoration to increase their adaptive capacity to the adverse effects of climate change.

Private sector funding of land restoration and EbA in Angola remains limited. This constraint persists despite the existence of a national Environmental Fund that has the potential to catalyse private sector investment in ecosystem restoration and climate change. Currently, this fund is sourced from environmental fines, licensing fees and donor contributions. Resources from this fund should be directed to priority environmental projects by means of an application process, however, because of the continued slow progress to establish financial mechanisms to disperse funds, the application of these funds remains limited and will likely continue to remain so according to consultations carried out during the PPG. Another potential source of investments in EbA from the private sector is the Corporate Social Investment (CSI) allocation of the petroleum industry. Although CSI is not currently legislated for oil companies, it is integrated into their contracts with the GoA. Sonangol, the national petroleum company, is responsible for identifying these CSI projects. Legislated CSI for petroleum companies is likely to come into effect in 2015. Once this legislation is ratified, the Ministry of Petroleum will likely be the entity that identifies and directs petroleum companies to potential CSI projects. Without technical guidance, the private sector will likely continue to invest in education (e.g. schools and clinics) and biodiversity conservation (e.g. Green Turtle conservation projects) CSI projects unrelated to EbA.

## Component 2 baseline projects

**The Support to the Fisheries Sector Project (FSSP) (2012–2017)** is financed through the African Development Bank, implemented by the Ministry of Fisheries and has a total budget of US\$18,518,518, of which US\$3,000,000 will be provided as co-financing. The project will develop artisanal fishing livelihoods, promote economic activity along the Angolan coast through investments in transport, waste management and fish processing infrastructure. The long-term aims of the project are to: i) improve the well-being of artisanal fishers through increased household income; ii) contribute to the GoA's efforts to reduce poverty and accelerate economic growth on a sustainable basis; and iii) strengthen the capacity of institutions responsible for fishery management. The FSSP will focus on artisanal fishers living in 14 communities along the Angolan coast. As in the LDCF project, direct beneficiaries of the FSSP will include women, who constitute 80% of small-scale fish processors and traders. The project will also be of benefit to ancillary trades such as boat repairers, net menders, transport providers and petty traders working in project sites.

Activities under the FSSP include *inter alia*: i) construction of four artisanal fish landing sites/centres; ii) rehabilitation of 14 km of access roads; and iii) construction of water supply and sanitation facilities and a power supply system (US\$3,000,000). The effects of future climate change – such as coastal flooding, soil erosion and storm damage – will negatively affect the infrastructure installed by the FSSP, which does not currently account for these impacts. In particular, the predicted increase in rainfall intensity in more northern coastal provinces will result in an increase in frequency and severity of floods. Coastal infrastructure constructed by the project – including access roads and fish landing centres – will remain vulnerable in flood-prone provinces such as Bengo and Luanda. The LDCF project will

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<sup>23</sup> such as sustainable timber harvesting

<sup>24</sup> Including two coastal communities



help to climate-proof the activities of the FSSP through targeted EbA interventions under Component 2. The EbA interventions implemented will demonstrate techniques for climate-proofing coastal infrastructure using an EbA approach. For example, the LDCF project will be undertaking mangrove rehabilitation in and around Barra do Dande in the Bengo Province, where the FSSP is installing a fuel station. Restoration of mangroves at Barra do Dande will safeguard infrastructure in coastal areas from damage from flooding and storm surges.

The UNEP project “**Building Capacity for Coastal Ecosystem-based Adaptation in Small Island Developing States (SIDS)**” is financed by the European Commission and will run from 2014 to 2016. This project aims to assist countries and regions to develop and apply ecosystem-based adaptation approaches to maintain and enhance the resilience of tropical coastal ecosystems and the services they provide to coastal communities in SIDS.

The LDCF project will build lessons learned through the SIDS project regarding adaptation in coastal ecosystems. In particular, lessons from the SIDS project will help to advise communities on the correct choice of EbA interventions in coastal ecosystems. Further to this, the guide “Options for ecosystem-based adaptation in coastal environments” produced by the SIDS project be promoted as a planning tool and a broader guide for EbA interventions in Angola. As such, the SIDS project will contribute \$150,000 as cofinancing to the LDCF project.

### **COMPONENT 3: Enhanced institutional coordination and capacity for proactive adaptation in Angola.**

In Angola, the policies related to management of natural resources and ecosystems – such as the National Policy on Forestry, Fauna and Areas of Conservation – do not include consideration of the current and predicted impacts of climate change. Additionally, the strategies and plans related to coastal planning and ecosystem management – such as the Coastal Zone Master Plan – do not include consideration of potential adaptation measures such as EbA. This is partly because there is inadequate data and information to support a detailed understanding of the impacts of climate change at a sectoral level, or to motivate for increased allocation of budget to support climate change adaptation activities. For example, no analysis has been conducted for the fishery, agriculture, energy, water or tourism industries on: i) the current and future impacts of climate change on each sector; and ii) the relative cost of different adaptation options. This information is important to guide strategic planning and decision-making, and without it, adaptation will continue to not be integrated into sectoral budgets.

Currently, MINAMB, through the GAC, is responsible for the overall coordination of projects and programmes related to climate change. Strategic oversight related to climate change in different economic sectors is the responsibility of CIBAC. This commission is chaired by MINAMB and includes, amongst others, ministers from the MININT and MINEA. However, the CIBAC currently does not meet on a regular basis. This is partly because the Secretariat of the CIBAC is currently constituted on an *ad hoc* basis by technical staff from various member ministries, depending on the particular advice required by members. This has resulted in inefficiencies in the administration of the forum such as irregularity of meetings, poor coordination of inputs and inadequate follow-up of actions tabled at meetings. These inefficient institutional arrangements and a lack of information related to climate change vulnerability continue to be a barrier to effective coordination between Angola’s important economic sectors.

At an inter-sectoral level, public awareness of the predicted effects of climate change, as well as potential adaptation options such as EbA, remains limited. There is currently no central source of information about adaptation for the general public or specific sectors. Although some useful public documents related to national adaptation options and awareness raising have been generated, these documents are often not publicly available or shared between government departments.

At the local level, there remains a limited awareness and knowledge within communities living in the Cabinda, Bengo, Kwanza Sul and Namibe Provinces about the existence, predictions and causes of climate change. In particular, there is little understanding of the linkages between climate change and the increased frequency of events such as flooding. Coastal communities living in these provinces will continue to have limited awareness of practices that would increase their resilience to climate change. Without this awareness, coastal communities will continue with livelihood practices that are vulnerable to climate change.

### Component 3 baseline project

The **Angola Water Sector Institutional Project 2010–2019 (PDISA)** (US\$113.4 million) is financed by the International Development Association and the Southern African Development Community (SADC) (Co-financing US\$3,000,000). This project will be implemented through the MINEA and its DNAAS. PDISA is strengthening the institutional capacity and efficiency of agencies in the water sector to improve access and reliability of water service delivery. Inadequate storm water drainage and inadequate sanitation results in frequent occurrence of water-borne diseases and shortfalls in fresh water supply in many inland and coastal cities. The objective of the project is therefore to improve the quality and sustainability of urban water supply and sanitation services in urban centres. The project is comprised of four components, including: i) development of institutions in the water supply and sanitation sub-sector; ii) water resources management; iii) rehabilitation of water supply systems; and iv) capacity building and change management to strengthen the ability of government to improve water supply. Activities under PDISA include *inter alia* the rehabilitation of selected urban water supply systems and investments in improved access and reliability of water service delivery.

Without LDCF resources, PDISA will continue to develop water infrastructure without an understanding of climate change vulnerabilities of the water sector – and associated costs – along the Angolan coast. Consequently, in certain parts of the coast this infrastructure could be vulnerable to the future impacts of climate change, including increased intensity and frequency of storm surges and flooding. To enhance the water sector's understanding of adaptation, economic assessments will be undertaken under Outcome 3 of the LDCF project... These assessments will build on the sectoral vulnerability assessments and will demonstrate: i) the economic cost of current and future climate change to the water sector; and ii) the relative costs of different adaptation alternatives.

The LDCF project will also build on the capacity-building interventions of the PDISA, which are aimed at improving governance in the water sector (total budget US\$3,000,000). Under Output 3.1, CIBAC representatives from the water sector will be trained on: i) how to interpret climate change adaptation investment appraisals; ii) how to use cost effectiveness rationales for the planning and decision-making process; and iii) the importance of mainstreaming climate change adaptation into regional, national and sectoral development plans for the water sector. Additionally, the overall improved functioning of CIBAC – promoted under Outcome 3 – will support the long-term climate proofing of the water sector through improved inter-sectoral coordination for adaptation.

The sectoral vulnerability assessment undertaken under Outcome 1 of the LDCF project will also provide detailed information about the climate change risks faced by the water sector in the coastal zone. This analysis will include the predicted effects of climate change on *inter alia*: i) water provision to coastal settlements; ii) ground and surface water availability; iii) water-related diseases such as malaria and cholera; and iv) water infrastructure along the coast. This vulnerability assessment will include recommendations for cost-effective adaptation interventions appropriate to the water sector and applicable to the aims of PDISA, and therefore contribute to the long-term objectives of this project.

In summary, the LDCF project will enhance the institutional capacity building interventions of the PDISA project by promoting an in-depth understanding of the effects – and related costs – of current and future climate change on the water sector. This improved understanding will support agencies in the water sector to improve access and reliability of water service delivery, even under conditions of climate change. The PDISA will contribute co-financing of US\$3,000,000 to this LDCF project.

### *Conclusion*

Through the planned interventions, the LDCF project will increase the climate resilience of the baseline projects described above. Importantly, stakeholders from these initiatives will be consulted on an ongoing basis, and lessons learned through the proposed project will be shared with these stakeholders. To achieve this, representatives from the baseline projects will be involved in PSC meetings. In addition, CIBAC will act as forum for project managers from baseline projects and other ongoing initiatives to discuss and develop synergies between their projects and the LDCF project.

The goal of this LDCF project is to increase the resilience of Angola's vulnerable coastal communities and economic sectors – including fisheries, agriculture, transport, energy, water and tourism – to the negative effects of climate change. The objective of the project is to reduce vulnerability to climate change of national government and coastal communities along the coast of Angola. The adaptation alternative of the proposed project is described in Section A.3 below.

*3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project.*

In order to enhance the capacity of national government and coastal communities to adapt to climate change along the coast of Angola and build on the outcomes of baseline projects, the LDCF project will undertake a range of adaptation interventions. Under Component 1, the technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to local communities will be strengthened. This will be achieved by conducting a vulnerability assessment of the coast and establishing a pilot EWS in Barra do Dande. Under Component 2, EbA technologies and climate-resilient land management techniques will be transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability and extreme events. Finally, under Component 3 inter-ministerial coordination and institutional capacity to adapt to climate change in Angola will be increased. Additionally, awareness about climate change impacts and adaptation among non-governmental stakeholders will be improved through national awareness campaigns. These interventions are described further described below (for additional detail see Section 3.3 of the UNEP Project Document or Section 2.3 of the UNDP Project Document).

OUTCOME 1: Strengthened technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to local communities.

Co-financing amounts for Outcome 1: US\$6,161,467

LDCF: US\$1,568,000

Implementing Agency: UNEP

Several important economic sectors based along Angola's coast – including fisheries, agriculture, transport, energy, water and tourism – are vulnerable to current and future effects of climate change. To address these threats, activities under Outcome 1 of the project will strengthen the technical capacity of national government staff in INAMET to collect, analyse and disseminate weather and climate data. Additionally, INAMET staff will be trained to package early warnings based on available data. Moreover, extension officers from CNPCB and other relevant provincial and local government representatives will be trained to disseminate early warnings to coastal communities.

Initially under Outcome 1, vulnerability assessments will be undertaken for Angola's coastal zone. These assessments will focus primarily on economic sectors that are vulnerable to climate change and will include the development of recommended adaptation responses, and will be carried out using PROVIA guidelines<sup>25</sup>. Local academic institutions – such as Agostinho Neto University – will be involved in the vulnerability assessments, contributing data and expertise. The information generated under this Outcome will inform the development of other project activities. Additionally, activities in this component of the project will focus on the establishment of an EWS in Barra do Dande. This will be achieved by: i) installing appropriate equipment and software, including *inter alia* weather and hydrological monitoring stations; ii) strengthening the capacity of CNPCB to disseminate early warnings effectively to local communities; and iii) strengthening the capacity of local communities to respond to early warnings. To promote appropriate responses at a local level, an early warning response plan will be developed in collaboration with local communities.

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<sup>25</sup> PROVIA guidance on Assessing Vulnerability, Impacts and Adaptation to Climate Change (UNEP, 2013) is structured along a five-stage iterative adaptation learning cycle: i) identifying adaptation needs; ii) identifying adaptation options; iii) appraising adaptation options; iv) planning and implementing adaptation actions; v) monitoring and evaluation of adaptation. The PROVIA guidance has compiled an e-prototype tool that may be piloted during this project to help develop VIAs. Other tools and methods of dissemination will also be used.



Outcome 1 of the project will build on the ongoing work of other projects and organisations in Angola. In particular, the LDCF project will work closely with the GEF/UNDP Cuvelai project that is developing the climate forecasting and EWS in the Cuvelai River Basin (see Section 2.7 of the UNEP project document for a more detailed description of this project). Importantly, the Cuvelai project will work with stakeholders in INAMET and MININT to build national-level capacity for climate forecasting and EWS provision. This national-level capacity building and technical support will benefit the local-level interventions of the LDCF project in Barra do Dande.

Output 1.1: A set of detailed sectoral and localised vulnerability assessments for Angola's coastal zone.

The activities to be implemented under Output 1.1 are:

- 1.1.1 Undertake a detailed climate change vulnerability assessment – including identification of predicted climate change impacts – for Angola's coastal zone.
- 1.1.2 Produce sector-specific vulnerability assessments detailing climate change impacts on important coastal sectors – including *inter alia* fisheries, agriculture, transport, energy, water and tourism – and appropriate adaptation responses.
- 1.1.3 Train appropriate government staff (including staff from *inter alia*: MINAMB, INAMET, CIBAC and Climate Change Cabinet) to understand, interpret and replicate climate change vulnerability assessments in Angola's coastal zone.
- 1.1.4 Disseminate the results of the coastal zone and sector-specific vulnerability assessments, including an integrated vulnerability map, to development planners and policy makers.

Output 1.2: Operational EWS developed in Barra do Dande.

The activities to be implemented under Output 1.2 are:

- 1.2.1 Conduct an assessment to identify/verify the meteorological equipment required to establish a flood and drought EWS in Barra do Dande.
- 1.2.2 Identify and assess sites for the installation of weather stations and hydrological monitoring.
- 1.2.3 Procure, install and test relevant weather and hydrological monitoring stations at the identified sites.
- 1.2.4 Establish an appropriate communication system to transmit meteorological and hydrological information to INAMET, and transfer flood and drought early warnings from INAMET Forecasting Centre, SNPC and relevant local authorities at Barra do Dande.
- 1.2.5 Train extension officers from SNPC and other relevant local government representatives at Barra do Dande site on interpretation of climate information and translation into locally relevant climate forecasts and advisories<sup>26</sup>.
- 1.2.6 Develop flood and drought early warning response plans with pilot communities in Barra do Dande.

OUTCOME 2: EbA technologies and climate-resilient land management techniques transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability and extreme events.

Co-financing amounts for Outcome 2: US\$3,150,000

LDCF: US\$3,080,000

Implementing Agency: UNEP

Currently, the capacity of communities living in the four interventions sites to adapt to extreme climate-related events is limited. To strengthen this capacity, LDCF interventions under Outcome 2 will: i) rehabilitate coastal ecosystems using EbA interventions with the aim of setting in place a process for full restoration; and ii) implement climate-resilient land management interventions – including sustainable agriculture – to promote sustainability of EbA interventions and further promote resilience of local livelihoods under conditions of climate change. The rehabilitation and climate-resilient management of these coastal ecosystems will provide protection against beach erosion from storm surges and enhance ecosystems goods and services, as described below.

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<sup>26</sup> Based on existing informal EWS, means of disseminating climate forecasts to local communities could include a flag alert system. Additionally, extension workers could also implement a system of telephoning or visiting pre-identified community members. These individuals will be tasked with passing the early warning message on to others in their immediate vicinity by knocking on doors or using a loud hailer.

The project will promote and demonstrate the EbA approach at intervention sites in Chiloango, Longa, Barra do Dande and Bero through targeted rehabilitation of degraded ecosystems such as mangroves, marshlands and rivers. Climate-resilient plant species (for example mangrove species able to withstand increased salinity because of sea-level rise or riparian tree species that are flood-resilient) will be prioritised in these rehabilitation activities. Furthermore, the project will prioritise species, which generate multiple goods and services (for example fruit trees) for the benefit of local communities. EbA activities to be promoted by the project will include the rehabilitation and establishment of mangroves that will: i) provide a protective barrier against sea-level rise and storm surges; ii) reduce coastal inundation by tidal waters; and iii) increase the productivity of local fisheries by provide breeding habitats for commercially valuable fish species. In addition, the project will rehabilitate wetland and riparian ecosystems, including rehabilitation of vegetation along river banks, to demonstrate the benefits of this approach to local communities. Wetland rehabilitation may also include small-scale clearing of channels to improve water flow, thereby increasing water quality and improving habitat for commercially important fish species. These interventions will provide multiple benefits such as: i) reduced severity and frequency of flooding of communities in low-lying areas; ii) reduced loss of fertile topsoil through erosion; iii) reduced deposition of silt and sediment; and iv) improved filtration and resultant quality of fresh water. In particular, the project will focus on increasing the stability of the shoreline at the mouth of the Bero River and rehabilitating the adjacent marshlands. The rehabilitation of the Bero River area will reduce the rate of beach erosion from sea-level rise, thereby providing protection for coastal infrastructure and local communities. For all planned EbA interventions, an Environmental Impact Assessment will be conducted at each site (if deemed necessary following national environmental regulations) to ensure that activities do not have unintended negative consequences.

In addition to the demonstration of EbA in several ecosystem types (mangroves, marshlands and rivers), the project will also demonstrate other climate-resilient approaches to land management. These climate-resilient practices for land management will be tailored to each of the project sites (see Section 3.3 of the UNEP project document) and will be complementary to EbA activities by promoting agricultural, waste management and sustainable harvesting practices that promote ecosystem health and sustainable livelihoods under climate change,

The EbA and climate-resilient land management approaches demonstrated under this outcome will be implemented through the appointment of appropriately skilled and experienced organisations as technical service providers<sup>27</sup>. Importantly, communities at pilot sites will be involved in the site selection and implementation of the project's activities through community management committees established with the support of the project. These committees will build on existing structures within each community including *inter alia* fishing cooperatives, NGO groups and/or religious organisations. Management plans for the implementation of community-based EbA activities will be developed and implemented by these committees in Chiloango, Barra do Dande, Longa and Bero. These management plans will include a strategy for the long-term sustainability and maintenance of the project's activities. Sub-committees of the community management committee will be established to focus on specific elements of the management plan such as *inter alia*: i) establishment of patrols to prevent activities such as illegal logging and hunting; and ii) waste management; and iii) water quality monitoring. By managing existing and rehabilitated wetland ecosystems sustainably through patrols and waste management, local communities will retain the adaptation benefits of these ecosystems, including buffering from coastal storms and floods.

Also under this outcome, coastal communities at the project intervention sites will be trained on: i) implementing, monitoring and maintaining EbA to generate long-term benefits; and ii) techniques and practices for climate-resilient land management. This training will include information about EbA-related conservation issues such as responsible hunting for subsistence. Additionally, representatives of local government will be provided with training on the implementation and maintenance of investments in EbA and climate-resilient land management techniques including *inter alia* crop rotation and selection of diverse locally adapted crops. These training activities will promote replication of project interventions in other nearby communities. Community management committees and local community members will also be trained on the early warning response plans developed under Outcome 1. This training will focus on interpreting and responding to early warnings.

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<sup>27</sup> These are likely to be national-level NGOs and consultancies, which will partner with local organisations in the various project sites during planning and implementation.

An education programme will be established in local schools in and around the four project sites to increase awareness of the benefits of EbA. Educational materials will include media such as board games, posters, storytelling and drawing competitions. Content produced and lessons learned from education activities will be shared with the ‘Angola Content’ education programme, which is part of the National Environmental Education Programme (PRONEA), thereby upscaling the project’s awareness-raising activities.

Finally, based on the lessons learned through the implementation of project interventions, EbA project concept notes will be developed to encourage private sector investment in EbA in and around Chiloango, Barra do Dande, Longa and Bero. Currently, petroleum and mining companies are contractually obliged to invest in social and environmental projects in Angola, but have very little guidance on how to invest for maximum impact. Consequently, CSI projects tend to be piecemeal and are implemented over short timescales. The project will therefore develop EbA concept notes to support an enabling environment for the private sector to make social investments using CSR budgets that will generate multiple social, ecological and climate change benefits. The EbA project concept notes will be tailored for different CSI budgets and will include *inter alia*: i) details on the vulnerability of the target sector to climate change ii) the economic rationale for investing in EbA; and iii) quantification of the social and environmental benefits of the investment. Additionally, technical details will be included in the EbA project concept notes that would enable replication of project activities, including *inter alia*: i) links to the EbA protocols developed under Output 2.1; ii) practical lessons learned by the LDCF project; iii) budgets required to upscale EbA interventions; and iv) details of suppliers and equipment in pilot sites. Where practical, upscaling of project interventions will be focussed on areas around Chiloango, Barra do Dande, Longa and Bero in order to make use of the implementation capacity of local communities developed under this outcome.

The Project Management Unit (PMU) will engage with relevant forums – such as the Petroleum Industry Steering Committee and the Environment Fund – to: i) disseminate the concept notes developed under this Output; and ii) raise awareness of the corporate social investment (CSI) benefits of these projects. The project concept notes will also be shared with government institutions – such as Sonangol and the ministries of Transport and Fisheries – that have large development projects planned along the coast. Dissemination of the concept notes will also be conducted under Outcome 4.1 as part of climate change awareness raising activities targeting private sector stakeholders.

#### Output 2.1: EbA interventions, including mangrove and wetland rehabilitation, implemented in pilot sites in Chiloango, Barra do Dande, Longa and Bero.

The activities to be implemented under Output 2.1 are:

- 2.1.1 Undertake biophysical, socio-economic and market assessments at each of the chosen intervention sites to identify multi-use plant species for EbA interventions (e.g. wetland rehabilitation, reforestation, mangrove rehabilitation) that can provide co-benefits to local communities.
- 2.1.2 Identify indigenous multi-use and climate-resilient species for EbA interventions (e.g. wetland rehabilitation, reforestation, mangrove rehabilitation).
- 2.1.3 Develop protocols to guide the implementation of EbA interventions (e.g. wetland rehabilitation, reforestation, mangrove rehabilitation).
- 2.1.4 Identify and contract an appropriately skilled and experienced organisation at each of the four project intervention sites to implement the project’s EbA and climate-resilient land management interventions.
- 2.1.5 Establish community management committees at selected intervention sites, building on existing structures, to coordinate community involvement in the implementation of EbA and climate-resilient land management interventions<sup>28</sup>.

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<sup>28</sup> Community management committees are groups of between five and ten community members that consult the broader community on issues related to project implementation. Where practical, these committees will build on existing community groups. Ideally, once established, they should continue meeting beyond the duration of the LDCF project.

- 2.1.6 Liaise with the community management committees and other community members to identify/verify sites and pilot families to carry out EbA interventions, including *inter alia* mangrove rehabilitation, wetland rehabilitation, and re-vegetation.
- 2.1.7 Implement wetland rehabilitation at Chiloango River mouth (Cabinda Province).
- 2.1.8 Implement wetland rehabilitation in Barra do Dande (Bengo Province).
- 2.1.9 Implement wetland rehabilitation at Longa River mouth (Kwanza Sul Province).
- 2.1.10 Implement wetland rehabilitation at Bero River mouth (Namibe Province).
- 2.1.11 Develop and implement community-based EbA intervention management plans to ensure the long-term sustainability of interventions.

Output 2.2: Climate-resilient land management techniques appropriate to local conditions demonstrated in selected communities in Chiloango, Barra do Dande, Longa and Bero.

The activities to be implemented under Output 2.2 are:

- 2.2.1 Identify, in collaboration with local communities, appropriate climate-resilient land management techniques to be implemented in each pilot intervention site.
- 2.2.2 Establish demonstration plots at each project intervention site to demonstrate climate-resilient land management techniques.
- 2.2.3 Implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. This will include *inter alia*: i) climate-resilient agriculture crops and techniques; ii) waste management interventions to promote ecosystem and human health; and iii) subsistence hunting and harvesting practices to promote sustainable livelihoods under climate change.

Output 2.3: Pilot communities trained on EbA, climate-resilient land management and early warning response plans.

The activities to be implemented under Output 2.3 are:

- 2.3.1 Develop and/or adapt training programmes for local communities on: i) the benefits of EbA; and ii) implementing, maintaining and monitoring both EbA interventions and climate-resilient agricultural techniques; and iii) early warning response plans. Training on early warning response plans will be based in the response plans developed under Activity 1.2.6.
- 2.3.2 Train local government representatives on EbA and climate-resilient land management techniques.
- 2.3.3 Train community management committees to oversee and coordinate local community involvement in the implementation of EbA and climate-resilient land management interventions.
- 2.3.4 Train community management committees and local community members on early warning response plans developed in Activity 1.2.6.
- 2.3.5 Train local communities at each project intervention site on the implementation and maintenance of EbA interventions and climate-resilient land management techniques.
- 2.3.6 Host four experience-sharing events where people from nearby communities are brought to the demonstration plots established under Activity 2.2.2 and trained on climate-resilient land management techniques.

Output 2.4: EbA project concept notes developed for private sector upscaling of EbA interventions.

The activities to be implemented under Output 2.4 are:

- 2.4.1. Design a long-term strategy to monitor the socio-economic and bio-physical impacts of EbA interventions.
- 2.4.2. Implement the monitoring strategy designed in Activity 2.4.1 to assess the impacts of EbA to provide lessons learned and best practices for upscaling EbA.
- 2.4.3 Collate lessons learned and best practices generated through Outcome 2 and from other national/international projects on: i) EbA interventions; ii) climate-resilient land management techniques; iii) the social and environmental benefits of these approaches; and iv) community management structures for the implementation and maintenance of these interventions.

2.4.4 Develop EbA project concept notes for private sector upscaling of EbA interventions.

2.4.5 Engage with the private sector through relevant forums to disseminate EbA project concept notes and raise awareness about the CSI benefits of such projects. Engagements will be through presentations and related discussions within relevant forums, including the Petroleum Industry Steering Committee.

OUTCOME 3: Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola.

Co-financing amounts for Outcome 3 and 4: US\$3,000,000

LDCF: US\$ US\$978,000

Implementing Agency: UNDP

*With LDCF/SCCF Intervention (adaptation alternative)*

At present, the cost of climate change at a sectoral level is not well understood and the economic rationale for climate change adaptation along the Angolan coast has not been developed. Consequently, climate change is not adequately integrated into national policies, or into the plans and budgets of vulnerable economic sectors in Angola. To address this gap, an economic assessment will be conducted under Outcome 3 to quantify the economic impacts of climate change on Angola's coastal zone, disaggregated by sector. Specifically, these studies will demonstrate the cost-effectiveness of adaptation by establishing the relative cost of various adaptation responses. Based on these economic studies, cost-effective adaptation interventions for coastal areas will be recommended. The results of economic assessments will be disseminated to members of CIBAC, thereby raising awareness amongst government officials in CIBAC's member ministries of the need to plan for climate change adaptation. Policy briefs will be produced to guide the integration of climate change adaptation interventions – including EbA – into relevant policies, sectoral plans and budgets.

Building on the economic assessment and policy briefs, as well as the vulnerability assessments produced under Outcome 2, a coastal zone adaptation plan will be developed. This plan will build on the existing Coastal Zone Master Plan. CIBAC members and technical staff will be consulted in the development process to ensure that the coastal zone adaptation plan addresses specific sectoral concerns and supports national development objectives. This consultative approach will support the mainstreaming of the coastal zone adaptation plan into relevant sectoral, regional and national development plans and related budgets.

The LDCF project will also implement interventions to improve the technical functioning of the CIBAC, and thus promote inter-ministerial coordination on adaptation in Angola. An assessment will be undertaken to identify gaps in, as well as provide recommendations to strengthen, the capacity of the Secretariat of CIBAC, technical staff of member ministries, and the GAC to coordinate climate change actions. Additionally, operational and technical support will be provided to the Secretariat of CIBAC to: i) arrange regular meetings; ii) prepare agendas and contents for meetings; iii) advocate for the inclusion of climate change considerations in relevant strategies and plans based on identification of cost-effective adaptation options; and iv) raise awareness about climate change effects in the coastal zone of Angola. Moreover, technical guidelines and training will be provided to the Secretariat of CIBAC, technical staff of member ministries, and the GAC on mainstreaming adaptation into regional, national and sectoral development plans. The Technical Advisor hired through the project will support complementarities and programmatic synergies between the LDCF project and the Cuvelai project in developing national-level capacity for climate change adaptation in Angola.

The LDCF project will also provide technical support to the Secretariat of the CIBAC and for implementation of the National Adaptation Plan (NAP) roadmap. The NAP Global Support Programme (NAP-GSP) is currently assisting the GoA to create a NAP roadmap for Angola. A national-level training on the roadmap process was held in April 2015, but the roadmap has not yet been finalised. Support for the NAP roadmap will be required – probably in the form of training or technical input – but the actual needs of the programme are still unclear. Consequently, the nature of the support that the LDCF project will provide for implementing the roadmap will be decided on during the project inception phase.

Output 3.1: Technical support and training provided to the Secretariat of the Inter-ministerial Committee for Biodiversity and Climate Change (CIBAC) and Climate Change Cabinet (GAC).

The activities to be implemented under Output 3.1 are:

- 3.1.1 Conduct a gap assessment of the technical capacity of the Secretariat of CIBAC, technical staff of member ministries, and the GAC for: i) information-sharing; and ii) coordinating the climate change agenda.
- 3.1.2 Propose recommendations to clarify/improve the functioning of the Secretariat of the CIBAC, supporting it to operationalise the commission's mandate.
- 3.1.3 Provide operational and technical support to the Secretariat of CIBAC to: i) arrange regular meetings of the CIBAC; ii) prepare agendas and contents for meetings; iii) advocate for the inclusion of climate change considerations in relevant strategies and plans using an cost effectiveness argument; and iv) raise awareness about climate change effects in the coastal zone of Angola.
- 3.1.4 Provide technical support to the Secretariat of CIBAC and GAC for the NAP process in Angola, to support implementation of the NAP roadmap.
- 3.1.5 Conduct training sessions for the Secretariat of CIBAC, technical staff of member ministries, and the GAC on: i) interpreting climate change adaptation economic assessments produced under Activity 3.2.1; ii) using a cost effectiveness argument in the planning and decision making process and; iii) mainstreaming adaptation into regional, national and sectoral development plans and budgets.

Output 3.2: Policy briefs and technical guidelines produced to support the integration of climate change adaptation into relevant policies and plans, including their related budgets.

The activities to be implemented under Output 3.2 are:

- 3.2.1 Undertake and present assessments of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector, to raise awareness about the need for climate change adaptation to be integrated into relevant policies/plans and related budgets. Relevant policies/plans include: i) The Strategic National Programme for Water; ii) The Tourism Master Plan of Angola; iii) National Plan for Preparedness, Contingencies, Response and Recovery from Calamity and Disasters; and iv) The Artisanal Fisheries Development Plan (See Section 2.4 of the UNEP PD).
- 3.2.2 Identify entry points at the national and provincial level for the integration of climate change adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions.
- 3.2.3 Develop a coastal zone adaptation plan and integrate adaptation interventions into relevant sectoral, regional and national development plans.
- 3.2.4 Develop and/or adapt technical guidelines – in English and Portuguese – for GAC, sectoral ministries (including *inter alia* fisheries, agriculture, transport, energy, water and tourism) and the CIBAC on how to assess, plan and finance climate change adaptation interventions, and integrate into the sectoral and national budgeting processes.

OUTCOME 4: Improved awareness about climate change impacts and adaptation among non-governmental stakeholders.

Under Output 4, a programme will be designed and implemented to raise national and local awareness of the effects of climate change on the coastal zone of Angola, and cost-effective adaptation interventions. This awareness programme will also include *inter alia*: i) lessons learned from implementation of EbA activities at project intervention sites in Chiloango, Barra do Dande, Longa and Bero; and ii) examples of best-practices for coastal adaptation from other LDCs. This programme will target NGOs, relevant private sector stakeholders, academic institutions and the general public. In addition, the lessons learned and knowledge generated through the LDCF project will be disseminated through, but not limited to, appropriate web-based platforms – such as the African Adaptation Knowledge Network (AAKNET) and UNDP ALM – to promote national and regional knowledge sharing. Additionally, findings from research that is undertaken by national consultants to inform LDCF interventions – including results of coastal vulnerability and economic assessments – will be presented to students and academics at national institutions. In addition, representatives of businesses and commercial representative bodies will be engaged as part of the awareness raising campaign. Workshops will be held to share the results of the vulnerability and economic analysis with relevant industries, including petroleum, fisheries, agriculture and mining. At these workshops, community members from the project sites

will be invited to report on their experiences of EbA and climate-resilient land management. Additionally, a short film documenting the restoration process will be shown to promote investment in the EbA concept notes.

The Project Management Unit will also establish and maintain a climate change e-library – and associated relationships of information sharing – as part of the MINAMB website. This e-library will include open-source adaptation materials, including *inter alia*: i) lessons learned and publications of the LDCF project; ii) academic research and papers produced by national universities; and iii) other relevant publications. In addition to specific documents, there will be a section with different links to other online libraries of NGOs and other LDCs. The e-library will support information sharing between CIBAC members and other government ministries. Additionally, it will be accessible to the general public, including students from national universities and members of the private sector. Consequently, the e-library will promote information sharing and public/private collaboration on climate change and adaptation in Angola.

Output 4.1: Public awareness programme undertaken to inform non-governmental stakeholders including NGOs, academia and private sector about climate risks and adaptation.

The activities to be implemented under Output 4.1 are:

- 4.1.1 Design and implement awareness-raising campaigns for NGOs, relevant private sector stakeholders, academic institutions and the general public on: i) climate change impacts on the coastal zone; ii) potential climate change adaptation interventions; and iii) the benefits of EbA for increasing the resilience of livelihoods and communities to climate change.
- 4.1.2 Collect, codify and disseminate lessons learned and knowledge generated through the LDCF project to appropriate national and regional networks, such as Africa Adaptation Knowledge Network.
- 4.1.3 Arrange for national consultants hired through the project to present the findings of their assessments or studies – including results of coastal vulnerability and economic assessments – at local academic institutions.

*4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing*



The current and predicted effects of climate change will have negative effects on coastal communities and sectors, such as fisheries, agriculture, transport, energy, water and tourism. In particular, the increasing frequency and severity of extreme weather events – such as floods – are resulting in *inter alia* damage to ecosystems and infrastructure along the coastline. For example, floods in March 2015 caused damage to an estimated 1,770 homes in Viana, Cacuaco and Belas municipalities of Luanda<sup>29</sup>. Local and national INAMET and SNPC staff do not currently have the capacity to improve the adaptive capacity of coastal communities and sectors to climate change. In particular, these institutions have limited capacity to: i) collate, analyse and disseminate climate data effectively; and ii) implement appropriate responses and interventions for adaptation.

The LDCF project will increase the adaptive capacity of the government and coastal communities in Angola to climate change. This will be achieved by: i) strengthening EWS in Barra do Dande; ii) implementing adaptation interventions including EbA in Chiloango, Barra do Dande, Longa and Bero; iii) strengthening technical and institutional capacity of coastal communities at intervention sites and national stakeholders (including the CIBAC) for climate change adaptation. In addition, integration of adaptation into relevant policies, plans and budgets will be promoted, thereby increasing the sustainability of Angola's economic development. A summary of the adaptation alternative and the business-as-usual scenario is represented in the table below.

Table 1: A summary of the adaptation alternative and the business-as-usual scenario


Business-As-Usual		Adaptation alternative scenario
Overall		



<sup>29</sup> Thousands of Homes Damaged by Floods in Luanda, Angola. Davies, R., 11 March 2015, <http://floodlist.com/africa/thousands-homes-damaged-floods-luanda-angola> [Accessed on 16 March 2015]

<p>Rapid population growth – coupled with poor land use planning – and associated environmental degradation along the coast of Angola has resulted in: i) environmental risks to human wellbeing, such as floods; ii) food and livelihood insecurity; and iii) insufficient access to clean water. Climate change impacts, including increased variability in rainfall and temperature and increased frequency and severity of droughts and floods, are exacerbating these problems. While various national projects have been initiated to address these baseline problems, limited technical capacity to predict climate change impacts and assess the vulnerability of local communities to these impacts threatens the ability of these projects to achieve their social and economic development objectives. Furthermore, climate change adaptation is not integrated into the budgets and plans of sectors responsible for addressing these problems (e.g. water, agriculture and fisheries), and currently inter-ministerial capacity to respond to climate change through CIBAC<sup>30</sup> remains limited by operational and technical gaps.</p> <p>At a local level, communities living in the provinces of Cabinda, Bengo, Kwanza Sul and Namibe are currently vulnerable to non-climate related threats such as ecosystem degradation and food insecurity, which are exacerbated by climate change. Under the business-as-usual scenario, these communities do not have the technical capacity to respond to the increase to these threats caused by climate change nor understand the problems posed by climate change.</p>		<p>To address this problem the GoA – with support from UNEP and UNDP– will implement a climate change adaptation project in the coastal areas of Angola funded from LDCF resources. The interventions of the LDCF project will strengthen the technical capacity of local and national government staff to analyse, predict and respond to the effects of climate change. In addition, the capacity of coastal communities to implement adaptation interventions – including EbA – will be strengthened... At a national level, inter-ministerial coordination and institutional capacity for adaptation will be supported through technical support and training of CIBAC. Moreover, public awareness of the effects of climate change – and appropriate adaptation interventions – will be improved through campaigns targeting NGOs, relevant private sector actors and academic institutions.</p>
<p><b>Outcome 1</b></p> <ul style="list-style-type: none"> <li>• Angola's coastal sectors – including fisheries, agriculture, transport, energy, water and tourism – are vulnerable to future climate change impacts. These impact include <i>inter alia</i> increased: i) flooding; ii) drought; iii) soil erosion; iv) sea level rise; and v) storm surges.</li> <li>• No vulnerability assessments have been carried out to date.</li> <li>• INAMET has insufficient technical capacity to: i) collect climate and hydrological data; ii) analyse the data efficiently; iii) produce flood early warning information products. Additionally, CNPCB and SNPC do not have the technical capacity to disseminate early warnings to coastal communities.</li> <li>• There is limited understanding of the effects of climate change by sectoral ministries hence climate change adaptation is not prioritised into sectoral plans and budgets.</li> </ul>		<p>The LDCF project will strengthen technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to coastal communities. Vulnerability assessments completed through the project will enable the government to prioritise vulnerable areas and identify appropriate adaptation options. Furthermore, through the strengthening of technical capacity and the installation of an EWS in Baro Do Dande, the LDCF project will enable INAMET to deliver warning to coastal communities and thereby reduce their vulnerability to climate change impacts. This outcome will be achieved through the activities below.</p> <ul style="list-style-type: none"> <li>• Conducting detailed vulnerability assessments to enhance understanding of the vulnerability of economic sectors operating in the coastal zone.</li> <li>• Strengthening the technical capacity of staff in INAMET, SNPC, local government at project intervention sites and the Ministries of Environment, Fisheries, Tourism and Transport to understand,</li> </ul>

<sup>30</sup> Commission for Biodiversity and Climate Change (CIBAC) was established in 2012 and is attended by ministers of 7 national ministries and their technical advisors. CIBAC is tasked with providing strategic oversight related to climate change in different economic sectors.



		<p>interpret and replicate climate change vulnerability assessments.</p> <ul style="list-style-type: none"> <li>Increasing the adaptive capacity of coastal communities in Baro do Dande by establishing a flood EWS.</li> <li>Strengthening the technical capacity of extension officers from SNPC and other relevant local government representatives at the selected project intervention site to interpret and translate climate information into early warnings relevant for coastal communities.</li> <li>Improving the preparedness of coastal communities at the selected intervention sites to respond to early warnings by developing appropriate response plans.</li> </ul>
		<b>Cost:</b> US\$1,500,000
<b>Outcome 2</b>		
<ul style="list-style-type: none"> <li>Coastal ecosystems – including mangroves and wetlands – in Chiloango, Barra do Dande, Longa and Bero are being degraded through unsustainable land use practices (e.g. clearing for agricultural land) and tree felling for construction. These degraded ecosystems are less able to provide the goods and services upon which coastal communities and sectors depend. These services include provisioning, regulatory, flood protection, cultural and recreational services. This degradation will continue to be exacerbated by the effects of climate change, which are predicted to worsen. Such effects include <i>inter alia</i> climate-related changes to hydrology and water temperature which will further degrade the functioning and health of coastal ecosystems as a result of increased incidences of flooding and changes in salinity.</li> <li>Coastal communities lack the capacity to rehabilitate coastal ecosystems or implement climate-resilient land management techniques. These communities will therefore remain vulnerable to climate change.</li> <li>Ongoing land management projects such as FAO “<i>Integrating climate resilience into agricultural and agro pastoral production systems through soil fertility management in key productive and vulnerable areas using the farmers field school approach</i>” promote climate-resilient agriculture and the integration of related interventions into existing agricultural practices. However, no previous or ongoing initiatives implement EbA, and therefore the approach is not demonstrated in Angola’s coastal areas. As a result, an understanding of the benefits of EbA among coastal communities – including those living in Chiloango, Barra do Dande, Longa and Bero – is very limited.</li> </ul>		<p>The LDCF project will implement a suite of EbA interventions in Chiloango, Barra do Dande, Longa and Bero to rehabilitate coastal ecosystems (including mangroves and wetlands) and to increase the adaptive capacity of coastal communities. These EbA interventions will be complemented by the demonstration of climate-resilient land management techniques that will reduce human pressure on coastal ecosystems by improving the existing livelihood options of local communities. This outcome will be achieved through the activities below.</p> <ul style="list-style-type: none"> <li>Identifying climate-resilient and multi-use plant species for EbA interventions by undertaking biophysical, socio-economic and market assessments at each of the chosen intervention sites.</li> <li>Developing protocols to guide the implementation of EbA interventions.</li> <li>Improving local institutional capacity to adapt to climate change by establishing community management committees in pilot communities. These committees will oversee and coordinate community involvement in LDCF interventions.</li> <li>Enhancing the functioning of coastal ecosystems in the four pilot communities by implementing appropriate EbA and climate-resilient agriculture interventions. These functions included increased: i) productivity of fisheries; ii) recreational opportunities for national tourism; and iii) flood attenuation capacity.</li> <li>Strengthening the adaptive capacity of communities at intervention sites by: i) demonstrating climate-resilient land management techniques; and ii) training local government representatives on EbA and climate-resilient agriculture.</li> <li>Promoting sustainability of adaptation interventions by developing and implementing community-based EbA intervention management plans.</li> <li>Promoting upscaling and replication of EbA in Chiloango, Barra do Dande, Longa and Bero by developing EbA project concept notes. These will be disseminated to the public and private sectors through forums such as the Environment Fund.</li> </ul>

		<b>Cost:</b> US\$3,380,000
<b>Outcome 3</b>		
<ul style="list-style-type: none"> <li>CIBAC will continue to meet on an <i>ad hoc</i> basis. This will continue to result in inefficiencies in the administration of the forum such as: i) poor coordination of activities; and ii) inadequate follow up of actions and delegation of responsible parties tabled at meetings.</li> <li>Ministries for fisheries, agriculture, transport, energy, water and tourism will continue to have a limited understanding of the effects of climate change on Angola's coastal zone, despite the vulnerability of these economic sectors.</li> <li>National government will continue to have limited knowledge of: i) appropriate adaptation interventions for the coastal zone of Angola and ii) the cost-effectiveness of these interventions relative to each other and to no adaptation ,</li> </ul>		<p>The LDCF project will increase inter-ministerial coordination and institutional capacity to adapt to climate change in Angola. The project will also propose revisions to sectoral policies/strategies to integrate climate change adaptation into development planning. This outcome will be achieved through the activities below.</p> <ul style="list-style-type: none"> <li>Strengthening national institutional capacity for adaptation by providing operational and technical support to the Secretariat of CIBAC to: i) arrange regular meetings of CIBAC; ii) prepare agendas for meetings of CIBAC; iii) advocate for the inclusion of climate change considerations into relevant policies, strategies and legalisation.</li> <li>Promoting adaptation at an inter-ministerial level by providing technical support to the Secretariat of CIBAC and CCG for the NAP process in Angola.</li> <li>Increasing the national capacity to access and effectively use climate finance by: i) training the Secretariat of the CIBAC and CCG on the economic impacts of climate change relative to the costs of adaptation in future planning and decision-making; ii) disseminating technical guidelines to policy- and decision-makers on how to integrate adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions; and iii) hosting follow-up sessions to discuss lessons learned and ensure training efficacy.</li> <li>Improving understanding the ministries for economic sectors of the effects of climate change on Angola's coastal zone, disaggregated by the respective fisheries, agriculture, transport, energy, water and tourism sectors, by undertaking a vulnerability assessment.</li> <li>Identifying cost-effective adaptation interventions for coastal areas.</li> <li>Promoting sustainability of economic sectors on the coast by developing policy briefs that identify entry points at the national and provincial level for the integration of climate change adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions.</li> </ul>
		<b>Cost:</b> US\$500,000
<b>Outcome 4</b>		
<ul style="list-style-type: none"> <li>Vulnerable communities and the public have limited awareness and understanding of the effects of climate change and adaptation – including EbA.</li> <li>MINAMB and the MININT have initiated campaigns on climate change awareness. However, there is insufficient information available on the most effective and appropriate adaptation techniques.</li> </ul>		<p>The LDCF project will improve awareness on climate change effects and adaptation among NGOs, private sector stakeholders and academic institutions. This will be achieved through the activities below.</p> <ul style="list-style-type: none"> <li>Conducting an awareness-raising campaign for NGOs, private sector stakeholders, academic institutions working in the coastal zone on: i) climate change effects in Angola; ii) potential interventions for adaptation to climate change, including EbA; and iii) the benefits of EbA for increasing the resilience of livelihoods and coastal communities to climate change.</li> </ul>

		<ul style="list-style-type: none"> <li>Promoting national and regional knowledge sharing on lessons learned and information generated by the LDCF project through national and regional networks, such as AAKNET.</li> <li>Improving awareness of students and staff at local academic institutions through presentation of findings from lessons learned under this LDCF project.</li> </ul>
		<b>Cost:</b> US\$500,000

5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF).

*Adaptation benefits*

The practices promoted and demonstrated by the LDCF project (including *inter alia* EWS, EbA and climate-resilient land management) will be supported by the increased availability of data and information to guide the development of locally appropriate adaptation actions. This will include a vulnerability assessment of Angola's coastal zone that will assist in the identification of sites and activities to be prioritised for adaptation-related initiatives. The increased availability and quality of information on sub-national climate change hazards and vulnerabilities will benefit important economic sectors and livelihood practices (notably including agriculture, forestry fisheries, livestock husbandry and water), thereby helping to safeguard previous and ongoing investments in Angola's socio-economic development. The project will support improved decision-making related to climate-smart development planning by providing investments and technical assistance to the national hydrometeorological agency INAMET, thereby increasing the availability of real-time and spatially explicit climate and weather data. These climate data will support both improved development planning as well as the provision of climate hazard early warnings to coastal communities.

In the long-term, the investments of the LDCF project will generate sustained benefits for coastal communities and vulnerable economic sectors beyond the lifespan of the project. For instance, the project will support the development of standard operating procedures and community response plans for Barra do Dande thereby supporting a long-term system to issue early warnings for this settlement beyond the project implementation period. Additionally, the EbA project concept notes undertaken under Output 2.4 will catalyse private sector investment in the upscaling of LDCF project interventions and thus enable CSR initiatives to invest in EbA and concrete adaptation actions. Lessons learned from EbA and climate-resilient land management interventions in Component 2 will be shared through regional networks such as Africa Adaptation Knowledge Network (AAKNET) and an e-library to be published on the MINAMB website. Therefore, lessons learned through LDCF project interventions will contribute towards a global understanding of best practice adaptation in an LDC context and in other coastal countries. Additionally, the enhanced capacity of the CIBAC (Output 3.1) for the mainstreaming of adaptation into sectoral budgets and plans into the future will support medium- and long-term adaptation to climate change at a national level especially in the context of Angola's NAP process.

The LDCF project will also *inter alia*: i) restore wetland and mangrove ecosystems and; ii) promote community-based management of restored ecosystems. By restoring these ecosystems, the LDCF project will contribute to increasing the availability of resources integral to local livelihoods and nutrition, such as fish. Consequently, the project will help to improve regional food security and secure local livelihoods. Additionally, mangrove restoration and coastal reforestation interventions will contribute toward biodiversity conservation and mitigation of climate change through carbon sequestration<sup>31</sup>.

6) innovativeness, sustainability and potential for scaling up

*Innovativeness*

The LDCF project is innovative in its design to demonstrate interventions that will increase the adaptive capacity of local communities to the negative effects of climate change. In particular, EbA approaches that are informed by

<sup>31</sup> Murray, B, Linwood Pendleton, W. Jenkins, A, and Sifleet, S. 2011. Green Payments for Blue Carbon: Economic Incentives for Protecting Threatened Coastal Habitats. Nicholas Institute Report. NI R 11-04.

indigenous knowledge and scientific information have not been implemented in Angola. Moreover, these EbA interventions will be complemented by climate-resilient land management techniques that will promote conservation of ecosystems – such as agro-ecological and mangrove – in which interventions will be implemented.

Response plans will be developed and piloted with local communities to improve their preparedness for adequate and timely responses to early warnings of climate-related hazards. This innovative approach can be replicated with other communities in Angola in the future.

To promote private sector investment in adaptation, EbA project concept notes will be developed. The private sector is rarely included in adaptation investments, and therefore this is an innovative approach to sustaining, replicating and upscaling EbA in Angola.

To support information sharing, a new public adaptation e-library will be developed on the MINAMB website. The e-library will support information sharing between CIBAC members and other government ministries. While information sharing on adaptation within government is common, innovatively this e-library will also be accessible to the general public, including students from national universities and members of the private sector. Consequently, the e-library will promote information sharing and public/private collaboration on climate change and adaptation in Angola.

### *Sustainability*

The LDCF project was developed through consultation with various stakeholders, including: i) central and local government representatives; ii) delegates of coastal economic sectors such as fisheries, agriculture, transport, energy, water and tourism; iii) NGO's; iv) UNEP and UNDP; and v) coastal communities (see site reports in Appendix 15 of the UNEP project document). Stakeholder consultations that were undertaken during the PPG phase and that will be undertaken during project implementation will support the sustainability of interventions beyond the duration of the project by prioritising the long-term needs of coastal communities and sectors.

The activities of the project include a strong emphasis on capacity-building, training and institutional strengthening, particularly with respect to climate change adaptation. Stakeholders that are targeted for inclusion in the project's capacity-building activities include representatives of local and national government, the private sector, NGOs and academia. It is anticipated that the LDCF investments in strengthening the capacity of these stakeholders will support the sustainability and effectiveness of similar ongoing and future projects in Angola. Further examples of the project's capacity-building activities are detailed further below.

Activities that will strengthen the institutional and technical capacity for EWS in Angola, and adaptation interventions, will be undertaken by the LDCF project. This will be achieved by training relevant stakeholders on these approaches. Within Component 1, relevant representatives from government will be trained on the: i) interpretation of climate information; and ii) development of locally relevant climate forecasts and advisories (Output 1.1). This training will complement ongoing capacity building activities of the UNDP-GEF Cuvelai project, resulting in an increased number of government staff being trained on a broader range of topics. As a result, these stakeholders will have strengthened capacity to improve and sustain the EWS in Angola during and beyond the LDCF project. In particular, this strengthened capacity will enable appropriate and timely responses to climate-related risks and implementation of appropriate adaptation interventions. Additionally, early warning response plans will be developed in consultation with communities at intervention sites, thereby supporting adaptation to climate-induced natural hazards. These communities will also be trained on planning, implementing and maintaining EbA and climate-resilient land management. As a result, these local stakeholders will have the capacity to sustain on-the-ground interventions after the LDCF project is terminated. Moreover, EbA will be designed to provide livelihood benefits for coastal communities, thereby promoting continued ownership amongst these stakeholders.

The proposed project will also strengthen national expertise on climate change adaptation interventions and EbA by prioritising the appointment of national consultants. International consultants will be appointed only where local expertise is limited. In such instances, national and international consultants will work together. As a result, of the collaboration between international and national consultants, the knowledge and capacity of the national consultants on

international best practice for EbA and EWS will be developed and strengthened. This enhanced knowledge will promote national ownership of the project outcomes, thereby contributing to the overall sustainability of the project's benefits.

Within Component 3, programmes will be implemented to improve the awareness of the general public on EWS, climate change and appropriate interventions for adaptation. Moreover, information on lessons learned through the LDCF project will be disseminated through these programmes. Improved awareness of EbA and climate-resilient land management in Angola and benefits of the demonstrations that will be implemented within Component 2 will promote sustainability of these interventions.

Within the LDCF project, research will be undertaken to inform, and strengthen the evidence base for, adaptation options in Angola. This research will include: i) vulnerability assessments – including adaptation options – under Outcome 1 for coastal zones in Angola; ii) assessments on useful and climate-resilient species under Outcome 2; and iii) economic impact assessments under Outcome 3. The knowledge that is generated through this research will promote sustainability of project interventions and may pave the way for new projects that build on them to address vulnerability issues or research gaps. Moreover, this knowledge will inform the design of future adaptation interventions in Angola. In addition, involvement of academia and students will potentially incentive new research lines at the national level in those related areas.

Importantly, the LDCF project will benefit from the UN's previous experiences in Angola, particularly the GEF LDCF project – implemented by UNDP – promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angolan's Cuvelai River Basin. The LDCF project will build on the lessons learned from this project – and other initiatives for ecosystem restoration and management – to avoid pitfalls that have been experienced.

#### *Potential for scaling up*

The LDCF project interventions – and the benefits derived from these interventions – are designed to be replicable in other areas of Angola and in other LDCs within the region. To facilitate effective replication by Ministries such as MINAMB and MINAGRI, lessons learned and knowledge generated during the project implementation will be documented and disseminated through appropriate national and regional networks such as the Africa Adaptation Knowledge Network (Output 4.1). Additionally, knowledge and awareness-raising activities will be undertaken to improve the understanding of climate change risks and adaptation among a variety of non-governmental stakeholders including NGOs, the private sector, academia and the general public. These activities will promote replication of interventions outside of project sites. Importantly, the project design is also aligned with national policies, strategies, and legislation for Angola (see Section 3.6), which will further facilitate replication.

The cost-effectiveness of EbA and climate-resilient land management will promote replication of these approaches amongst: i) vulnerable coastal communities who do not have access to financial capital; and ii) representatives of important economic sectors that will benefit from increased investments in EbA, such as the fisheries and agriculture sectors. Moreover, a participatory approach will be adopted throughout the LDCF project, thereby promoting ownership of interventions amongst local and national stakeholders. This ownership will support the integration of cost-effective adaptation interventions into: i) local planning (e.g. preparation of disaster response plans); and ii) sectoral strategies, budgets and plans.

Under Output 2.1, protocols will be developed for EbA implementation. These protocols will incorporate lessons learned and best practices from: i) ongoing ecosystem restoration projects in Angola; and ii) other EbA projects in southern Africa and coastal countries. Importantly, these protocols will contribute to the technical knowledge base on EbA in Angola, thereby facilitating replication. These protocols will be designed for particular ecosystems (i.e. coastal forests, mangroves and wetlands). Consequently, they will promote the use of EbA in similar landscapes throughout Angola in the future.

Scaling up of this approach will also be promoted through the EbA concept notes that will be developed for the private sector. These notes will support an enabling environment for the private sector to make social investments using CSR

budgets that will generate multiple social, ecological and climate change benefits. For more information about replicability, please view Section 3.9 of the UNEP project document and Section 2.7 of the UNDP project document.

**A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/A

**A.3. Stakeholders. Elaborate on how the key stakeholders engagement, particularly with regard to civil society and indigenous people, is factored in the preparation and implementation of the project.**

The implementation strategy for the LDCF-financed project includes extensive stakeholder participation. Details of the stakeholder participation during the PPG phase are provided in Section 2.5 and Appendix 16 of the UNEP PD. Stakeholder engagement will be continuous throughout the project implementation phase, beginning with the project inception workshop. Stakeholders will be consulted throughout the implementation phase to: i) promote community understanding of the project's outcomes; ii) promote local community ownership of the project through engaging in planning, implementing and monitoring of the interventions; iii) communicate to the public in a consistent, supportive and effective manner; and iv) maximise complementation with other ongoing projects. CIBAC will act as forum for project managers from baseline projects and other ongoing initiatives to discuss and develop synergies their projects and the LDCF project. The participation of stakeholders per outcome is detailed in the table below.

Table 2: Stakeholder participation per outcome.

Outcome	Output	Lead coordinating institutions or	Important stakeholders/ partners	Key responsibilities
1.Strengthened technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to coastal communities.	1.1 A set of detailed sectoral and localised vulnerability assessments for Angola's coastal zone.	MINAMB	<ul style="list-style-type: none"> <li>Climate change adaptation/ vulnerability consultancy</li> <li>National Industry Experts</li> <li>INAMET</li> <li>MINAMB (GAC)</li> <li>Sectoral ministries</li> <li>CNPCB</li> <li>Academia – Agostinho Neto University</li> </ul>	Overseeing: <ul style="list-style-type: none"> <li>Coastal climate change vulnerability assessment and sector specific vulnerability assessments.</li> <li>Disseminated of vulnerability research within various national institutions.</li> </ul>
	1.2 Operational early warning system developed in a selected project intervention site.	MINAMB	<ul style="list-style-type: none"> <li>International meteorological/ EWS specialist</li> <li>Training/ community engagement consultancy</li> <li>INAMET</li> <li>CNPCB</li> <li>INRH</li> <li>Ministry of Family and Women Promotion</li> </ul>	Coordinating: <ul style="list-style-type: none"> <li>Implementation of operational EWS developed in a selected project intervention site.</li> <li>Training of decentralized CNPCB service providers, extension officers from CNPCB and other relevant local government representatives.</li> <li>Development of flood early warning response plans with pilot communities.</li> </ul>

Outcome	Output	Lead coordinating institutions or	Important stakeholders/ partners	Key responsibilities
				<ul style="list-style-type: none"> <li>Promoting gender sensitive training.</li> </ul>
2. EbA technologies and climate-resilient land management techniques transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability, and extreme events.	2.1 A suite of EbA interventions, appropriate to local ecosystems, implemented in intervention sites in Chiloango, Barra do Dande, Longa and Bero.	MINAMB	<ul style="list-style-type: none"> <li>Implementing organisation</li> <li>International EbA/ land restoration expert</li> <li>Community engagement expert</li> <li>Academia – Agostinho Neto University</li> <li>Community management committees</li> <li>Local fishing cooperatives, NGO groups and religious organisations</li> <li>MINEA</li> <li>MINPES</li> </ul>	Overseeing: <ul style="list-style-type: none"> <li>EbA interventions in intervention sites.</li> <li>Establishment of community management committees in pilot communities.</li> <li>Development and implementation of community-based EbA intervention management plans.</li> </ul>
	2.2 Climate-resilient land management appropriate to local conditions demonstrated in pilot communities in Chiloango, Barra do Dande, Longa and Bero.	MINAMB	<ul style="list-style-type: none"> <li>Implementing organisations</li> <li>International EbA/ land restoration expert</li> <li>Community engagement expert</li> <li>Community management committees</li> <li>Local fishing cooperatives, NGO groups and religious organisations</li> <li>MINEA</li> <li>MINPES</li> <li>IDA</li> </ul>	Overseeing: <ul style="list-style-type: none"> <li>Implementation of a range of climate-resilient land management interventions within and around pilot communities.</li> <li>Establishment of demonstration plots at each project intervention site</li> </ul>
	2.3 Pilot communities trained on EbA, climate-resilient land management, and early warning response plans.	MINAMB	<ul style="list-style-type: none"> <li>Community engagement expert</li> <li>Training Consultancy</li> <li>Implementing organisations</li> <li>Local fishing cooperatives, NGO groups and religious organisations</li> <li>MINEA</li> <li>MINPES</li> <li>IDA</li> </ul>	Coordinating: <ul style="list-style-type: none"> <li>Training of coastal communities on: i) EbA and the benefits of this approach; ii) climate-resilient land management techniques; iii) methods to implement and maintain both EbA interventions and climate-resilient land management; and iv) early warning response plans.</li> <li>Hosting of experience-sharing events where people from nearby communities are</li> </ul>

Outcome	Output	Lead coordinating institutions or	Important stakeholders/ partners	Key responsibilities
				trained on climate-resilient land management techniques.
	2.4 EbA project concept notes developed for private sector upscaling of EbA interventions.	MINAMB	<ul style="list-style-type: none"> <li>• MINAMB (GAC)</li> <li>• MINPET</li> <li>• Implementing organisations</li> </ul>	<p>Coordinating:</p> <ul style="list-style-type: none"> <li>• Developing of EbA project concept notes for private sector upscaling of EbA interventions.</li> </ul> <p>Implementing:</p> <ul style="list-style-type: none"> <li>• Engagements with the private sector through relevant forums – such as the Environmental Fund – to disseminate EbA project concept notes and raise awareness about the corporate social investment benefits of such projects.</li> </ul>
3. Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola.	3.1 Technical support and training provided to the Secretariat of the CIBAC and Climate Change Cabinet to improve inter-ministerial coordination and institutional capacity of the CIBAC.	MINAMB	<ul style="list-style-type: none"> <li>• Members of the CIBAC, including, but not limited to, <i>inter alia</i>: MINAMB, MINADER, MINEA (INRH) and INAMET</li> <li>• Environmental economic/ policy expert</li> <li>• TA</li> </ul>	<p>Overseeing:</p> <ul style="list-style-type: none"> <li>• Conducting of a gap assessment on the technical capacity, information-sharing mechanisms, institutional arrangements and coordination mechanisms of the CIBAC.</li> <li>• Provision of operational and technical support to the Secretariat of the CIBAC</li> </ul>
	3.2 Policy briefs and technical guidelines produced to support the integration of climate change adaptation into relevant policies and plans, including their related budgets.	MINAMB	<ul style="list-style-type: none"> <li>• Environmental economic/ policy expert</li> <li>• TA</li> <li>• MINAMB (CCC)</li> <li>• Sectoral Ministries (related to fisheries, agriculture, transport, energy, water and tourism)</li> </ul>	<p>Coordinating:</p> <ul style="list-style-type: none"> <li>• Assessments of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector</li> <li>• Development of policy briefs detailing the economic impacts of climate change in coastal areas, potential adaptation interventions.</li> </ul>
4. Improved awareness about climate change impacts and adaptation among non-governmental stakeholders.	4.1 Public awareness programme undertaken to inform non-governmental stakeholders including NGOs, academia and private sector about climate	MINAMB	<ul style="list-style-type: none"> <li>• Communications expert</li> <li>• TA</li> <li>• MINAMB</li> <li>• NGOs</li> <li>• Academia</li> <li>• Private sector</li> </ul>	<p>Overseeing:</p> <ul style="list-style-type: none"> <li>• Awareness-raising campaigns for NGOs, relevant private sector stakeholders, academic institutions and the general public.</li> <li>• Disseminating lessons learned and knowledge generated through the project through appropriate national and regional networks.</li> </ul>



Outcome	Output	Lead coordinating institutions or	Important stakeholders/ partners	Key responsibilities
	risks and adaptation.			

**A.4. Gender Considerations. Elaborate on how gender considerations were mainstreamed into the project preparation, taking into account the differences, needs, roles and priorities of men and women.**

In Angola, the adaptive capacity of both men and women is compromised by challenges such as to: i) limited access to weather and climate forecasting information; ii) limited access to natural resources such as water; and iii) limited participation in social networks that provide resources or technical support to adapt to the observed and predicted effects of climate change. However, Angolan women are considered particularly sensitive to the effects of climate change because they tend to be responsible for domestic responsibilities such as cooking and collection of fuel and water for household use. Additionally, women in artisanal fishing communities are responsible for selling the fish that are caught by community members. Consequently, the livelihoods of these women are directly linked to the health of fish stocks, which are predicted to be negatively affected by alterations in Benguela Current. Currently, most women in rural parts of Angola have insufficient access to relevant information and skills to manage the negative effects of climate change on food, fuel and water security. A reduction in access to these resources therefore has detrimental implications for women and families in terms of i) overall health; ii) nutrition; and iii) livelihood income.

The LDCF project will address the vulnerability and low adaptive capacity of women to climate change by mainstreaming gender considerations into the design and implementation of EbA activities. For example, the project will work directly with fishing cooperatives and associations, several of which are focussed on the sale of fish and therefore have almost exclusively female membership. To integrate gender into relevant activities, within Component 1 the LDCF project will collaborate with the Ministry of Family and Women Promotion. Under Component 2, gender specific indicators and targets will be developed to monitor the progress of gender mainstreaming into EbA activities and the development of alternative livelihoods. Under all Components, gender sensitivity will be incorporated into trainings so that female participants are empowered to participate fully in the training sessions and related EbA activities. Trainers will be required to have the skills and experience necessary to plan and facilitate gender-sensitive training. Finally, the project results framework has used gender-disaggregated targets to ensure gender is mainstreamed throughout.

**A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):**

Table 3 below describes the risks that have been identified, their associated impacts and countermeasures.

Table 3: Identified risk, associated impacts and counter-measures.

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
National level risks						
1	Institutional capacity and relationships between line ministries are not sufficient to provide effective solutions to	Multi-sectoral adaptation interventions are compromised and interventions are confined to	Medium	<ul style="list-style-type: none"> <li>Develop technical capacity of the CIBAC to support inter-ministerial coordination and planning around climate change adaptation.</li> <li>Ensure technical representatives from all line ministries are included in the</li> </ul>	Institutional	P= 3 I= 4

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
	climate problems that are complex and multi-sectoral.	those sectors willing to engage in cross-sectoral dialogue. The vulnerability of certain sectors and Angola as a whole to climate change is not fully addressed.		<p>training provided to the secretariat of the CIBAC. This will increase institutional capacity within, and facilitate coordination between different ministries.</p> <ul style="list-style-type: none"> <li>• Produce sectoral vulnerability assessments for different line ministries to promote support for the LDCF project activities.</li> </ul>		
2	Long- and medium-term climate change adaptation priorities undermined by national emergencies or civil unrest.	Project activities are interrupted. Natural and financial capital is lost.	Medium	<ul style="list-style-type: none"> <li>• The project manager and TA will keep abreast of national events and politics to ensure knowledge of any potential disruption to project activities at intervention sites. This to allow for the timely implementation of contingency plans. Should civil unrest/national emergencies be deemed by the project manager and TA to be a direct threat to project activities at implementation sites, alternative project sites identified during the PPG phase will be considered.</li> </ul>	Social, environmental	P= 1 I= 4
3	National financial instability due to high dependence on oil prices	Climate integration into national budgets are undermined by several cuttings in national budgets	High	<ul style="list-style-type: none"> <li>• Strengthen advocacy efforts focused on long- and medium-term economic benefits on integration of adaptation options into national budgets and communicate these to policymakers throughout.</li> <li>• Engage with the private sector through EbA project concept notes to promote investments outside of the national budget to sustain and upscale climate change adaptation interventions.</li> </ul>	Economic, Political	P= 2 I= 3
4	Unclear land tenure reduces the sustainability of EbA and climate-resilient land restoration interventions.	Communities degrade restored land as they consider it individually owned.	Low	<ul style="list-style-type: none"> <li>• Land that will be restored is owned by the state. The project will raise community awareness of this through training of local communities.</li> <li>• Ensure technical representatives from all line ministries are included in the training provided to the secretariat of the CIBAC. This will increase institutional</li> </ul>	Political	P= 1 I= 4

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
				capacity within, and facilitate coordination between different ministries, ensuring that different ministries do not plan to use restored land for alternative purposes.		
Local level risks						
5	Current climate and seasonal variability and/or hazard events prevent implementation of planned activities.	Economic loss or physical damage to infrastructure delays implementation of project activities.	Medium	<ul style="list-style-type: none"> <li>• Meteorological predictions and seasonal variability at each site will be used to inform the selection of climate-resilient species and techniques to: i) assist plant growth particularly in the seedling/sapling phase; and ii) reduce risk of damage from climate-induced natural hazards.</li> <li>• Intervention sites will be mapped to establish the extent to which they are vulnerable to specific natural hazards. This mapping will be used to inform restoration practices and techniques.</li> <li>• Select EWS equipment that is resilient to climate-related risks.</li> </ul>	Economic	P= 3 I= 3
6	Communities do not support interventions and do not adopt ecosystem management activities for adaptation during or after the LDCF project because of limited immediate benefits of EbA.	Unsustainable use of natural resources continues, leading to further degradation of ecosystems. Climate-resilient land management techniques are not implemented in the long term. Consequently, communities continue to be vulnerable to climate-induced natural hazards.	Medium	<ul style="list-style-type: none"> <li>• Co-develop community based management plans with coastal communities to guide management activities over time.</li> <li>• Implement alternative livelihoods that have been deemed financially, technically and socially viable/feasible to reduce reliance on intensive land use.</li> <li>• Engage with community stakeholders through-out the project's implementation to strengthen their continued buy-in into the LDCF project.</li> <li>• Actively involve coastal communities in project implementation through <i>inter alia</i>: i) establishing community management committees; ii) liaising with the community management committees and other community members to identify intervention sites for</li> </ul>	Social, environmental	P= 2 I= 3

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
				<p>EbA interventions; and iii) developing and implement community-based EbA intervention management plans.</p> <ul style="list-style-type: none"> <li>• Raise public awareness on the capacity of the restored ecosystems to increase community resilience to climate change.</li> <li>• Foster a bottom-up, grassroots approach throughout the project's development and implementation phases.</li> <li>• Improve capacity building and training of the communities to improve their understanding of the adaptation benefits of the EbA activities.</li> <li>• Implement activities that have direct benefits in addition to the ecosystem restoration interventions.</li> </ul>		
7	Lack of already established implementing partners at the local level and/or low capacity level for the implementation of local interventions	Low implementation rate; Low capacity of communities engagement;	Medium	<ul style="list-style-type: none"> <li>• A criteria for site selection during the PPG phase was the presence of suitable implementing partners at intervention sites, so this risk has been significantly minimized.</li> <li>• If local implementing partners are unable to deliver results timeously, national NGOs or partners, such as Development Workshop or ADRA, will be engaged to coordinate project interventions at the project sites.</li> </ul>	Technical	
8	Priority interventions implemented are not found to be cost effective.	Project interventions are not upscaled for large-scale EbA programmes.	Low	<ul style="list-style-type: none"> <li>• Use cost effectiveness as a core principle in the implementation of adaptation measures (EbA and EWS).</li> <li>• Record detailed information on cost effectiveness. Such information will be widely disseminated for use by future projects and research.</li> </ul>	Economic	P= 1 I= 3
9	Baseline project activities not achieved as planned.	The LDCF project activities are compromised as a result of a lack of existing interventions	Medium	<ul style="list-style-type: none"> <li>• Design activities that build on baseline projects but do not depend entirely on the success of the baseline projects. The activities to be implemented within the LDCF project are designed to be beneficial to</li> </ul>	Economic	P= 3 I= 2

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
		upon which to build.		the coastal communities even if they are implemented alone.		
10	Large-scale infrastructure development – such as the Port near Barro do Dande – takes place within project areas.	Project activities are disrupted or delayed.	Medium	<ul style="list-style-type: none"> <li>• The project manager and TA will work with appropriate governmental agencies to ensure prioritisation of the LDCF project in the project areas.</li> <li>• The PMU will coordinate with other line ministries to ensure that they are up to date on the location of planned infrastructure development.</li> <li>• A port is to be constructed near Barro do Dande (see site reports in Appendix 15 in UNEP PD for further details). Based on stakeholder consultations, the port construction will be geographically removed (around 10-15km away) from the LDCF project intervention sites. The PMU will keep track of plans for the port development and if, during the inception phase, the construction of the port is deemed to have a high risk of negatively impacting on the project activities then an alternative site may be selected.</li> </ul>	Institutional	P= 3 I= 4
11	Uncontrolled settlements into the natural ecosystems.	The restoration activities are unsustainable.	High	<ul style="list-style-type: none"> <li>• Raise awareness of the national and local government on this potential risk, with a focus on coastal sectors.</li> <li>• Raise awareness of communities on the benefits of restored natural ecosystems for adaptation and their livelihoods.</li> <li>• Maximise the economic benefits from sustainable natural resource management.</li> </ul>	Social, environmental	P= 4 I= 4
12	Theft and vandalism of early warning and climate monitoring equipment.	The reliability of weather reports, forecasts, and early warnings will be compromised	Medium	<ul style="list-style-type: none"> <li>• Hold public awareness workshops to sensitise communities on the importance of EWS infrastructure.</li> <li>• Involve local stakeholders in the maintenance of equipment and the collection of data.</li> <li>• Install fencing around</li> </ul>	Social Technical	P= 1 I= 4

	Description of risk	Potential consequences	Risk rating	Mitigation measures/proposed interventions	Risk category	Probability & Impact (1=low, 5=high)
		in pilot areas if a significant proportion of infrastructure is no longer functional.		equipment in high risk areas.		

**A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

**Institutional arrangements**

The LDCF project will be implemented over a four-year period (2016–2019). UNEP and UNDP will be the GEF Implementing Agencies (IAs) for the project. UNEP will provide oversight for Component 1 and 2 (Outcomes 1 and 2) of the project. UNDP will oversee Component 3 (Outcomes 3 and 4). Two separate project documents outline the responsibilities of each agency within a common logical framework. For Components 1 and 2 the project will be nationally executed by the Ministry of Environment (MINAMB), although some specific support services may be provided by the UNDP CO on a cost-recovery basis, upon request by UNEP. For Component 3, the project will be nationally executed by the Ministry of Environment (MINAMB) with UNDP Country Office (CO) direct support in line with the Standard Basic Assistance Agreement (SBAA of 18 February, 1977) and the UNDP Country Programme Action Plan (CPAP 2009–2014) signed between the UNDP and the Government of Angola.

Through all three components, the LDCF project will be building capacity for adaptation planning, undertaking pilot EWS and EbA interventions, and developing climate change outreach and awareness raising. All of these interventions correspond with areas of work within Sub-programme 1 – Climate Change under the current UNEP Programme of Work (PoW 2014–15). Under this Climate Change Sub-programme the project will be contributing to PoW Output 2 (Technical support provided to countries to implement ecosystem-based adaptation demonstrations and supporting adaptation approaches, and to scale these up through partnerships at the regional and national levels) and Output 4 (Technical support provided to countries to address adaptation planning and reporting requirements under the Framework Convention on Climate Change), under expected accomplishment A (Ecosystem-based and supporting adaptation approaches are implemented and integrated into key sectoral and national development strategies to reduce vulnerability and strengthen resilience to climate change impacts).

Through Component 3, the LDCF project will be strengthening institutional capacity to address climate change. These interventions correspond with areas of work within the UNDP Strategic Plan Outcome 5, which focuses on reducing the likelihood of conflict and lowering the risk of natural disasters, including from climate change. The LDCF project will contribute to UNDP's Strategic Plan Outcome 5 and specifically to Output 5.4 (Preparedness systems in place to effectively address the consequences of and response to natural hazards).

**Management structure**

**Executing Agency**

MINAMB is the Executing Agency (Implementing Partner<sup>32</sup>) of the LDCF project. It will provide overall leadership for the project in close collaboration with: i) INAMET; ii) INARH; iii) the Ministry of Agriculture and Rural Development (MINADER); and iv) the Governments of the Cabinda, Bengo, Kwanza Sul and Namibe Provinces.

<sup>32</sup> as per UNDP terminology

MINAMB will be responsible for achieving the LDCF project objective and will designate a senior official from the GAC to act as the National Project Director. His/her primary responsibility will be to ensure that the LDCF project produces the results specified in the project document to the required standard of quality and within the specified time and cost constraints<sup>33</sup>. The National Project Director will work closely with all partner institutions to link the project with complementary national programmes and initiatives. MINAMB will also designate an alternate that will act as National Project Director in his/her absence to ensure continuity.

### *Implementing Arrangements*

As the **executing agency**, MINAMB will have full responsibility to support accountability, transparency, effective management and timely achievement of results.

The day-to-day management of the LDCF project will be the responsibility of the **Project Management Unit (PMU)**, under the direct supervision of the National Project Director. The PMU will be based in Luanda and will comprise the following fulltime staff: i) National Project Manager; ii) Finance Manager; iii) Project Assistant; and iv) a Technical Advisor. The PMU will be further supported by an international Monitoring and Learning Specialist for the UNEP components.

A **National Project Manager** will lead the PMU. The National Project Manager will be recruited<sup>34</sup> on a full-time basis to coordinate the execution of the LDCF project under the guidance of the National Project Director. He/she will be accountable to the National Project Director for *inter alia*: i) the quality, timeliness and effectiveness of the interventions carried out; and ii) the transparent use of project funds<sup>35</sup>.

The National Project Manager will produce **annual work plans** (with associated cash advance requests/annual budget plan)<sup>36</sup>, to be approved by the PSC at the end/beginning of each year. These plans will provide the basis for allocating resources to planned activities. Once the PSC approves the annual work plan it will be sent to the UNEP Task Manager and UNDP Regional Technical Specialist for Climate Change<sup>37</sup> for clearance with respect to GEF funds. Once the annual work plan and associated cash advance requests/annual budget plan is cleared by UNEP/UNDP, GEF funds will be released.

The National Project Manager will manage the project in line with all work plans, and in accordance with GEF and UNEP/UNDP guidelines. In addition, he/she will deliver **quarterly progress reports** to the National Project Director, UNEP Task Manager and UNDP CO. These reports will include information on: i) the status of activities; and ii) challenges encountered on the ground during project execution. In particular, the National Project Manager will: i) provide on-the-ground information for UNEP/UNDP progress reports; ii) engage with stakeholders; iii) organise the PSC meetings; iv) provide technical support to the project, including measures to address challenges to project implementation; and v) participate in training activities, report writing and facilitation of expert activities that are relevant to the National Project Manager's area of expertise.

The National Project Manager will also produce<sup>38</sup>: i) UNDP and UNEP annual financial reports, with support from the **Financial Assistant**; ii) bi-annual progress reports and PIRs; iii) budget revisions; and iv) any other reports at the request of the PSC. These reports will summarise the progress made by the project against the expected results, explain any significant variances and detail the necessary adjustments. Consequently, they are the main reporting mechanism for monitoring project activities.

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<sup>33</sup> within the conditions laid down by the Project Steering Committee and in line with UNEP and UNDP Policies and Procedures

<sup>34</sup> by MINAMB using national rules and regulations and ensuring international standards on recruitment processes

<sup>35</sup> The Executing Agency is also accountable for the use of LDCF project funds.

<sup>36</sup> under the supervision of the Project Director and with support from the rest of the PMU

<sup>37</sup> at the GEF Regional Coordinating Unit (RCU)

<sup>38</sup> under the supervision of the Project Director and with support from the rest of the PMU

A national **Project Administrative Assistant** will be hired by MINAMB to directly support the National Project Manager on administrative issues. In addition, a driver for the project will be recruited by MINAMB.

Because of the complexity of the project, a **Finance Manager** will be recruited to: i) administer the finances of the LDCF project; and ii) support and capacitate the GAC on financial matters. The Finance Manager will produce the necessary financial reports for both agencies.

An international **Technical Advisor** (P3) will be recruited by UNDP with UNEP support (on the explicit request by the GoA). He/she will be based in Luanda with regular field missions to project sites. Under the overall guidance of the UNDP Country Director, UNDP Regional Technical Advisor and UNEP Task Manager and direct supervision of the Programme Specialist for Climate Change (UNDP Angola), the Technical Advisor will be responsible for providing overall technical backstopping, monitoring and operational support to the project. This Technical Advisor will be an expert on adaptation and will provide technical support to project activities and to the CCC on related matters. The Technical Advisor will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis. This TA will not provide any oversight services and is considered project staff.

An international **Monitoring and Learning Specialist** will be recruited by UNEP for support of Components 1 and 2 – he/she will be based internationally and will support the PMU on a part-time basis. This support will include in-country missions to Angola at least twice a year. The Monitoring and Learning Specialist will support the PMU with: i) monitoring; ii) reporting; iii) knowledge sharing; and iv) adaptive management.

The Project Implementation Support Team will comprise of national and international experts contracted to perform specific tasks required by the project related to *inter alia* climate vulnerability, EWS and ecosystem restoration. In addition, competent organisations – such as NGOs or local consultancies – hired through a competitive process to implement EbA and climate-resilient agriculture<sup>39</sup> will be included in this support team.

### Project Management Costs

The PMU, and the duties it will perform, is essential for the successful implementation of the LDCF project. However, the costs related to establishing this unit – including staff salaries, office rent, office equipment and communication costs – will be more than the project management costs specified in the PIF for this project. This is due primarily to the high cost of living in Angola. Indeed, Luanda is consistently ranked as the most expensive city in Africa to live in<sup>40</sup> and has amongst the highest salary post-adjustments for any country within the UN system. Despite efforts to reduce project management costs, such as cost sharing with the GEF/UNDP Cuvelai project (GEF ID: 5166) and finding an efficient alternative that has enabled a reduction of 50% of the office rental budget, project management costs remain high. Therefore, to ensure the successful implementation of the LDCF project management costs have been increased from 5% of the project costs to 7.2% of the project costs (US\$414,000).

### Project assurance

UNEP GEF Climate Change Adaptation Unit, the Angolan UNDP Country Office and UNDP-GEF Unit will monitor the project's implementation and achievement of the project outcomes and outputs – and ensure the proper use of UNEP and UNDP GEF funds.

UNEP will be responsible for the recruitment of mid-term and terminal evaluators through UNEP's independent Evaluation Office, and the required follow-up. UNDP as co-implementing agency will be consulted for input and comments throughout the evaluation process.

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<sup>39</sup> in partnership with local communities in Chiloango, Barra do Danda, Longa and Bero

<sup>40</sup> Mercer 2014 Cost of Living Survey. <http://www.mercer.com/newsroom/cost-of-living-survey.html>. Accessed 16 March 2014.



As requested by the Government of Angola, the UNDP Country Office will provide the following support services for implementation of this Component 3 of the LDCF project:

- payments, disbursements and other financial transactions;
- recruitment of staff, project personnel and consultants;
- procurement of services and equipment, including disposals;
- organisation of training activities, conferences, workshops;
- travel authorization, GoA clearances ticketing and travel arrangements; and
- shipment, custom clearance and vehicle registration.

While the administrative and financial conditions are created for the fully national implementation by the GoA, ad hoc requests for support may be made to the UNDP CO by UNEP if deemed appropriate in order to implement the project as per the work plan, as UNEP is not based in the country. The UNDP cost recovery policy will be applied to these kind of services. Based on the Universal Pricing List, an estimate has been made of these fees and included in the project budget so that they are already accounted for.

### Project Steering Committee

The PSC is the group responsible for making management decisions by consensus when guidance is required by the National Project Manager. This will include *inter alia* approval of project work plans and any revisions by UNEP, UNDP and the MINAMB. In order to ensure UNEP and UNDP's ultimate accountability, PSC decisions should be held to a standard of cost-effectiveness, fairness, integrity, transparency and effective international competition. Project reviews by this group will be made at designated decision points during the running of a project, or as necessary when raised by the National Project Manager.

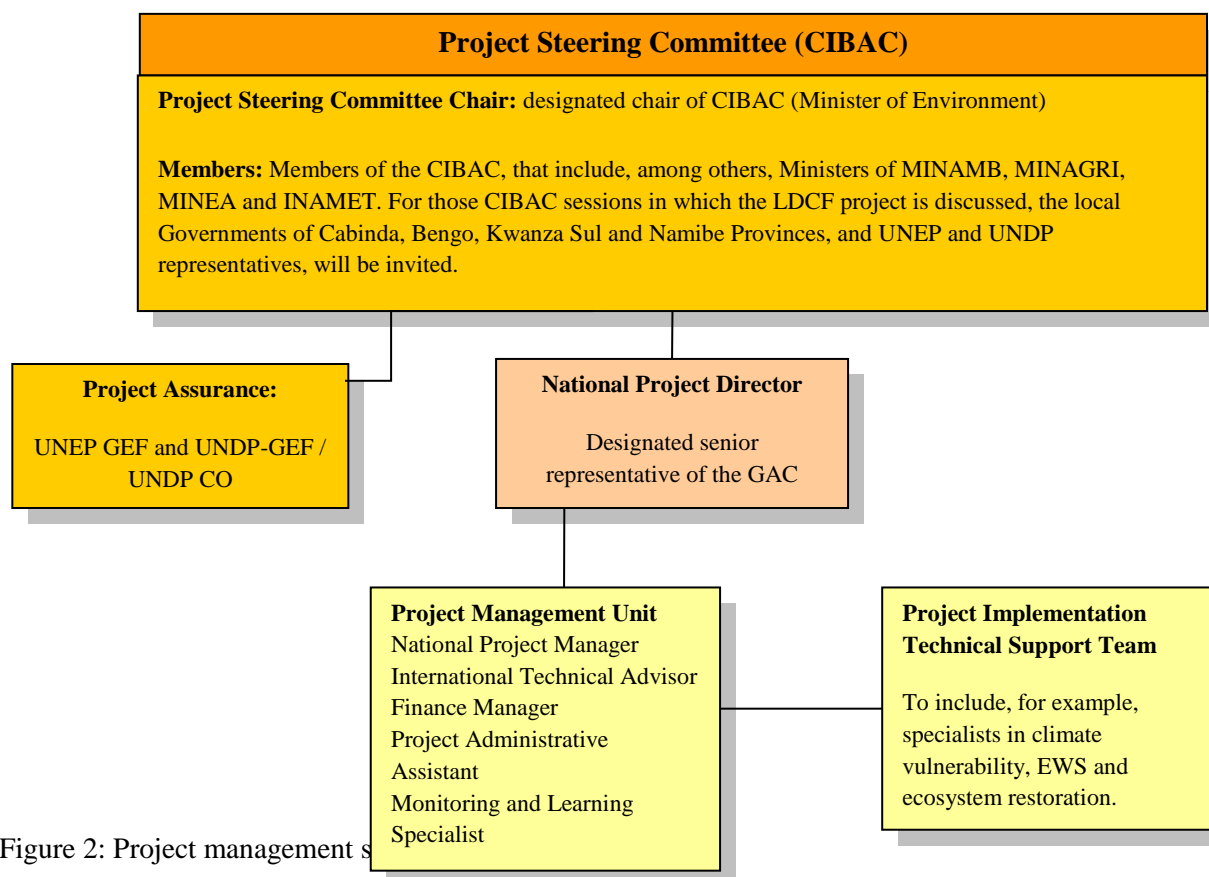


Figure 2: Project management structure

The Inter-ministerial Commission for Biodiversity and Climate Change (CIBAC) will provide the forum for the PSC. The PSC will also be comprised of representatives from UNEP and UNDP, and local Governments of Cabinda, Bengo, Kwanza Sul and Namibe Provinces, as illustrated in Figure 2. Reasons that the CIBAC has been chosen include: i) avoiding duplication of current structures; and ii) because this forum is the highest coordination and decision-making body in relation to climate change. Representatives of other stakeholder groups may be included in the PSC, as considered necessary. The PSC will meet at least twice per annum (more often if required). Specific roles of the PSC are outlined in Appendix 11 of the UNEP project document.

### Project Support Team

Project implementation will be supported by contractors, selected according to UNEP and UNDP procurement rules.

The MINAMB may contract other entities – defined as Responsible Parties – to undertake specific project tasks through a process of competitive bidding according to procurement rules and regulations of the GoA. However, if the Responsible Party is another government institution, Inter-governmental Organisation or a United Nations agency, competitive bidding will not be necessary and direct contracting will be applied. Confirmation of direct contracting will need to comply with comparative advantage, timing, budgeting and quality criteria. If direct contracting criteria cannot be met, the activity will be open to competitive bidding.

### Financial procedures

UNEP will provide oversight to the financial arrangements and procedures under Components 1 and 2, as per UNEP financial rules and regulations.

The financial arrangements and procedures for the project component 3 are governed by the UNDP rules and regulations for National Implementation Modality (NIM)<sup>41</sup> with UNDP CO direct support.

For the Component 3 and given the NIM scenario that applies in Angola, most financial transactions will be conducted through direct payment requests made by MINAMB. The National Project Manager – with support from the Project Management Unit – will prepare Request for Direct Payments and Request for Advance of Funds. These will be signed by the National Project Director (or alternate) to be sent to UNDP CO. The LDCF project will be audited in accordance with UNEP and UNDP Financial Regulations and Rules and applicable audit policies.

### Coordination with other initiatives

Several GEF and non-GEF projects that focus on adaption to climate change or ecosystem restoration are currently being implemented in Angola. These initiatives provide opportunities for synergies and knowledge exchange with the LDCF project. The project management team will coordinate efforts and establish linkages with similar projects. The related projects are described below.

#### *GEF Initiatives*

The LDCF-funded UNDP project Promoting Climate-Resilient Development and Enhanced Adaptive Capacity to Withstand Disaster Risks in Angola's Cuvelai River Basin (2014–2017) (US\$4,416,210) is a climate change adaptation initiative that addresses climate-related vulnerabilities through on-the-ground investments and capacity building of GoA and local communities. Components of this project include: i) transferring technologies – and related capacity building – for climate and environmental monitoring; ii) enhancing sustainable rural livelihoods; and iii) increasing understanding of climate change adaptation and practices amongst local communities and government. Component 1 of

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<sup>41</sup> There are two scenarios of NIM: (a) full national implementation, in which national implementing partners directly assume the responsibility for the related output (or outputs) and carry out all activities towards the achievement of these outputs; and (b) national implementation, in which the national implementing partner assumes full responsibility for the related output(s) but where, at the request of the government, UNDP as a responsible party undertakes specific and clearly defined activities for the implementing partner.

the LDCF project is aligned with the Cuvelai project, which contributes to the development of comprehensive famine and flood early warning systems (FFEWS) in the Cuvelai Basin. Lessons learned from the Cuvelai project have been integrated into the design of the LDCF project. Moreover, the LDCF project will be emulating some of the Cuvelai project's early warning interventions in Barra do Dande.

The FAO climate change adaptation project entitled "Integrating and Up-Scaling Climate Resilience into Agricultural and Agropastoral Production Systems through Soil Fertility Management in Key Productive and Vulnerable Areas Using the Farmers Field School Approach" is currently at PIF stage (US\$4,416,210). The overall objective of the project will be to increase the resilience of small-scale farmers to climate variability and extreme weather events, as well as the consequent degradation of ecosystems. This initiative will be based in the Central Plateau interior of Angola while the LDCF project will be based in the country's coastal areas. However, there are opportunities for engagement and sharing lessons learned between the two projects. In particular, lessons learned from this FAO GEF project will inform the design and implementation of climate-resilient land management interventions under Component 2 of the LDCF project.

The FAO project entitled "Enhancing Climate Change Resilience in the Benguela Current Fisheries System" (2012–2017) (US\$4,725,000) is a GEF LDCF-funded climate change adaptation project, which is currently implementing participatory adaptive strategies to promote food and livelihood security in the coastal regions of Angola. Given that they are both implementing interventions in the coastal zone, the LDCF and FAO projects offer many linkages and opportunities for cooperation. During implementation, FAO project managers will be consulted to promote synergies and avoid duplication of interventions. In particular, LDCF project activities to strengthen institutional capacity of local organisations – such as the Committee of the Environment – will complement similar activities under Component 3 of the FAO project.

The Environmental Sector Support Project (ESSP) (2010–2015) (US\$12,314,814) is a nation-wide project funded by AfDB, with counterpart funding from GoA. Initially, this project included three components: i) environmental governance, capacity building and institutional strengthening; ii) integrated environmental conservation and natural resource management; and iii) project management. Thereafter, an additional component related to climate change – approved and funded by GEF (Climate Change) – was incorporated into this project. With GEF support, the project includes interventions to strengthen the institutional capacities of the Ministry of Environment (MINAMB), Ministry of Agriculture (MINAG), NGOs and CSOs to manage the effects of climate change. The LDCF project will develop the capacity of the CCG – which is based within MINAMB – to manage climate change adaptation at a national level.

The AfDB/GEF-LDCF project Integrating Climate Change into Environment and Sustainable Land Management Practices (US\$6,668,182) has four components: i) governance, capacity building and institutional strengthening; ii) integrating climate adaptation measures into Sustainable Land Management (SLM) practices in four demonstration sites – Namibe, Huambo, Kuando Kubango and Cabinda; iii) knowledge management through a coordination mechanism with other projects; and iv) monitoring and evaluation. The LDCF project will undertake EbA and climate-resilient land management interventions in Namibe and Cabinda. These interventions will align with the SLM interventions of the AfDB project.

The UNEP GEF-LDCF project Umbrella Programme for National Communication to the UNFCCC (US\$11,330,000) will strengthen the capacity of the institutions involved in the development of national communications on climate change. Moreover, this initiative will enhance the base of information related to climate change and adaptation. Through Component 3 of the LDCF project, the technical and institutional capacity of the GoA to manage climate change – including integrating adaptation into national policies and plans – will be strengthened. Therefore, the LDCF project is aligned with the Umbrella Programme. During implementation, stakeholders from this programme will be consulted to avoid duplication of capacity-building activities.

Two important ongoing GEF-funded initiatives, which will be aligned with this GEF LDCF funded projects, are the global adaptation projects related to the advancement of the National Adaptation Plans (NAPs) of LDCs. The UNDP/UNEP GEF-LDCF funded project entitled Assisting Least Developed Countries (LDCs) with Country-driven

Processes to Advance National Adaptation Plans (NAPs) 2013-2015 (US\$1,998,000) will strengthen policies and institutional capacities at national and decentralised levels in multiple LDCs, with the objectives of promoting long term adaptation planning and therefore low carbon and climate-resilient human development through initiating the NAP process. The UNDP/UNEP-LDCF project Expanding the Ongoing Support to Least Developed Countries (LDCs) with Country-driven Processes to Advance the National Adaptation Plans (NAPs) (US\$6,200,000) (starting in 2016) will strengthen the institutional and technical capacities of LDCs to start and/or advance their NAP process. This will be achieved by enhancing the capacity of participating countries to advance both medium- and long-term adaptation planning in the context of national development strategies and budgets. This LDCF project will complement both aforementioned projects – that support adaptation planning in the medium and long term – by increasing the capacity of the GoA to adapt to the immediate and short-term effects of climate change, particularly by responding to the priorities outlined in the NAPA.

The objective of the FAO GEF Land Degradation/LDCF project Land Rehabilitation and Rangelands Management in Smallholders Agro-pastoral Production Systems in South Western Angola (US\$3,013,636) is to enhance the capacity of South Western Angola's small holders' agro-pastoral sector to mitigate the effects of land degradation. This objective will be achieved by mainstreaming SLM practices into agro-pastoral and development initiatives. The LDCF project will be informed by lessons learned from the FAO project's integration of SLM into local initiatives.

#### *Non-GEF-projects*

The Local Development Project (LDP) (2010–2015) is funded by the GoA (US\$121,700,000). This project has three components: i) increasing poor households' access to improved social and economic infrastructure by financing the rehabilitation and construction of basic public works and municipal grants; ii) promoting Local Economic Development by developing business skills and participation in markets of selected producer groups; and iii) strengthening capacity of local institutions, public entities and civil society to plan, manage and monitor basic public service delivery and expenditure. The LDP is being implemented in 17 provinces, four of which are provinces where the intervention sites for the proposed LDCF project are located – Bengo, Namibe, Cabinda and Kwaza Sul. The LDCF project will also promote food security and environmental infrastructure in these coastal provinces through EbA and climate-resilient land management activities.

The Climate for Development in Africa Programme (ClimDev-Africa) (€14 million for 2012–2014) is a joint initiative of the Commission of the African Union (AUC), the AfDB and the United Nations Economic Commission for Africa (UNECA). Through the ClimDev-Africa, regional, sub-regional and national policy capacity will be strengthened by: i) building science and observation infrastructure; ii) enhancing working partnerships between public, private and civil society sector and vulnerable communities; and iii) creating and strengthening knowledge frameworks. The LDCF project is aligned with ClimDev-Africa in that it builds on existing climate monitoring infrastructure in Angola. Improved collection of climate data in Angola will enhance the regional understanding of climate change. Additionally, Component 1 of the LDCF project will enhance the national understanding of climate change vulnerability through a detailed vulnerability assessment of the coastal zone. This will contribute to the national repository of knowledge about climate change vulnerability and adaptation responses and will be shared with other LDCs through AAKNET under Component 4 of the LDCF project.

UNEP, in collaboration with IUCN, developed a Strategic Plan for the Mayombe Transboundary Forest Initiative (2013 – 2014). The Strategic Plan outlines the steps required to establish a transboundary protected area complex in the Mayombe forest ecosystems of Angola, DRC, Congo and Gabon. The Strategic Plan details 8 key result areas, including inter alia: i) Awareness, education and technical capacity building; and ii) Research and ecological monitoring. The LDCF project will contribute to these two key results areas through the awareness-raising and research components included in the project design. In addition, the LDCF project will build on UNEPs experience in Angola gained through this project

A UNEP-Angola Country Cooperation Framework was signed in December 2015. This framework focuses on five key areas of cooperation that include biodiversity and ecosystems, environmental governance and regional cooperation,

climate change, sustainable production and consumption and disaster risk reduction and city planning. The overall objective of the UNEP-Angola cooperation framework is to provide Institutional and technical cooperation and support to enhance sustainable management of environment and natural resources in Angola. Capacity building cuts cross all these areas and it also includes providing Institutional and technical cooperation from UNEP and support to enhance sustainable management of environment and natural resources in Angola. The LDCF project is directly related to several areas of the Country Cooperation Framework implementation and can help it reach its objectives. During implementation of the LDCF project, cooperation will be sought with the UNEP implementing team of the Country Cooperation Framework to ensure complementarity.

### **Additional Information not addressed at PIF Stage**

#### **A.7. Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?**

The LDCF project has been designed to align with Angola's national priorities and identified needs related to climate change adaptation. In particular, through its focus on climate change adaptation in the coastal zone, the LDCF project will contribute to the national priorities identified under the UNFCCC by addressing sensitivity to climate change risks. The activities of the project will also contribute to broader national objectives related to sustainable development, environmental protection and improved quality of life for rural communities. Importantly, the LDCF project will support the aims of the United Nations Convention on Biological Diversity (1997) and will contribute to achieving the Sustainable Development Goals<sup>42</sup> as outlined below. The emphasis of the project's activities on degraded ecosystems, with a particular focus on coastal wetlands, mangroves and upstream river areas, will result in the restoration and improved management of ~561 hectares of wetlands.

The LDCF project will contribute to the following SDGs:

- SDG 5 – Achieve gender equality and empower all women and girls, by promoting gender equity throughout the project and targeting women in specific project activities;
- SDG 6 – Ensure availability and sustainable management of water and sanitation for all, by implementing EbA interventions in wetlands and mangroves, introducing climate-resilient land management techniques and improving waste management in coastal areas;
- SDG 13 – Take urgent action to combat climate change and its impacts, specifically:
  - 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries, by implementing EbA interventions in four coastal communities and introducing an EWS at Barro do Dande;
  - 13.2 Integrate climate change measures into national policies, strategies and planning, by capacity building and strengthening of coordination mechanisms within the Secretariat of CIBAC, and;
- SDG 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss through the rehabilitation of wetlands and the introduction of climate-resilient land management techniques.

The project also has more specific national benefits. These include improved understanding of the impacts of climate change on the coast of Angola by sectoral ministries, INAMET and CNPCB. This will be achieved by undertaking a detailed vulnerability assessment of the coastal zone. Training on the results of this vulnerability assessment will strengthen technical capacity of government staff at local and national levels to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to local communities. A further national benefit provided by the LDCF project is an assessment of the economic impacts of climate change on Angola's coastal

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<sup>42</sup> The Sustainable Development Goals (SDGs) are a set of targets that have been proposed to replace the Millennium Development Goals, which expire in 2015. However, the SDGs take a broader approach on environmental sustainability. There are 17 SDGs that are to be achieved by 2030.

zone, disaggregated by sector. This economic assessment will raise awareness about the need for climate change adaptation to be integrated into relevant sectoral policies/plans and related budgets. Proactive planning for adaptation will help to climate-proof provision of essential services in the coastal zone. For example, the MINPET needs to take into account the risk that increased coastal storm surges under climate change could have on fisheries infrastructure along the coast, such as processing stations.

An additional benefit of the project at national level will be increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola. The CIBAC provides strategic oversight related to climate change in different sectors. Consequently, strengthening this committee to promote, collaborate and information sharing between ministries will advance climate change adaptation at a national level.

At a local level, the climate change vulnerability of four communities along the coast of Angola will be addressed through the LDCF project. Climate-resilient land management and EbA interventions will enhance natural and agricultural ecosystem services, thereby contributing to improved livelihoods agricultural production. At a local level, food and livelihood security will be enhanced. The project will directly benefit an estimated ~3,680 people who live within the proposed project restoration sites. It is envisioned that these community members will participate directly in the implementation of the project's activities, particularly those related to implementation of ecosystem restoration and SLM practices. Within the surrounding areas in the vicinity of the project's restoration sites, the project will generate indirect benefits to an estimated ~49,000 people through *inter alia*: i) reduced vulnerability to climate-related hazards such as flooding; ii) improved agricultural productivity through reduced erosion and loss of fertility of soil; iii) improved productivity of fisheries; and iv) improved quality of water as a result of reduced sedimentation and pollution. Additionally, the EWS piloted in Barra do Dande will improve the capacity of coastal communities to respond to extreme climate events, such as floods. A functional EWS will help to prevent loss of life, injury and damage to property by warning people timeously of impending floods. Training of decentralized extension officers from CNPCB and other relevant local government representatives will promote the replication of EWS in other coastal communities, further preventing loss of life and damage to property.

**A.8. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.**

Within all three components and implementation structure, the LDCF project will promote effective management of knowledge. The table below details how knowledge will be managed effectively.

Table 4: Knowledge management approach

Project aspect/component	Contribution to effective knowledge management
Project management and implementation arrangements	<ul style="list-style-type: none"> <li><i>Generating and recording information/knowledge:</i> An international <b>Monitoring and Learning Specialist</b> will be recruited by UNEP for support of Components 1 and 2 – he/she will be based internationally and will support the PMU on a part-time basis. This support will include in-country missions to Angola at least twice a year. The Monitoring and Learning Specialist will support the PMU with: i) monitoring; ii) reporting; iii) knowledge sharing; and iv) adaptive management.</li> </ul>
Component 1	<ul style="list-style-type: none"> <li><i>Generating and recording information/knowledge:</i> A set of detailed <b>vulnerability assessments</b> for Angola's coastal zone, and disaggregated by sector, will be developed and shared with planners and policy-makers through appropriate media such as online platforms.</li> </ul>
Component 2	<ul style="list-style-type: none"> <li><i>Generating and recording information/knowledge:</i> <b>EbA protocols</b> will be developed based on: i) field-based assessments of intervention sites; ii) predicted climate trends; and iii) examples of EbA best practices. These protocols will inform effective EbA along the coast of Angola in the</li> </ul>

	<p>future.</p> <ul style="list-style-type: none"> <li>• <i>Maintaining/sustaining knowledge:</i> <b>Sub-committees</b> will be established within existing community management committees. These committees will be involved in coordinating project activities, and monitoring the impacts of project interventions.</li> <li>• <i>Generating and recording information/knowledge:</i> Results from <b>monitoring of EbA interventions</b> will be shared with national and private universities an adaptation e-library to be created on the MINAMB website.</li> <li>• <i>Maintaining/sustaining knowledge:</i> Through <b>training</b> of coastal communities, these stakeholders will have enhanced knowledge on EbA and climate-resilient land management.</li> <li>• <i>Generating and recording information/knowledge:</i> <b>EbA project concept notes</b> will be developed for the private sector. These notes provide a description of how to implement/coordinate an EbA project, thereby supporting an enabling environment for the private sector to make social investments using CSR budgets that will generate multiple social, ecological and climate change benefits.</li> </ul>
Component 3	<ul style="list-style-type: none"> <li>• <i>Maintaining/sustaining knowledge:</i> Through <b>training</b> of CIBAC and GAC, these national stakeholders will have enhanced knowledge on climate change and cost effective adaptation options, including EbA.</li> <li>• <i>Generating and recording information/knowledge:</i> <b>Policy briefs</b> and <b>technical guidelines</b> will be developed to support integration of climate change into relevant policies and plans, and related budgets.</li> </ul>
Component 4	<ul style="list-style-type: none"> <li>• <i>Maintaining/sustaining knowledge:</i> A <b>public awareness programme</b> will be implemented to inform the general public about climate risks and potential adaptation options. Within these programmes, findings from research that is undertaken by national consultants to inform LDCF interventions — including results of coastal vulnerability and economic assessments — will be presented to students and academics at national institutions.</li> </ul>

- **B. Description of the consistency of the project with:**

**B.1. Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:**

The project is well aligned with a wide range of national policies, strategies and legislation. Stock-taking and consultations during the PPG highlighted additional policies, strategies and plans of relevance that have been added to the project documents. For a complete list of these plans and strategies see Section 2.4 of the UNEP Project Document and Section 2.2.1 of the UNDP Project Document. The LDCF project will promote the inclusion of adaptation in both national plans and budgets through the development of technical guidelines and policy briefs under Component 3. A brief description of the main policies, strategies and plans leading development in Angola and how they relate to the proposed project is presented below.

**The National Adaptation Programme of Action (NAPA):** the LDCF project has been developed to address and implement priority activities outlined in Angola's NAPA (2006), including the following NAPA priorities:

- Priority 2: Promote sustainable land management (SLM) for increased agricultural yields – the project will train coastal communities and extension services on climate-resilient land management methodologies.
- Priority 6: Revise sectoral laws for proactive adaptation – the project will propose recommendations for revisions to relevant national laws, sectoral plans and associated budgets to mainstream adaptation.
- Priority 7: Create an EWS for flooding and storms – the project will be supporting the development of a functional EWS in Barra do Dande, working with INAMET and CNPCB.
- Priority 8: National institutional mechanism for adaptation planning and mainstreaming – the project will strengthen the coordination mechanism of CIBAC to encourage effective planning of adaptation interventions in coastal areas of Angola.

**Angola's National Biodiversity Strategy and Action Plan (NBSAP):** the LDCF project is aligned with the NBSAP because it supports the restoration and conservation of ecologically important coastal wetland ecosystems. Additionally, the NBSAP strategic objective of improved environmental education is supported through the awareness raising and

community engagement interventions of the LDCF project. The climate-resilient land management interventions of the LDCF project – including sustainable agriculture interventions – will also support the NBSAP goal of sustainable biodiversity use.

**Angola's 2025 Long Term Development Strategy (LTDS):** the LDCF project is aligned with the objectives of the LTDS because it reduces the vulnerability of coastal economic sectors – such as the fishery, petroleum and tourism sectors – to climate risks. Additionally, implementation of EbA and sustainable agriculture interventions in pilot coastal communities will contribute to poverty alleviation by diversifying livelihoods.

**Angola's Development Programme for 2012–2017 (ADP):** the LDCF project will contribute to realising ADP priorities. In particular, food security and will be addressed through the implementation of EbA and sustainable agriculture interventions. In addition, through community response plans, coastal communities will have strengthened capacity to adapt to climate-related threats such as flooding and drought. The LDCF project will also help to develop the public sector by promoting improved inter-ministerial coordination of climate change adaptation at a national level.

**National Development Plan 2013–2017 (NDP):** the LDCF project will support climate-resilient economic development by: i) mapping the climate-vulnerabilities of important coastal sectors and providing suggestions for adaptation interventions; and ii) developing and disseminating guidelines for integrating climate change adaptation into sectoral strategies and budgets to national government stakeholders.

**Angola's National Plan for Preparation, Contingencies, Responses and Recovery from Calamities and Natural Disasters 2009-2014:** the LDCF project will support the objectives of this plan by: i) mitigating the effects of floods, mudslides and drought on coastal communities through EbA interventions; ii) developing maps of the vulnerability of relevant sectors in coastal areas to climate change; and ii) improving the EWS system in Barra do Dande. This plan is due to be revised in 2015, and the LDCF project will advocate for the inclusion of EbA approaches as a response to climate change-induced natural disasters.

**The Strategic National Programme for the Water 2013–2017** is a short-term framework for multi-sector investment in the water sector. It includes investment in the economic, social, environmental, legal and institutional aspects of the water sector in Angola. The main problems facing the water sector are also identified, including floods, droughts, erosion as well as existing and potential conflicts over water use. This programme will inform the vulnerability and economic assessments conducted by the LDCF project under Components 1 and 3. The results of the vulnerability assessment will be used to advocate for the inclusion of water sector-specific adaptation options into the national programme.

**The Tourism Master Plan of Angola for 2011–2020** describes the potential of the domestic and international tourism industry in Angola, as well as barriers to achieving that potential. Identified barriers to the development of the tourism industry include i) inadequate infrastructure; ii) unreliable service; iii) excessive bureaucracy; and iv) lack of human capacity and trained staff in the hospitality and tourism industries. The LDCF project will support the Tourism Master Plan and the general development of the tourism industry by promoting the restoration and conservation of Angola's coastal ecosystems. These activities will increase the aesthetic beauty of Angola's coastal areas and contribute to the development of ecotourism potential. The LDCF project will also promote the inclusion of climate change adaptation options into this plan, based on the results of the tourism sector-specific vulnerability assessment, to safeguard tourism infrastructure.

**The Artisanal Fisheries Development Plan 2014–2017 (PDPA)** aims to reduce poverty in local artisanal fishing communities. The plan also aims to enhance access to markets for fishing products from artisanal fishermen. Additionally, implementation of the plan will contribute to improving the health, education, living conditions and income of artisanal fishing communities. The LDCF project will promote the inclusion of climate change adaptation options into this plan to protect the livelihoods of vulnerable coastal communities.



## B.2. Fund Strategies. GEF focal area<sup>43</sup> and/or fund(s) strategies, eligibility criteria and priorities.

As a LDC, Angola has limited resources to effectively lower the risks that climate change poses to hard-won development gains. However, the GoA is making efforts to address climate change. Angola is committed to ensuring that the poorest and most vulnerable communities are supported by programmes that enhance their long-term adaptive capacity. Angola ratified the United Nations Framework Convention on Climate Change (UNFCCC)<sup>44</sup>, thereby committing to the adoption of policies and implementation of measures to adapt to climate change.

The LDCF project is aligned with the GEF VI programming strategy for LDCF/SCCF projects. Therefore, the project activities will complement and build on the achievements of the existing GEF projects being planned and implemented in Angola. Particularly, the following GEF Focal Area Objectives are addressed in the project:

- CCA-1, Outcome 1.3: Climate-resilient technologies and practices adopted and scaled up. The LDCF project will enable communities to adopt EbA and climate-resilient agriculture practices.
- CCA-2, Outcome 2.1: Increased awareness of climate change impacts, vulnerability and -adaptation. The climate change awareness-raising programme to be implemented by the LDCF project will contribute to this CCA-2 outcome. Furthermore, the project will conduct vulnerability assessments and demonstrate adaptation interventions, which will further contribute to an increased awareness about vulnerability and adaptation.
- CCA-3, Outcome 3.1: Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes established and strengthened. The LDCF project will provide technical support and training to the Secretariat of the CIBAC and GAC to improve inter-ministerial coordination and institutional capacity of CIBAC.

For additional information please see section 3.1 of the UNEP project document.

## C. Describe the budgeted M &E plan

The M&E framework set out in the Project Results Framework in Annex A is aligned with the AMAT and UNEP and UNDP M&E frameworks. Please see Section 6 of the UNEP and UNDP project documents for the full M&E plan. As described in Management Arrangements, the primary responsibility for overseeing M&E of the project's activities will reside with UNEP programme management who will coordinate the MTR and TE through UNEP's independent Evaluation Office. The project's progress towards achievement of objectives specified in the Results Framework will be measured by the Monitoring and Learning Specialist, who will report to the UNEP Task Manager. All budgeted M&E activities, including Financial Audits, Inception Workshop, and mid-term/terminal evaluations, will be paid by UNEP. The M&E budget is presented in Table 5 below.

Table: 5 Costed Monitoring and Evaluation plan

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"><li>• Project Manager (MEE)</li><li>• PIU</li><li>• UNDP CO, UNDP GEF, UNEP</li></ul>	Indicative cost: 7,000	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"><li>• UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.</li><li>• PIU, esp. M&amp;E expert</li></ul>	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required
Measurement of Means	<ul style="list-style-type: none"><li>• Oversight by Project Manager (MEE)</li></ul>	To be determined as part of	Annually prior to



<sup>43</sup> For biodiversity projects, please describe which [Aichi Target\(s\)](#) the project will directly contribute to and what indicators will be used to track progress towards achieving these specific Aichi target(s).

<sup>44</sup> On 28 May 1993.

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
of Verification for Project Progress on output and implementation	<ul style="list-style-type: none"> <li>PIU, esp. M&amp;E expert</li> <li>Implementation teams</li> </ul>	the Annual Work Plan's preparation. Estimated 3,000	ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> <li>Project manager (MEE)</li> <li>PIU</li> <li>UNEP TM</li> <li>UNDP CO</li> <li>UNDP RTA</li> <li>UNDP EEG</li> </ul>	None	Annually
Periodic status/progress reports	<ul style="list-style-type: none"> <li>Project manager and team</li> </ul>	None	Quarterly
Baseline Evaluation	<ul style="list-style-type: none"> <li>Project manager (MEE)</li> <li>PIU</li> <li>UNEP TM</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 35,000	
Mid-term Evaluation	<ul style="list-style-type: none"> <li>Project manager (MEE)</li> <li>PIU</li> <li>UNEP TM</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 35,000	At the mid-point of project implementation
Terminal Evaluation	<ul style="list-style-type: none"> <li>Project manager (MEE)</li> <li>PIU</li> <li>UNEP TM</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 35,000	At least three months before the end of project implementation
Audit	<ul style="list-style-type: none"> <li>UNDP CO</li> <li>UNEP TM</li> <li>Project manager (MEE)</li> <li>PIU</li> </ul>	Indicative cost: 25,000	Yearly
Visits to field sites	<ul style="list-style-type: none"> <li>UNDP CO</li> <li>UNDP RCU (as appropriate)</li> <li>Government representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly for UNDP CO, as required by UNDP RCU
<b>TOTAL indicative COST</b> Excluding project team staff time		US\$ 140,000 (+/- 2% of total GEF budget)	

**PART III: certification by gef partner agency(ies) GEF Agency(ies) certification**

This request has been prepared in accordance with GEF policies<sup>45</sup> and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yy)	Project Contact Person	Telephone	Email Address
Brennan Van Dyke Director GEF Coordination Office		March 08, 2016	Barney Dickson, Head, Climate Change Adaptation Unit, UNEP-DEPI	+254-20-762-3545	<a href="mailto:barney.dickson@unep.org">barney.dickson@unep.org</a>
Adriana Dinu Executive Coordinator, UNDP-GEF		March 08, 2016	Henry Rene Diouf Regional Technical Specialist-Adaptation UNDP-GEF		<a href="mailto:henry.rene.diouf@undp.org">henry.rene.diouf@undp.org</a>

<sup>45</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF  
GEF6 CEO Endorsement /Approval Template-January 2015.doc

## **Annex A: Project results framework**

	<b>Indicator</b>	<b>Baseline</b>	<b>Target</b>	<b>Means of verification</b>
Objective: To reduce vulnerability to climate change of national government and coastal communities along the coast of Angola.	1. Total number of direct beneficiaries (and % of which are women) of the project's EWS and EbA activities.	0	At least 2500 direct beneficiaries (50% of which are women), including: 750 <sup>46</sup> beneficiaries of the EWS and 1800 <sup>47</sup> beneficiaries of EbA and climate-resilient land management interventions.	Attendance registers from training sessions and training reports.  Registers of community beneficiaries kept by the organisation implementing EbA and climate-resilient land-management interventions at each project site.  Survey results and reports.
Outcome 1. Strengthened technical capacity of government staff at local and national level to analyse, predict and respond to climate change effects, access policy-relevant data and deliver relevant information to coastal communities (overseen by UNEP).	1. Number of relevant government staff within each targeted national and local institution (INAMET, local government at Chiloango, Barra do Dande, Longa and Bero) with the technical capacity to analyse and respond to climate change effects.	Low. Few government technicians have the capacity to analyse climate change information and develop appropriate adaptation responses. Baseline values to be quantified during the baseline assessment.	At least 15 relevant government staff within targeted institutions (3 within INAMET, 3 each within local government at Chiloango, Barra do Dande, Longa and Bero) have the technical capacity to analyse and respond to climate change effects by the end of the project.	Attendance registers from training sessions and training reports. Capacity scorecard assessments. An assessment of capacity will be done using the following criteria:  1. Ability to analyse data from weather stations and generate early warning. 2. Ability to assess vulnerability to climate change. 3. Capacity to deliver early warning to relevant coastal communities. 4. Ability to assess the effectiveness of EWS.  The following scoring scale will be used: 1 = Very limited or no evidence of capacity 2 = Partially developed capacity 3 = Fully developed, demonstrated capacity  An overall score is calculated, with a maximum score of 12 given for the four criteria. These criteria will be further validated at inception phase.  Government staff that have score at least 8/12 will be

<sup>46</sup> There are 1540 people living in and around Barra do Dande, the site of the EWS installation. It is assumed that at least half of this population will benefit from the EWS.

<sup>47</sup> There are a total of 3678 people living in the four project intervention sites. It is assumed that at least half of this population will benefit from the project's EbA and climate-resilient land management interventions.

			considered to have the technical capacity to analyse and respond to climate change effects.
2. Number of detailed sectoral and localised climate change vulnerability assessments produced.	No climate change vulnerability assessment specific to Angola's coastal zone or coastal sectors have been completed. A biodiversity vulnerability assessment of Angola's coast has been produced. Climate change vulnerability assessments have been undertaken in major cities including Luanda and Benguela.	At least 1 climate change vulnerability assessment for Angola's coastal zone completed and at least 4 detailed sectoral climate change vulnerability assessments (which may include the agricultural, fisheries, energy, water and tourism sectors) completed by the end of the project.	Vulnerability assessments produced and reported on in Angola's Climate Change Reports, National Communication. Vulnerability assessments shared on MINANB website and climate change e-library. Interviews with PMU.
3. Establishment of an operational flood early warning system at Barra do Dande.	There is currently no early warning system at Barra do Dande.	1 operational flood early warning system is established at Barra do Dande by the end of the project, comprised of at least 5 weather stations and 4 hydrological monitoring stations <sup>48</sup> .	Field visits to verify that weather stations and hydrological monitoring equipment has been installed and is operational. Interviews with INAMET and INARH. Review of the early warning system established.  The degree to which the EWS will be deemed operational can be verified as follows: <ol style="list-style-type: none"> <li>1. Is data being successfully collected using monitoring equipment?</li> <li>2. Is the data being transferred successfully to the INAMET data analysis centre?</li> <li>3. Are INAMET technicians able to analyse the data to produce early warnings?</li> <li>4. Are relevant local stakeholders receiving the early warnings timeously?</li> <li>5. Are these stakeholders communicating the early warnings to affected community members timeously?</li> </ol> If the answer to at least four of the five questions

<sup>48</sup> EWS equipment is listed in budget note 14 and includes, *inter alia*: 5 Automatic Weather Stations (AWS) and at least 5 rainfall gauges complete with remote data transmission and archiving at the identified installation sites; 1 spare Automatic Weather Stations (AWS) and 2 spare rainfall gauges complete with remote data transmission and archiving; 1 mobile AWS for sensor's field calibration; 4 automatic river gauging stations and 4 manual water level stations at the identified installation sites, complete with remote data transmission and archiving at INAMET, Civil Protection and INARH; 1 spare automatic river gauging stations and 1 spare manual water level stations; and 1 mobile Hydromet Automatic Station (HAS) for sensor's field calibration.

				above is “yes”, then the EWS will be considered operational.
	4. Development of an early warning community response plan.	No early warning community response plan has been developed at Barra do Dande.	1 early warning community response plan has been developed by the end of the project.	Interviews with INAMET and INARH. Interviews with community members at Barra do Dande. Review of early warning community response plan.
Outcome 2. EbA technologies and climate-resilient land management techniques transferred to coastal communities in Angola to reduce their vulnerability to droughts, rainfall variability, and extreme events (overseen by UNEP).	1. Number of people (and % of women) at Chiloango, Barra do Dande, Longa and Bero who have been trained and are practicing EbA interventions and climate-resilient land management.	EbA interventions and climate-resilient land management have so far not been implemented in the target communities.	At least 500 people, 30% of which are women, at Chiloango, Barra do Dande, Longa and Bero who have been trained in and are practicing EbA interventions and climate-resilient land management by the end of the project.	Registers of community beneficiaries kept by the organisation implementing EbA and climate-resilient land-management interventions at each project site. Surveys and interviews with local community members at project intervention sites. Site visits to verify EbA interventions and climate-resilient agriculture techniques.
	2. Number of hectares of wetland rehabilitated using EbA interventions at Chiloango, Barra do Dande, Longa and Bero.	0 hectares of wetland have been rehabilitated. There are currently 400 hectares of degraded wetland in Chiloango, 10 hectares in Barra do Dande, 41 hectares in Longa and 110 hectares in Bero	By the end of the project, at least 400 hectares of wetland rehabilitated using EbA interventions in Chiloango, at least 10 hectares of wetland rehabilitated in Barra do Dande, at least 41 hectares of wetland rehabilitated in Longa and at least 110 hectares of wetland rehabilitated in Bero.	Site implementation reports produced by the relevant implementing organisation at each project intervention site. Field visits to verify the extent of EbA interventions. Interviews with local community members. Interviews with relevant implementing organisation at each project intervention site.

	3. Number of climate-resilient land management techniques adopted at Chiloango, Barra do Dande, Longa and Bero.	No climate-resilient land management techniques are being implemented at the project intervention sites.	At least 3 climate-resilient land management techniques adopted per pilot site. This will include <i>inter alia</i> : i) climate-resilient agriculture crops and techniques; ii) waste management interventions to promote ecosystem and human health; and iii) subsistence hunting and harvesting practices to promote sustainable livelihoods under climate change.	Site implementation reports produced by the relevant implementing organisation at each project intervention site. Field visits to verify the extent of climate-resilient land management interventions. Interviews with local community members. Interviews with relevant implementing organisation at each project intervention site.
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	4. Number of local community members (and % of women) trained on the implementation and maintenance of EbA interventions and climate-resilient land management.	0 local community members from the project intervention sites have been trained on implementation and maintenance of EbA interventions and climate-resilient land management.	At least 400 local community members (30% of which are women) trained on the implementation and maintenance of EbA interventions and climate-resilient land management by the end of the project.	Attendance registers from training workshops. Interviews with local community members. Interviews with the PMU.
	5. Number of EbA project concept notes to promote the upscaling of EbA developed and presented to private sector stakeholders.	No EbA project concept notes have been developed. Outreach projects implemented by the private sector (petroleum industry) generally focus on education (e.g. school construction) or biodiversity conservation.	At least 3 EbA project concept notes to promote the upscaling of EbA have been developed and presented to private sector stakeholders by the end of the project.	Review of EbA project concept notes produced. Interviews with the PMU. Attendance registers and reports of presentations to private sector stakeholders.
Outcome 3. Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola (overseen by UNDP).	1. Degree to which institutional capacity and arrangements to lead, coordinate and support the integration of climate change into relevant policies and plans is strengthened – for CIBAC and the CIBAC secretariat .	Current estimated level of overall institutional capacity is 4 (out of 10).  CIBAC was established in 2012 to coordinate climate change at an inter-ministerial level. The committee is attended by Ministers of various climate-sensitive or relevant ministries and therefore includes some authority over sector-specific budget allocations. However, the Secretariat of CIBAC has not yet been properly constituted and does not have a clear mandate. The committee is therefore not functioning optimally and climate change adaptation has not been fully	CIBAC and the Secretariat of CIBAC has progressed by at least 3 steps in their institutional capacity and arrangements score assessment framework by the end of the project.	A scoring methodology as suggested by the GEF AMAT will be adopted. The scoring is based on five criteria expressed as questions (these criteria will be further validated at inception phase): 1. Are there institutional arrangements in place to coordinate the integration of climate change adaptation into relevant policies, plans and associated processes for coastal areas? 2. Are those arrangements based on (a) clear and strong mandate(s) and supported by adequate budget allocations? 3. Do those arrangements include authority over the budgets of climate-sensitive sectors? 4. Do those arrangements include broad stakeholder participation across relevant, climate-sensitive sectors? 5. Are those arrangements effective, i.e. is climate change adaptation coordinated across key national and sectoral decision-making processes?  Each question is answered with an assessment and score for the extent to which the associated criterion has been met: not at all (= 0), partially (= 1) or to a large extent/ completely (= 2). An overall score is



		<p>integrated into sectoral strategies and plans.</p> <p>Baseline values to be verified during the baseline assessment using the AMAT score criteria. Quantitative assessment of the baseline for this indicator will be conducted at inception stage.</p>		calculated, with a maximum score of 10 given five criteria.
	2. Number of proposed revisions to integrate climate change into existing policies/strategies/plans included on the agenda of CIBAC meetings.	0 proposed revisions to integrate climate change into existing policies/strategies/plans have been included on the agenda of CIBAC to date.	2 proposed revisions to integrate climate change into existing policies/strategies/plans included on the agenda of CIBAC meetings by the end of the project.	Agendas of CIBAC meetings. Minutes of CIBAC meetings.
	3. Establishment of a permanent secretariat of CIBAC with a clearly defined role/mandate.	The secretariat of CIBAC is currently convened on an <i>ad hoc</i> basis. The composition of members varies and it does not have a clearly defined mandate.	A permanent secretariat of the CIBAC is established with a clearly defined role/mandate by the end of the project.	Agendas of CIBAC meetings. Minutes of CIBAC meetings. Review of mandate of the secretariat of the CIBAC.
	4. Assessment of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector.	0 economic assessments of climate change impacts on Angola's coastal zone have been conducted.	An assessment of the economic impacts of climate change, disaggregated by sector, on Angola's coastal zone produced by the end of the project.	Review of economic assessment produced.
Outcome 4. Improved awareness about climate change impacts and adaptation among non-governmental stakeholders (overseen by UNDP).	1. Number of people (and % of women) who are informed about climate change impacts and adaptation through the project's awareness programme.	No awareness raising programme on climate change has been undertaken.	At least 1000 people (of which at least 50% are women) are informed about climate change and adaptation through the public awareness programme	Reports from awareness raising activities undertaken, including attendance registers. Attendance registers from seminars/presentations

			<p>by the end of the project. This will include:</p> <p>250 people from NGOs;</p> <p>250 people from the private sector;</p> <p>250 people from academia; and</p> <p>250 people from CBOs.</p>	
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## **Annex B: Responses to project reviews**

#	Comment	Response
16	Please provide information about the type of training communities will receive and the specific kind of climate change risks that would be addressed in each district through the training. Also, please described how gender dimensions will be included in the different project components	<p>See Section 2.3 in the UNDP project document and 3.3 in the UNEP project document.</p> <p><b>Local communities</b> in Chiloango, Barra do Dande, Longa and Bero will be trained on: i) implementing, monitoring and maintaining EbA to generate long-term benefits; and ii) techniques and practices for climate-resilient land management. This training will include information about EbA-related conservation issues such as responsible hunting for subsistence. Through this training, the capacity of local communities to adapt to the current and predicted climate-related effects will be increased. These effects include more frequent and severe: i) beach and soil erosion; ii) droughts; and iii) floods.</p> <p><b>Community management committees</b> and local communities in Chiloango, Barra do Dande, Longa and Bero will be trained on the early warning response plans developed through the LDCF project. This training will focus on interpreting and responding to warnings. In particular, this training will enable appropriate and timely responses by local communities to floods.</p> <p><b>Local government</b> in Chiloango, Barra do Dande, Longa and Bero will be trained on sector-specific vulnerability to climate change. In particular, these government staff will be trained to understand, interpret and replicate such assessments. In addition, extension officers from SNPM and other representatives from local government will be trained on: i) packaging of early warning information in an appropriate manner for local communities; and ii) dissemination of these warnings to the local community. Local government will also be trained on implementing and maintaining EbA and climate-resilient land management techniques including <i>inter alia</i> crop rotation and selection of diverse locally-adapted crops. These training activities will increase the adaptive capacity of local government to the climate-related effects of more frequent and severe beach and soil erosion, droughts and floods. Consequently, replication and upscaling of such technologies will be promoted in villages nearby the project intervention sites.</p> <p>The components of the proposed LDCF project will increase the adaptive capacity of local communities, and will support the diversification livelihoods. In particular, the project will focus on empowering women through these activities. For example, these stakeholders will play a role in the implementation of project activities, and will receive benefits from these activities. Moreover, gender-disaggregated indicators have been included in the Results Framework to follow progress on the inclusion of women in these activities. Importantly, women in general and particular women's groups will be consulted at all stages of project implementation. The effects of climate change are often more notable for women. For example, in rural</p>

		<p>communities, women and children frequently travel long distances to collect water. Consequently, the effects of decreasing surface water reserves are more notable in these areas, as the distances to be walked to collect this resource will lengthen. By increasing adaptive capacity of local communities in this area and contributing to water conservation – through EbA and sustainable agriculture – the opportunity costs incurred by women while undertaking these activities will be reduced. Women’s rights will be promoted in accordance with national legislation, appropriate strategies and UN guidelines for interaction within Angola. Importantly, the project is aligned with the National Gender Policy of 2011-2015. Gender has been taken into account throughout the project design and document.</p> <p>Under all Components, gender sensitivity will be incorporated into trainings so that female participants are empowered to participate fully in the training sessions and related EbA activities. Trainers will be required to have the skills and experience necessary to plan and facilitate gender-sensitive training. The project results framework has used gender-disaggregated targets to ensure gender is mainstreamed throughout.</p>
17	Please identify and described the role of each stakeholder in the project.	Please see Section A.3. In this section, the lead/coordinating institutions and important stakeholders for each output are identified.
20	Please explain the roles of the executing partners and of the coordinating partners in the project implementation.	<p>The role of the executing partner (as well as the role of the implementing agencies) has been clearly detailed in Section 5: Managements Arrangements of the UNDP Project Document and Section 4: Implementation Arrangements of the UNEP Project Document. Please also see Section A.6 above.</p> <p>The role of various government partners and other stakeholders during the implementation of the LDCF project is detailed in the stakeholder engagement plan. Please see Section A.3 above.</p>

## **Annex C: Status of implementation of project preparation activities and the use of funds<sup>49</sup>**

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: US\$ 150,000			
<i><b>Project Preparation Activities Implemented</b></i>	<i><b>GEF/LDCF/SCCF Amount (\$)</b></i>		
	<i><b>Budgeted Amount</b></i>	<i><b>Amount Spent To date</b></i>	<i><b>Amount Committed</b></i>
National consultants	<b>62,000</b>	<b>28,134</b>	<b>33,866</b>
International consultants	<b>55,000</b>	<b>36,600</b>	<b>18,400</b>
Meetings and workshops	<b>11,000</b>	<b>6,131</b>	<b>4,869</b>
Travel	<b>10,000</b>	<b>7,120</b>	<b>2,880</b>
Communications costs	<b>2,000</b>	<b>1,274</b>	<b>726</b>
Translator	<b>10,000</b>	<b>0</b>	<b>10,000</b>
<b>Total</b>	<b>150,000</b>	<b>79,259</b>	<b>70,741</b>

<sup>49</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

**Annex D: Calendar of expected reflows (if non-grant instrument is used)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

**N/A**

## Annex E: Procurement plan

### UNEP/GEF Project Procurement Plan

**Project title:** Addressing urgent coastal adaptation needs and capacity gaps in Angola

**Project number:** 5230

UNEP Budget Line		List of Goods and Services required	Budget (in US\$)	Year {Note 1}	Brief description of anticipated procurement process {Note 2}
<b>1100</b>	<b>Project personnel</b>				
1101	National Project Manager	This budget will be used to hire a National Project Manager (PM). Responsibilities of the PM include, <i>inter alia</i> : <ul style="list-style-type: none"> <li>• Heading the PMU.</li> <li>• Overseeing and managing project implementation, monitor work progress, and ensure timely delivery of outputs in accordance with GEF and UNEP/UNDP guidelines.</li> <li>• Providing technical support to the project, including measures to address challenges to project implementation.</li> <li>• Supervising, coordinating and facilitating the work of the Project Assistant, the Financial Manager, the Technical Advisor, field officers and the technical support unit (including national and international experts).</li> </ul>	216 000	Years 1,2, 3 and 4	The Project Steering Committee will draw up ToRs and put out an advertisement for the position of PM as required by the project. Applications and CVs of interested PMs will be reviewed. The consultant will be selected depending upon experience and availability.
1102	Project driver	This budget will be used to hire a project driver. The driver will support the Project Management Unit in their day-to-day activities. Under Component 2 the project driver will drive the TA and PM to interventions sites in Bengo and Kwanza Sul, as required.	72 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of project driver as required by the project. Applications and CVs of interested drivers will be reviewed. The consultant will be selected depending upon experience and availability.
<b>1200</b>	<b>Consultants</b>				
1201	National Industry Expert – Agriculture	This budget will be used to contract a national agriculture industry expert. This consultant will be an expert on climate change impacts to the agriculture sector and will provide sector-specific information to the agriculture sector vulnerability assessment.	6 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of National Industry Expert (Agriculture) as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1202	National Industry Expert - Fisheries	This budget will be used to contract a national fisheries industry expert. This consultant will be an expert on climate change impacts to the fisheries sector and will provide sector-specific	6 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of National Industry Expert (Fisheries) as required by

		information to the fisheries sector vulnerability assessment.			the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1203	National Industry Expert - Transport	This budget will be used to contract a national transport industry expert. This consultant will be an expert on climate change impacts to the transport sector and will provide sector-specific information to the transport sector vulnerability assessment.	6 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of National Industry Expert (Transport) as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1204	National Industry Expert - Environment	This budget will be used to contract a national environment industry expert. This consultant will be an expert on climate change impacts to the environmental sector and will provide sector-specific information to the environmental sector vulnerability assessment.	6 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of National Industry Expert (Environment) as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1205	National Industry Expert - Tourism	This budget will be used to contract a national tourism industry expert. This consultant will be an expert on climate change impacts to the tourism sector and will provide sector-specific information to the tourism sector vulnerability assessment.	6 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of National Industry Expert (Tourism) as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1206	International Meteorological/ EWS Specialist	This budget will be used to contract an International Meteorological/ EWS Specialist to conduct an equipment assessment, identify and assess sites for the installation of equipment and procure, install and test equipment. He/she will help to set up the technical aspects of an appropriate communication system to transmit meteorological and hydrological information to INAMET, and transfer flood and drought early warnings from INAMET Forecasting Centre to relevant local authorities. Finally, this consultant will prepare training material for extension officers from SNPCB on interpretation of climate information and translation into locally relevant climate forecasts and advisories.	64 000	Year 1 and 2	The PM will draw up ToRs and put out an advertisement for the position of International Meteorological/ EWS Specialist as required by the project. Applications and CVs of interested experts will be reviewed. The specialist will be selected depending upon qualification and experience.
1207	INAMET technician	This budget will be used to contract an INAMET technician. This technician will be an employee of INAMET and will assist the International Meteorological/ EWS Specialist to identify sites for the installation of weather stations and hydrological equipment.	3 000	Year 1	The PM will draw up ToRs and put out an advertisement for the position of INAMET technician as required by the project. Applications and CVs of interested experts will be reviewed. The technician will be



					selected depending upon qualification and experience.
1208	National EWS consultant	This budget will be used to contract a national EWS consultant. The consultant will develop flood and drought early warning response plans with pilot communities in the selected project intervention sites. This lump sum will include all material costs, travel or other costs incurred.	20 000	Year 2 and 3	The PM will draw up ToRs and put out an advertisement for the position of national EWS consultant as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1209	International EbA/ Agriculture Specialist	<p>This budget will be used to contract an international EbA/ Agriculture Specialist who will <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Undertake a biophysical, socio-economic and market assessments at each project site and identify species for EbA interventions.</li> <li>• Develop protocols to guide implementation of EbA interventions.</li> <li>• Support the National Project Manager to identify and contract organisations to implement interventions at each of the 4 pilot sites.</li> <li>• Identify the appropriate climate-resilient agriculture techniques to be implemented in each site.</li> <li>• Collaborate with the Community Engagement Expert and community management committees to develop community-based EbA intervention management plans.</li> <li>• Develop EbA project concept notes for private sector upscaling of EbA interventions in collaboration with the Community Engagement Expert and the TA.</li> </ul>	76 640	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of international EbA/ Agriculture Specialist as required by the project. Applications and CVs of interested experts will be reviewed. The specialist will be selected depending upon qualification and experience.
1210	Community Engagement Specialist	This budget will be used to contract a community engagement specialist. This expert will collaborate with contractors to establish community management committees in pilot communities. This expert will contribute to the process of identifying pilot sites for EbA interventions and collaborate with EbA expert and contractors to collate lessons learned and best practices at the end of the process. He or she will also be partly responsible for the development and production of EbA project concept notes for private sector upscaling of EbA interventions.	38 880	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of community engagement specialist as required by the project. Applications and CVs of interested experts will be reviewed. The specialist will be selected depending upon qualification and experience.
1211	Monitoring and learning specialist	This budget will be used to contract a monitoring and learning specialist. This specialist will be responsible for offering technical advice and support to the project unit as well as local	153 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of Monitoring and Learning Specialist as required by the

		and international consultants under Component 2. He or she will also work closely with the International Technical Advisor to ensure that the activities under all three project components are properly coordinated.			project. Applications and CVs of interested experts will be reviewed. The specialist will be selected depending upon qualification and experience.
1212	International Technical Advisor	This budget will be used to contract an International Technical Advisor (ITA) to be an expert on adaptation. He or she will provide technical input under Outcomes 3 and 4 and will be responsible for a number of activities under these outcomes. The ITA will also work closely with the Monitoring and Learning Specialist to ensure that the activities under all three project components are properly coordinated. This ITA will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis.	471 074	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of ITA as required by the project. Applications and CVs of interested experts will be reviewed. The consultant will be selected depending upon qualification and experience.
1213	International Adaptation Economics/Policy Expert	This budget will be used to contract an International Economics/ Policy expert. The International and National Adaptation and Economics/ Policy Expert will work together closely to:	90 000	Year 1, 2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of National and International Adaptation Economics/Policy experts as required by the project. Applications and CVs of interested experts will be reviewed. The consultants will be selected depending upon qualification and experience.
1214	National Adaptation Economics/Policy Expert	<ul style="list-style-type: none"> <li>• Provide training to the Secretariat of the CIBAC and Climate Change Cabinet on climate change adaptation finance and climate change adaptation investment appraisal.</li> <li>• Undertake and present assessments of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector.</li> <li>• Identify entry points at the national and provincial level for the integration of climate change adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions.</li> <li>• Develop a coastal zone adaptation plan and mainstream the plan into relevant sectoral, regional and national development plans.</li> <li>• Develop technical guidelines for GAC, sectoral ministries and the CIBAC on how to assess, plan and finance climate change adaptation interventions.</li> </ul>	35 000	Year 1, 2 and 4	
<b>1300</b>	<b>Administrative support</b>				
1301	Finance Manager	This budget will be used to contract a finance manager. The FM will be familiar with both UNEP and UNDP financial administration procedures and financial reporting requirements.	168 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of finance manager as required by the project.

		He or she will produce the necessary financial reports for both agencies.			Applications and CVs of interested managers will be reviewed. The manager will be selected depending upon qualification and experience.
1302	Project Administration Assistant	This budget will be used to contract a Project Administrative Assistant (PA). The PA will be hired to directly support the National Project Manager with administrative tasks, under his direct supervision.	72 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for the position of Project Administrative Assistant as required by the project. Applications and CVs of interested managers will be reviewed. The assistant will be selected depending upon qualification and experience.
<b>2200</b>	<b>Sub-contracts (MOUs/LOAs for supporting organizations)</b>				
2201	National academics	This budget will be used to contract a national academic team to visit project sites twice annually in year 2, 3 and 4 and document the progress of EbA and climate-resilient agriculture interventions. Outputs of this contract will include: i) detailed reports of project progress; and ii) peer reviewed publications related to LDCF interventions across the various areas.	60 000	Year 2,3 and 4	The PM will draw up ToRs and put out an advertisement for the contract for a team of national academics required by the project. Applications and CVs of interested managers will be reviewed. The assistant will be selected depending upon qualification and experience.
<b>2300</b>	<b>Sub-contracts (for commercial purposes)</b>				
2301	Vulnerability Assessment Consultancy	This budget will be used to contract a consultant/consultancy specialising in vulnerability assessments who will undertake a vulnerability assessment on coastal climate change in Angola. This consultancy will also develop sector-specific vulnerability assessments and conduct vulnerability assessment training. In addition, the consultancy will oversee the dissemination of the results of the coastal zone and sector-specific vulnerability assessments. Budget costs for this consultancy include data acquisition costs, travel and other potential costs incurred.	350 000	Year 1 and 2	The PM will draw up ToRs and put out an advertisement for a Vulnerability Assessment Consultancy as required by the project. Applications and CVs of interested companies will be reviewed. The company will be selected depending upon qualification and experience
2302	Consultancy sub-contracts for land restoration and climate-resilient agriculture in Chiloango (Cabinda)	This budget will be used to sub-contract a consultancy (which could be an NGO or a private company) for land restoration and climate-resilient agriculture in Chiloango (Cabinda). This organisation will implement appropriate EbA interventions at the site and establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. In addition, the consultancy implement a range of climate-resilient land management interventions identified in	185 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for an appropriate consultancy as required by the project. Applications and CVs of interested companies will be reviewed. The company will be selected depending upon qualification and experience.

		<p>Activity 2.3.1 within and around pilot communities. Finally, the consultancy will collaborate with the community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs are also included in this budget. These professional fees and associated costs include <i>inter alia</i>: restoration design, management and administration.</p>			
2303	Consultancy sub-contracts for land restoration and climate-resilient agriculture in Barra do Dande (Kwanza Sul)	<p>This budget will be used to sub-contract a consultancy (which could be an NGO or a private company) for land restoration and climate-resilient agriculture in Barra do Dande (Kwanza Sul). This consultancy will implement appropriate EbA interventions at the site and establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. In addition, the consultancy implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Finally, the consultancy will collaborate with the community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs are also included in this budget. These professional fees and associated costs include: restoration design, management and administration.</p>	155 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for an appropriate consultancy as required by the project. Applications and CVs of interested companies will be reviewed. The company will be selected depending upon qualification and experience.
2304	Consultancy sub-contracts for land restoration and climate-resilient agriculture in Longa (Kwanza Sul)	<p>This budget will be used to sub-contract a consultancy (which could be an NGO or a private company) for land restoration and climate-resilient agriculture in Longa (Kwanza Sul). This consultancy will implement appropriate EbA interventions at the site and establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. In addition, the consultancy implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Finally, the consultancy will collaborate with the community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs are also included in this</p>	175 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for an appropriate consultancy as required by the project. Applications and CVs of interested companies will be reviewed. The company will be selected depending upon qualification and experience.

		budget. These professional fees and associated costs include: restoration design, management and administration.			
2305	Consultancy sub-contracts for land restoration and climate-resilient agriculture in Bero (Namibe)	<p>This budget will be used to sub-contract a consultancy (which could be an NGO or a private company) for land restoration and climate-resilient agriculture in Bero (Namibe). This consultancy will implement appropriate EbA interventions at the site and establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. In addition, the consultancy implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Finally, the consultancy will collaborate with the community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs are also included in this budget. These professional fees and associated costs include: restoration design, management and administration.</p>	175 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for an appropriate consultancy as required by the project. Applications and CVs of interested companies will be reviewed. The company will be selected depending upon qualification and experience.
2306	Communications company	<p>This budget will be used to contract a communications company to prepare and undertake awareness-raising campaigns in partnership with the TA. This will include <i>inter alia</i>: liaising with print and television media, conceptualising a short film, designing electronic and print materials.</p> <p>In addition the company will disseminate lessons learned and knowledge generated through the project through appropriate national and regional networks.</p>	60 000	Year 1,2,3 and 4	The PM will draw up ToRs and put out an advertisement for a communications company as required by the project. Applications and CVs of interested consultancies/companies will be reviewed. The consultancy/company will be selected depending upon qualification and experience.
2307	Audio Visual and Print Production Costs Outcome 3	This budget will be used to cover the costs for printing and disseminating policy briefs and disseminating technical guidelines. Printing budget could also be used to cover any of the other relevant content produced under Output 3.2.	30 000	Year 2, 3 and 4	The PM will draw up ToRs and put out an advertisement for Audio Visual and Print Production company as required by the project. Applications and CVs of interested consultancies/companies will be reviewed.
2308	Audio Visual and Print Production Costs Outcome 4	This budget will be used to cover the costs of: i) printing materials (such as posters, summaries of lessons learned); ii) production and dissemination of short video clip; iii) layout, translation and formatting of communication materials; iv) production of multi-media such as talk shows, TV and radio spots, and billboards on the national roads; and v) dissemination of knowledge through online platforms.	122 926	Year 1, 2, 3 and 4.	The consultancy/company will be selected depending upon qualification and experience.

<b>3200</b>	<b>Group training</b>				
3201	Training on vulnerability assessments	This budget will be used for the training of 1-3 relevant representatives (at least 15 representatives in total per training event) from INAMET, MINAMB, CCC, Sectoral ministries and Civil Protection on climate change and vulnerability assessments. Budget for this training also includes venue, travel assistance, breakfast and lunch at each training session. Training sessions will be held in Luanda.	28 000	Year 1 and 4	The Vulnerability Assessment Consultancy will organise the training sessions with support from the PM.
3202	Training for extension officers	This budget will be used for the training of extension officers and other relevant local government representatives at the selected project intervention sites on interpreting climate information and translating it into locally relevant climate forecasts and advisories.	50 000	Year 2 and 3	The PM will organise the training for EbA with assistance from the International EbA/ Agriculture Specialist.
3203	Training for EbA	<p>This budget will be used for training for EbA including: development of training programmes and related materials for various activities; training for local government representatives and community management committees on EbA and climate-resilient land management; training for community management committees on EWS; training for community management committees on maintenance of EbA and climate-resilient land management; and experience sharing events.</p> <p>The budget will also be used for associated costs including <i>inter alia</i>: printing, facilitators, catering, venue hire, trainee transport and production of detailed training reports.</p>	86 000	Year 1, 2, 3 and 4	The PM will organise the training for EbA with assistance from the International EbA/ Agriculture Specialist.
3204	Training, workshops and conferences under Outcome 3	This budget will be used for training, workshops and conferences under Outcome 3. This will include 4 training workshops for the secretariat of the CIBAC and Climate Change Cabinet on i) financing climate change adaptation; and ii) climate change adaptation investment appraisal. In addition, a workshop on policy briefs and technical guidelines will be held in Luanda and will be facilitated/trained by the TA and the Economic expert. Included in the workshop budget are costs pertaining to travel assistance, breakfast and lunch.	40 000	Year 3 and 4	The TA will organise the training sessions with support from the PM.
3205	Training, workshops and conferences under Outcome 4	<p>This budget will be used for training, workshops and conferences under Outcome 4. This will include conferences and meetings for awareness-raising activities. Budget allocation has also been made for venue, speaker, catering at these conferences and meetings.</p> <p>In addition, conferences and workshops will be held at local</p>	60 000	Year 1,2,3 and 4	The TA will organise the training sessions with support from the PM.

		academic institutions. This will include 10 seminars from national consultants.			
<b>4100</b>	<b>Expendable equipment</b>				
4101	Communication materials for vulnerability assessments	This budget will be used for dissemination of the results of the vulnerability assessments and development of integrated vulnerability map.	18 000	Year 2	The PM will oversee this payment and the procurement of related services.
4102	Printing costs for EWS communication	This budget will be used for editing, printing and publishing protocols, handbooks, policy and information briefs, and/or guidelines	15 000	Year 1,2,3 and 4	The PM will oversee this payment and the procurement of related services.
4103	Office rental	This budget will be used for payment of office rental.	192 000	Year 1,2,3 and 4	The PM will oversee this payment and the procurement of related services.
4104	Office equipment	This budget will be used for payment for office equipment, including, desks, chairs, computers, office supplies.	30 000	Year 1 and 2	The PM will oversee this payment and the procurement of related services.
4105	Telecommunications cost	This budget will be used for payment of telecommunications costs, including telephone and internet.	48 000	Year 1,2,3 and 4	The PM will oversee this payment and the procurement of related services.
<b>3300</b>	<b>Meetings/Conferences</b>				
3301	Presentations for vulnerability assessments	This budget will be used for presentations for vulnerability assessments. These presentations will publicise the results of the vulnerability assessments to a broad range of stakeholders and relevant sectors.	24 000	Year 2	The Vulnerability Assessment Consultancy will organise these presentations with support from the PM.
3302	Consultations for community response plans	This budget will be used for training/consultation sessions with relevant communities (including venue, breakfast, lunch and participant transportation costs). These consultations will be held at the project implementation site.	12 000	Year 2 and 3	The Community Engagement Specialist will organise these consultations with support from the PM.
3303	Community management committee meeting costs	This budget will be used for community management committee meeting costs pertaining to transport of community members, token venue, stationary/printing costs, and catering.	20 000	Year 1,2,3 and 4	The Community Engagement Specialist will organise these consultations with support from the PM.
<b>4200</b>	<b>Non-expendable equipment</b>				
4201	Climate and hydrological monitoring equipment	<p>This budget will be used for the procurement and installation of climate and hydrological monitoring equipment at the identified installation sites.</p> <ul style="list-style-type: none"> <li>Install and test 5 Automatic Weather Stations (AWS) and at least 5 rainfall gauges complete with remote data transmission and archiving with display systems at the identified installation sites; Procure 1 spare Automatic Weather Stations (AWS) and 2 spare rainfall gauges complete with remote data transmission and archiving with</li> </ul>	630 000	Year 1	The International Meteorological/ EWS Specialist, INAMET technician and National EWS consultant will work together to identify, procure and oversee the installation of appropriate climate and hydrological equipment.

		<p>display systems; Procure and operationalise 1 mobile AWS for sensor's field calibration; integrating existing AWS and interfacing to INAMET central data collection and storage system; Install and test 4 automatic river gauging stations and 4 manual water level stations at the identified installation sites, complete with remote data transmission and archiving with display systems at INAMET, Civil Protection and INARH; Procure 1 spare automatic river gauging stations and 1 spare manual water level stations; Procure and operationalise 1 mobile Hydromet Automatic Station (HAS) for sensor's field calibration, integrating existing and recently INARH stations.</p> <ul style="list-style-type: none"> <li>• Install and test 4 automatic river gauging stations and at least 4 manual water level (at the X and X rivers) stations, complete with remote data transmission and archiving with display systems at INAMET, Civil Protection, INARH, Provincial Government and relevant municipal and communal administrations.</li> <li>• 5 VHF-U systems and/or Advanced powerful Walky Talky systems (50km range or plus via retransmitters) using open UHF radio frequencies for data transfer from AWS.</li> <li>• Stabilise power at 5 AWSs through the provision of dry cells, upgrading solar panels, and batteries.</li> </ul>			
4202	Climate and hydrological monitoring transmission equipment	This budget will be used to procure climate and hydrological monitoring transmission equipment, including inter alai telecommunications infrastructure. The budget will also be used to procure Communication Facility Radio Transceiver and supporting two way radios.	107 000	Year 2	The International Meteorological/ EWS Specialist, INAMET technician and National EWS consultant will work together to identify, procure and oversee the installation of appropriate climate and hydrological equipment.
4203	Chiloango – equipment and EbA inputs	This budget will be used for equipment and EbA inputs at Chilango to allow for the implementation of appropriate EbA interventions. Demonstration plots will also be established at each project intervention site to demonstrate climate-resilient agricultural techniques. The budget includes allocations for professional fees and associated costs.	530 000	Year 1,2,3 and 4	Consultancy sub-contracted for land restoration and climate-resilient agriculture in Chiloango will manage the procurement of these goods and services with oversight by the Monitoring and Learning Specialist.
4204	Barra do Dande – equipment and EbA inputs	This budget will be used for equipment and EbA inputs at Barra do Dande. This includes procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.	280 000	Year 1,2,3 and 4	Consultancy sub-contracted for land restoration and climate-resilient agriculture in Barra do Dande will manage the procurement of these goods and services with oversight by the Monitoring and Learning Specialist.



4205	Longa - equipment and EbA inputs	This budget will be used for equipment and EbA inputs at Longa. This includes procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.	400 000	Year 1,2,3 and 4	Consultancy sub-contracted for land restoration and climate-resilient agriculture in Longa will manage the procurement of these goods and services with oversight by the Monitoring and Learning Specialist.
4206	Bero - equipment and EbA inputs	This budget will be used for equipment and EbA inputs at Bero. This includes procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.	400 000	Year 1,2,3 and 4	Consultancy sub-contracted for land restoration and climate-resilient agriculture in Bero will manage the procurement of these goods and services with oversight by the Monitoring and Learning Specialist.
4207	Management plan inputs	This is an annual stipend for carrying out activities identified in the community management plan. These interventions are likely to include <i>inter alia</i> : i) facilitated market access for NTFPs from EbA interventions and crops produced from climate-resilient agriculture; and ii) budget for each community management committee for patrols of restored land.	80 800	Year 1,2,3 and 4	The PM will oversee the administration of this annual stipend and its expenditure by community management committees.
4208	Project Vehicle	This budget will be used to procure a project vehicle for site visits of the TA and Om to Bengo and Kwanza Sul.	50 000	Year 1,2,3 and 4	The PM will oversee this payment and the procurement of related services.
<b>5200</b>	<b>Reporting costs</b>				
5201	Project Steering Committee Meetings	This budget will be used to host Project Steering Committee meetings during the project lifespan.	8 000	Year 1,2,3 and 4	The PM will organise these meetings.
5202	Inception and closure workshop	This budget will be used to host the inception and closure workshop.	7 000	Year 1 and 4	The PM will organise these meetings.
	<b>GRAND TOTAL</b>		<b>5 092 320</b>		

**Note 1 - Year when goods/services will be procured**

**Note 2 - Based on your organisation's procurement procedures, and in compliance with UNEP rules and procedures, briefly explain how the service provider/consultant/vendor will be selected**

## Annex F: Detailed GEF Budget:

ANNEX F-1 - RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET LINE (GEF FUNDS ONLY US\$)															
Project title:			Addressing urgent coastal adaptation needs and capacity gaps in Angola												Notes
Project number:			5276												
Project executing partner:			Ministry of Environment (MINAMB)												
Project implementation period:			Expenditure by project component/activity						Expenditure by calendar year						
From:	2016														
To:	2019		Outcom e 1	Outcome 2	Outcom e 3 + 4	PM	M&E	Total	Year 1	Year 2	Year 3	Year 4	Total		
UNEP Budget Line															
10	PERSONNEL COMPONENT														
	1100	Project personnel													
	1101	National Project Manager	54000	126000	36000			216000	54000	54000	54000	54000	216000	28, 42, 47	
	1102	Project driver		72000				72000	18000	18000	18000	18000	72000	34	
	1199	Sub-total	54000	198000	36000	-	-	288000	72000	72000	72000	72000	288000		
	1200	Consultants													
	1201	National Industry Expert - Agriculture	6000					6000	6000	-	-	-	6000	2	
	1202	National Industry Expert - Fisheries	6000					6000	6000	-	-	-	6000	3	
	1203	National Industry Expert - Transport	6000					6000	6000	-	-	-	6000	4	
	1204	National Industry Expert - Environment	6000					6000	6000	-	-	-	6000	5	
	1205	National Industry	6000					6000	6000	-	-	-	6000	6	

		Expert - Tourism												
	1206	International meteorological/ EWS specialist	64000					64000	34500	29500	-	-	64000	10
	1207	INAMET technician	3000					3000	3000	-	-	-	3000	11
	1208	National EWS consultant	20000					20000	-	10000	10000	-	20000	19
	1209	International EbA/ agriculture specialist		76640				76640	46917	21473	4400	3850	76640	21
	1210	Community engagement specialist		38880				38880	14144	15552	4592	4592	38880	22
	1211	Monitoring and learning specialist		153000				153000	39500	39500	37000	37000	153000	31
	1212	International Technical Advisor			471074			471074	117769	117769	117769	117767	471074	37
	1213	International Adaptation economics / Policy Expert			90000			90000	7500	37500	32000	13000	90000	39
	1214	National Adaptation economics /Policy Expert			35000			35000	-	25000	10000	-	35000	39
	<b>1299</b>	<b>Sub-total</b>	<b>117000</b>	<b>268520</b>	<b>596074</b>	<b>-</b>	<b>-</b>	<b>981594</b>	<b>293330</b>	<b>296294</b>	<b>215761</b>	<b>176209</b>	<b>981594</b>	
	<b>1300</b>	<b>Administrative Support</b>												
	1301	Finance Manager	42000			126000		168000	42000	42000	42000	42000	168000	15
	1302	Project Assistant				72000		72000	18000	18000	18000	18000	72000	49
	<b>1399</b>	<b>Sub-total</b>	<b>42000</b>	<b>-</b>	<b>-</b>	<b>198000</b>	<b>-</b>	<b>240000</b>	<b>60000</b>	<b>60000</b>	<b>60000</b>	<b>60000</b>	<b>240000</b>	

	<b>1600</b>	<b>Travel on official business</b>												
	1601	Travel to EWS sites	3000					3000	1800	1200	-	-	3000	13
	1602	Travel for EbA		31680				31680	7920	7920	7920	7920	31680	36
	1603	Travel for TA			20000			20000	5000	5000	5000	5000	20000	46
	<b>1699</b>	<b>Sub-total</b>	<b>3000</b>	<b>31680</b>	<b>20000</b>	<b>-</b>	<b>-</b>	<b>54680</b>	<b>14720</b>	<b>14120</b>	<b>12920</b>	<b>12920</b>	<b>54680</b>	
<b>1999</b>	<b>Component total</b>		<b>216000</b>	<b>498200</b>	<b>652074</b>	<b>198000</b>	<b>-</b>	<b>1564274</b>	<b>440050</b>	<b>442414</b>	<b>360681</b>	<b>321129</b>	<b>1564274</b>	
<b>20</b>	<b>SUB-CONTRACT COMPONENT</b>													
	<b>2100</b>	<b>Sub-contracts (MOUs/LO As for cooperating agencies)</b>												
	2101							-					-	
	<b>2199</b>	<b>Sub-total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
	<b>2200</b>	<b>Sub-contracts (MOUs/LO As for supporting organizations)</b>												
	2201	National academics		60000				60000	-	20000	20000	20000	60000	30
	<b>2299</b>	<b>Sub-total</b>	<b>-</b>	<b>60000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>60000</b>	<b>-</b>	<b>20000</b>	<b>20000</b>	<b>20000</b>	<b>60000</b>	
	<b>2300</b>	<b>Sub-contracts (for commercial purposes)</b>												
	2301	Vulnerability assessment consultancy	350000					350000	200000	150000	-	-	350000	1

	2302	Chiloango - professional fees and associated costs		170000				170000	37000	49000	42000	42000	170000	23
	2303	Barra do Dande - professional fees and associated costs		155000				155000	31000	52000	36000	36000	155000	24
	2304	Longa - professional fees and associated costs		165000				165000	30000	55000	40000	40000	165000	25
	2305	Bero - professional fees and associated costs		165000				165000	30000	55000	40000	40000	165000	26
	2306	Communications company			80000			80000	-	30000	40000	10000	80000	42
	2307	Audio Visual and Print Production Costs Outcome 3			30000			30000	-	-	15000	15000	30000	41
	2308	Audio Visual and Print Production Costs Outcome 4			88926			88926	11500	24426	26500	26500	88926	43
								-					-	
	<b>2399</b>	<b>Sub-total</b>	<b>350000</b>	<b>655000</b>	<b>198926</b>	<b>-</b>	<b>-</b>	<b>1203926</b>	<b>339500</b>	<b>415426</b>	<b>239500</b>	<b>209500</b>	<b>1203926</b>	
<b>2999</b>	<b>Component total</b>		<b>350000</b>	<b>715000</b>	<b>198926</b>	<b>-</b>	<b>-</b>	<b>1263926</b>	<b>339500</b>	<b>435426</b>	<b>259500</b>	<b>229500</b>	<b>1263926</b>	
<b>30</b>	<b>TRAINING COMPONENT</b>													
	<b>3200</b>	<b>Group training</b>												
	3201	Training on vulnerability	28000					28000	-	28000	-	-	28000	7

		assessments												
	3202	Training for extension officers and agro-meteorological services	50000					50000	-	25000	25000	-	50000	18
	3203	Training for EbA		86000				86000	8800	23600	23600	30000	86000	27
	3204	Training, workshops and conferences under Outcome 3.			55000			55000	-	-	25000	30000	55000	40
	3205	Training, workshops and conferences under Outcome 4.			60000			60000	15000	15000	15000	15000	60000	44
	<b>3299</b>	<b>Sub-total</b>	<b>78000</b>	<b>86000</b>	<b>115000</b>	<b>-</b>	<b>-</b>	<b>279000</b>	<b>23800</b>	<b>91600</b>	<b>88600</b>	<b>75000</b>	<b>279000</b>	
	<b>3300</b>	<b>Meetings/Conferences</b>												
	3301	Presentations for vulnerability assessments	24000					24000	-	24000	-	-	24000	9
	3302	Consultations for community response plans	12000					12000	-	6000	6000	-	12000	20
	3303	Community management committee		20000				20000	5000	5000	5000	5000	20000	29

		meeting costs												
	3399	Sub-total	36000	20000	-	-	-	56000	5000	35000	11000	5000	56000	
3999	Component total		114000	106000	115000	-	-	335000	28800	126600	99600	80000	335000	
40	EQUIPMENT AND PREMISES COMPONENT													
	4100	Expendable equipment												
	4101	Communication materials for vulnerability assessments	18000					18000	-	18000	-	-	18000	8
	4102	Printing costs for EWS communication	15000					15000	5000	5000	5000	-	15000	16
	4103	Office rental				96000		96000	24000	24000	24000	24000	96000	51
	4104	Office equipment				30000		30000	20000	10000	-	-	30000	53
	4105	Telecommunications cost	22000			26000		26000	12000	12000	12000	12000	48000	50
	4199	Sub-total	55000	-	-	152000	-	185000	61000	69000	41000	36000	207000	
	4200	Non-expendable equipment												
	4201	Climate and hydrological monitoring equipment	726000					726000	726000	-	-	-	726000	14

	4202	Climate and hydrological monitoring transmission equipment	107000					107000	-	107000	-	-	107000	17
	4203	Chiloango - equipment and EbA inputs		530000				530000	106000	212000	106000	106000	530000	23
	4204	Barra do Dande - equipment and EbA inputs		280000				280000	56000	112000	56000	56000	280000	24
	4205	Longa - equipment and EbA inputs		400000				400000	80000	160000	80000	80000	400000	25
	4206	Bero - equipment and EbA inputs		400000				400000	80000	160000	80000	80000	400000	26
	4207	Management plan inputs		80800				80800	20200	20200	20200	20200	80800	30
	4208	Project vehicle		50000				50000	12500	12500	12500	12500	50000	33
	<b>4299</b>	<b>Sub-total</b>	<b>833000</b>	<b>1740800</b>	-	-	-	<b>2573800</b>	<b>1080700</b>	<b>783700</b>	<b>354700</b>	<b>354700</b>	<b>2573800</b>	
<b>4999</b>	<b>Component total</b>		<b>888000</b>	<b>1740800</b>	-	<b>152000</b>	-	<b>2758800</b>	<b>1141700</b>	<b>852700</b>	<b>395700</b>	<b>390700</b>	<b>2780800</b>	
<b>50</b>	<b>MISCELLANEOUS COMPONENT</b>													
	<b>5100</b>	<b>Operation and maintenance of equipment</b>												
	5101	Vehicle maintenance		20000				20000	5000	5000	5000	5000	20000	35
	<b>5199</b>	<b>Sub-total</b>	-	<b>20000</b>	-	-	-	<b>20000</b>	<b>5000</b>	<b>5000</b>	<b>5000</b>	<b>5000</b>	<b>20000</b>	
	<b>5200</b>	<b>Reporting costs</b>												



	5201	Project Steering Committee Meetings					8000	8000	2000	2000	2000	2000	8000	
	5202	Inception and closure workshop					7000	7000	3500	-	-	3500	7000	
								-					-	
	<b>5299</b>	<b>Sub-total</b>	-	-	-	-	<b>15000</b>	<b>15000</b>	<b>5500</b>	<b>2000</b>	<b>2000</b>	<b>5500</b>	<b>15000</b>	
	<b>5300</b>	<b>Sundry</b>												
	5301	Miscellaneous				2000		2000	500	500	500	500	2000	52
	5302	UNDP Cost Recovery Charges				62000		62000	15500	15500	15500	15500	62000	54
	5303	Professional service - Audit fees			12000			12000	3000	3000	3000	3000	12000	55
	<b>5399</b>	<b>Sub-total</b>	-	-	<b>12000</b>	<b>64000</b>	-	<b>76000</b>	<b>19000</b>	<b>19000</b>	<b>19000</b>	<b>19000</b>	<b>76000</b>	
	<b>5400</b>	<b>Hospitality and entertainment</b>												
	5401							-					-	
	<b>5499</b>	<b>Sub-total</b>	-	-	-	-	-	-	-	-	-	-	-	
	<b>5500</b>	<b>Evaluation</b>												
	5501	Baseline evaluation					35000	35000	35000	-	-	-	35000	
	5502	Mid-term evaluation					35000	35000	-	35000	-	-	35000	
	5503	Final evaluation					35000	35000	-	-	-	35000	35000	
	5504	Audit					20000	20000	5000	5000	5000	5000	20000	
	<b>5599</b>	<b>Sub-total</b>	-	-	-	-	<b>125000</b>	<b>125000</b>	<b>40000</b>	<b>40000</b>	<b>5000</b>	<b>40000</b>	<b>125000</b>	
<b>5999</b>	<b>Component total</b>		-	<b>20000</b>	<b>12000</b>	<b>64000</b>	<b>140000</b>	<b>236000</b>	<b>69500</b>	<b>66000</b>	<b>31000</b>	<b>69500</b>	<b>236000</b>	
<b>99</b>	<b>GRAND TOTAL</b>		<b>1568000</b>	<b>3080000</b>	<b>978000</b>	<b>414000</b>	<b>140000</b>	<b>6158000</b>	<b>2019550</b>	<b>1923140</b>	<b>1146481</b>	<b>1090829</b>	<b>6180000</b>	



Budget notes		
#	Description	Activities and Notes
<b>Component 1</b>		
1	Vulnerability assessment consultancy	<p><u>This consultancy will:</u></p> <p><b>1.1.1.</b> Undertake a vulnerability assessment on coastal climate change. This assessment will include: i) desktop analysis of existing climate and vulnerability data; and ii) GIS-based analysis; iii) participatory analysis. \$150 000</p> <p><b>1.1.2.</b> Develop related sector-specific vulnerability assessments, with input from national industry experts and best-practice adaptation recommendations tailored to each sector. \$150 000</p> <p><b>1.1.3.</b> Coordinate and conduct vulnerability assessment training (excluding venue and catering costs) \$30 000</p> <p><b>1.1.4.</b> Oversee the dissemination of the results of the coastal zone and sector-specific vulnerability assessments (including working with site developers to produce interactive vulnerability maps) \$20 000</p> <p>This lump sum will include all data acquisition costs, travel or other costs incurred.</p>
2	National Industry Expert - Agriculture	<b>1.1.2.</b> This consultant will be an expert on climate change impacts to the agriculture sector and will provide sector-specific information to the agriculture sector vulnerability assessment. 15 days @ \$400/day = \$6 000.
3	National Industry Expert - Fisheries	<b>1.1.2.</b> This consultant will be an expert on climate change impacts to the fisheries sector and will provide sector-specific information to the fisheries sector vulnerability assessment. 15 days @ \$400/day = \$6 000.
4	National Industry Expert - Transport	<b>1.1.2.</b> This consultant will be an expert on climate change impacts to the transport sector and will provide sector-specific information to the transport sector vulnerability assessment. 15 days @ \$400/day = \$6 000.
5	National Industry Expert - Environment	<b>1.1.2.</b> This consultant will be an expert on climate change impacts to the environmental sector and will provide sector-specific information to the environmental sector vulnerability assessment. 15 days @ \$400/day = \$6 000.
6	National Industry Expert - Tourism	<b>1.1.2.</b> This consultant will be an expert on climate change impacts to the tourism sector and will provide sector-specific information to the tourism sector vulnerability assessment. 15 days @ \$400/day = \$6 000.
7	Training on vulnerability assessments	<p><b>1.1.3.</b> Training of 1-3 relevant representatives (at least 15 representatives in total per training event) from INAMET, MINAMB, CCC, Sectoral ministries and Civil Protection on climate change and vulnerability assessments. Each training session will span 2-3 days. @ \$7000 per training including travel assistance, breakfast and lunch x 4 training sessions. This training sessions will be held in Luanda.</p> <p>The training sessions will include a session on vulnerable groups – including notably women. 10% of this training budget will be allocated to this session.</p>
8	Communication materials for vulnerability assessments	<p><b>1.1.4</b> Dissemination of the results of the vulnerability assessments.</p> <p>Rollup posters: \$300 per poster x 20 (2 for each sectoral ministry, INAMET, Civil Protection and CCC) = \$6 000</p> <p>Development of integrated vulnerability map: \$12 000 for web development fees.</p>
9	Presentations for vulnerability assessments	<b>1.1.4</b> Presentations to publicise the results of the vulnerability assessments. 6 presentations @ \$4000 per event = \$24 000. There will be 1 general presentation/workshop to showcase the results of the vulnerability assessment to a broad range of stakeholders, and 5 sector-specific presentations/workshops (for the agriculture, fisheries, transport, environment and tourism sectors).

10	International meteorological/ EWS specialist	<p>This consultant will conduct an equipment assessment, identify and assess sites for the installation of equipment and procure, install and test equipment. He/she will help to set up the technical aspects of an appropriate communication system to transmit meteorological and hydrological information to INAMET and INARH, and transfer flood and drought early warnings from INAMET Forecasting Centre and INARH Flood Forecasting Centre to relevant local authorities. Finally, this consultant will prepare training material for agro-met service providers and extensions officers from SNPCB on interpretation of climate information and translation into locally relevant climate forecasts and advisories.</p> <p><b>1.2.1</b> 10 days in total. (10 DSA @ DSA \$250/day, 1 flight @ \$2500)</p> <p><b>1.2.2.</b> 10 days in total. (10 DSA @ DSA \$250/day)</p> <p><b>1.2.3</b> 20 days in total. (20 SA @ DSA \$250/day)</p> <p><b>1.2.4.</b> 20 days in total. (20 SA @ DSA \$250/day, 1 flight @ \$2500)</p> <p><b>1.2.5.</b> 20 days in total</p> <p>(80 days total @ \$550/day; 60 days in-country @ DSA \$250/day; 2 flights @ \$2 500 /flight).</p>
11	INAMET technician	This technician will be an employee of INAMET and will assist the International meteorological/ EWS specialist to identify sites for the installation of weather stations and hydrological equipment. 10 days @ \$300/day
12	National Project Manager	National Project Manager (@ \$4500 per month) costs under Outcome 1.
13	Travel to EWS sites	Travel costs for project team to visit the and assess the EWS equipment installation sites. \$600 per visit x 5 visits.
14	Climate and hydrological monitoring equipment	<ul style="list-style-type: none"> <li>• Install and test 5 Automatic Weather Stations (AWS) and at least 5 rainfall gauges complete with remote data transmission and archiving with display systems at the identified installation sites; Procure 1 spare Automatic Weather Stations (AWS) and 2 spare rainfall gauges complete with remote data transmission and archiving with display systems; Procure and operationalise 1 mobile AWS for sensor's field calibration; integrating existing AWS and interfacing to INAMET central data collection and storage system; Install and test 4 automatic river gauging stations and 4 manual water level stations at the identified installation sites, complete with remote data transmission and archiving with display systems at INAMET, Civil Protection and INARH; Procure 1 spare automatic river gauging stations and 1 spare manual water level stations; Procure and operationalise 1 mobile Hydromet Automatic Station (HAS) for sensor's field calibration. \$666 000.</li> <li>• Installation and construction costs for 5 AWS, 5 rainfall gauges, 4 automatic river gauging stations and 4 manual water level stations. \$50 000.</li> <li>• Install and test 4 automatic river gauging stations and at least 4 manual water level stations, complete with remote data transmission and archiving with display systems at INAMET, Civil Protection, INARH, Provincial Government and relevant municipal and communal administrations.</li> <li>• 5 VHF-U systems and/or Advanced powerful Walky Talky systems (50km range or plus via retransmitters) using open UHF radio frequencies for data transfer from AWS. @\$5 000 each = \$25 000.</li> <li>• Stabilise power at 5 AWSs through the provision of dry cells, upgrading solar panels, and batteries. @\$5 000 each = \$25 000.</li> </ul>
15	Finance Manager	The Finance manager will oversee the procurement of all of the climate and hydrological monitoring equipment. Finance Manager (@ \$4500 per month) costs under Outcome 1.
16	Printing costs for EWS communication	Editing, printing and publishing protocols, handbooks, policy and information briefs, and/or guidelines

17	Climate and hydrological monitoring transmission equipment	<ul style="list-style-type: none"> <li>• Telecommunications infrastructure including computers, computer servers and software, radiotelephones, portable telephones, GSM/GPRS GSM/GPRS modems and other equipment for internet access. \$72 000</li> <li>• Communication Facility Radio Transceiver and supporting two way radios. \$25 000.</li> <li>• Procure equipment (hardware and software) and ensure connectivity (internet modems and access) for 4 modern forecasting workstations to support INAMET/INARH at project intervention site. @\$3 000 each = \$12 000</li> </ul>
18	Training for extension officers and agro-meteorological services	<b>1.2.5.</b> Facilitate in-service capacity programme for at least 15 decentralized agro-met service providers, extension officers from SNPCB and other relevant local government representatives at the selected project intervention site to be trained on interpreting climate information and translating it into locally relevant climate forecasts and advisories. These trainees will function as managers of the Flood Forecasting and Early Warning issuing, dissemination and response actions. 2 sets of in-service training @\$25 000 each.
19	National EWS consultant	<b>1.2.6.</b> The consultant will develop flood and drought early warning response plans with pilot communities in the selected project intervention sites. This lump sum will include all material costs, travel or other costs incurred.
20	Consultations for community response plans	<b>1.2.6. 4</b> x training/consultation sessions with community @ \$3000 per session, including, venue, breakfast and lunch. These training/consultations will be held at the project site, and will be used to develop flood community response plans, in consultation with local government officials and community management structures. This total cost also includes budget for transporting participants to the venue if necessary.
<b>Component 2</b>		
21	International EbA/ agriculture specialist	<p><u>This consultant will:</u></p> <p><b>2.1.1</b> Undertake a biophysical, socio-economic and market assessments at each project site. Total cost \$10 073</p> <p><b>2.1.2</b> Identify species for EbA interventions. Total cost \$10 073</p> <p><b>2.1.3.</b> Develop protocols to guide implementation of EbA interventions. Total cost \$10 073 40 days in total</p> <p><b>2.1.4.</b> Support the National Project Manager to identify and contract organisations to implement interventions at each of the 4 pilot sites. Total cost = \$3 825</p> <p><b>2.2.1.</b> Identify the appropriate climate-resilient agriculture techniques to be implemented in each site. 16 days in total = \$12 873</p> <p><b>2.1.8.</b> Collaborate with the Community Engagement Expert and community management committees to develop community-based EbA intervention management plans. 28 days in total = \$21 473</p> <p><b>2.4.3.</b> Collaborate with the Community engagement specialist and contractors to collate lessons learned and best practices at the end of the process. 7 days in total = \$3 850</p> <p><b>2.4.4.</b> and <b>2.4.5</b> Develop EbA project concept notes for private sector upscaling of EbA interventions in collaboration with the Community Engagement Expert and the TA. 8 days in total = \$4 400</p> <p>Total travel costs are included in the above figures. (104 days @ \$550/day; 52 days in-country @ DSA \$250 day; 2 international flights @ \$2 500 /flight, local flights - Cabinda \$320 x 2 and Namibe \$400 x 2)</p> <p>DSA depends on the site of the EW intervention. Have selected Cabinda DSA as a guideline: <a href="http://apps.who.int/bfi/tsy/PerDiem.asp">http://apps.who.int/bfi/tsy/PerDiem.asp</a></p>

22	Community Engagement specialist	<p><u>This consultant will:</u></p> <p><b>2.1.5.</b> Collaborate with contractors to establish community management committees in pilot communities. 30 days in total = \$12 000</p> <p><b>2.1.6.</b> Liaise with the community management committees and EbA expert to identify pilot sites for EbA interventions. 20 days in total = \$8 000</p> <p><b>2.1.8.</b> Collaborate with EbA expert and community management committees to develop community-based EbA intervention management plans. 30 days in total = \$12 000</p> <p><b>2.4.3.</b> Collaborate with EbA expert and contractors to collate lessons learned and best practices at the end of the process. 5 days in total = \$2 000</p> <p><b>2.4.4.</b> Develop EbA project concept notes for private sector upscaling of EbA interventions in collaboration with the International EbA/ agriculture specialist and the TA. 5 days in total = \$2 000</p> <p>Total travel costs = \$2880 (split over 2.1.5, 2.1.6, 2.1.8 = \$960 each)</p> <p>90 days @ \$400/day; local flights - Cabinda \$320 x 4 and Namibe \$400 x 4</p>
23	Consultancy sub-contracts for EbA and climate-resilient land restoration in Chiloango (Cabinda)	<p><b>2.1.7.</b> Implement appropriate EbA interventions. Professional fees and associated costs = \$135 000 and Equipment and EbA inputs = \$450 000</p> <p>Interventions under 2.1.7 will include <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Conduct an Environmental Impact Assessment, if required, for the proposed EbA and climate-resilient land restoration activities in Chiloango (\$20,000).</li> <li>• Establish a community-lead nursery for climate-resilient plant species identified in Activity 2.1.2.</li> <li>• Restore 400 ha of degraded wetlands using labour from local communities.</li> <li>• Assess the wetland ecosystem and create a cost effective strategy for its restoration in consultation with the community management committee.</li> <li>• Restore the wetland using workers from local communities. Activities will include <i>inter alia</i>: i) digging of new water channels; ii) clearing of existing water channels; and iii) planting with climate-resilient species to stabilise banks.</li> </ul> <p><b>2.2.2.</b> Establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. Professional fees and associated costs = \$10 000 and Equipment and EbA inputs = \$20 000</p> <p><b>2.2.3.</b> Implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Professional fees and associated costs = \$25 000 and Equipment and EbA inputs = \$60 000</p> <p><b>2.4.3.</b> Collaborate with the Community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs include: restoration design, management and administration.</p> <p>Equipment and EbA inputs include: procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.</p>

24	Consultancy sub-contracts for EbA and climate-resilient land restoration in Barra do Dande (Kwanza Sul)	<p><b>2.1.8.</b> Implement appropriate EbA interventions. Professional fees and associated costs = \$100 000 and Equipment and EbA inputs = \$150 000 Interventions under 2.1.7 will include <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Conduct an Environmental Impact Assessment, if required, for the proposed EbA and climate-resilient land restoration activities in Barro do Dande (\$20,000).</li> <li>• Establish a community-lead nursery for climate-resilient plant species identified in Activity 2.1.2.</li> <li>• Restore 10 ha of degraded wetlands in Barra do Dande using labour from local communities.</li> </ul> <p><b>2.2.2.</b> Establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. Professional fees and associated costs = \$10 000 and Equipment and EbA inputs = \$20 000</p> <p><b>2.2.3.</b> Implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Professional fees and associated costs = \$25 000 and Equipment and EbA inputs = \$60 000</p> <p><b>2.4.3.</b> Collaborate with the Community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p>Professional fees and associated costs include: restoration design, management and administration.</p> <p>Equipment and EbA inputs include: procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.</p>
25	Consultancy sub-contracts for EbA and climate-resilient land restoration in Longa (Kwanza Sul)	<p><b>2.1.9.</b> Implement appropriate EbA interventions. Professional fees and associated costs = \$115 000 and Equipment and EbA inputs = \$300 000 Interventions under 2.1.7 will include <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Conduct an Environmental Impact Assessment, if required, for the proposed EbA and climate-resilient land restoration activities in Longa (\$20,000).</li> <li>• Establish a community-led nursery for climate-resilient plant species identified in Activity 2.1.2.</li> <li>• Restore 41 ha of degraded wetland in Longa using labour from local and nearby communities.</li> <li>• Assess the wetland ecosystem and create a cost effective strategy for its restoration in consultation with the community management committee.</li> <li>• Restore the wetland and riverine area using workers from local communities.</li> </ul> <p>Activities will include <i>inter alia</i>: i) digging of new water channels; ii) clearing of existing water channels; and iii) planting with climate-resilient species to stabilise river banks.</p> <p><b>2.2.2.</b> Establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques. Professional fees and associated costs = \$10 000 and Equipment and EbA inputs = \$20 000</p> <p><b>2.2.3.</b> Implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities. Professional fees and associated costs = \$45 000 and Equipment and EbA inputs = \$110 000</p> <p><b>2.4.3.</b> Collaborate with the Community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</p> <p><u>Professional fees and associated costs include:</u> restoration design, management and administration.</p> <p><u>Equipment and EbA inputs include:</u> procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.</p>

26	Consultancy sub-contracts for EbA and climate-resilient land management in Bero (Namibe)	<p><b>2.1.10. Implement appropriate EbA interventions.</b> Professional fees and associated costs = \$115 000 and Equipment and EbA inputs = \$300 000</p> <p>Interventions under 2.1.7 will include <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Conduct an Environmental Impact Assessment, if required, for the proposed EbA and climate-resilient land restoration activities in Bero (\$20,000).</li> <li>• Assess the estuary, wetland and river ecosystem and create a cost effective strategy for its restoration in consultation with the community management committee.</li> <li>• Restore 110ha of wetland (including riverine) areas using workers from local communities. Activities will include inter alia: i) digging of new water channels; ii) clearing of existing water channels; and iii) planting with climate-resilient species to stabilise river banks.</li> <li>• Restore estuarine areas using workers from local communities. Activities will include inter alia clearing of silt and sediment, removal of litter and detritus.</li> </ul> <p><b>2.2.2. Establish demonstration plots at each project intervention site to demonstrate climate-resilient agricultural techniques.</b> Professional fees and associated costs = \$10 000 and Equipment and EbA inputs = \$20 000</p> <p><b>2.2.3. Implement a range of climate-resilient land management interventions identified in Activity 2.3.1 within and around pilot communities.</b> Professional fees and associated costs = \$40 000 and Equipment and EbA inputs = \$80 000</p> <p><b>2.4.3. Collaborate with the Community engagement specialist and contractors to collate lessons learned and best practices at the end of the process.</b></p> <p><u>Professional fees and associated costs include:</u> restoration design, management and administration.</p> <p><u>Equipment and EbA inputs include:</u> procurement and payment for goods and services including planting equipment and uniforms; wages for community labour; and hard costs of establishing nurseries and demonstration plots.</p>
27	Training for EbA	<p><b>2.3.1. Development of training programmes and related materials for 2.3.2, 2.3.3 and 2.3.4 : 30 days in total x \$300 p/d = total cost \$9 000</b></p> <p><b>2.3.2. 4 x training for local government representatives on EbA and climate-resilient land management: 4 x (1 training day @ 600 (2 trainers) + 3000 for local venue and catering) = total cost \$14 400</b></p> <p><b>2.3.3. 4 x training for community management committees on EbA and climate-resilient land management: 4 x (1 training day @ 600 (2 trainers) + 3000 for local venue and catering) = total cost \$14 400</b></p> <p><b>2.3.4. 4 x training for community management committees on EWS: 4 x (1 training day @ 600 (2 trainers) + 3000 for local venue and catering) = total cost \$14 400</b></p> <p><b>2.3.5. 4 x training for community management committees on maintenance of EbA and climate-resilient land management: 4 x (1 training day @ 600 (2 trainers) + 3000 for local venue and catering) = total cost \$14 400</b></p> <p><b>2.3.6 4 x experience sharing events: 4x (500 for transport costs, 600 for facilitators/trainers (2 trainers), 500 for educational material printing) = total cost \$6400</b></p> <p><b>Production of detailed training reports, with recommendations, for all trainings - total cost \$5 000</b></p> <p>Where no local venue is available, a gazebo should be rented to accommodate the trainees. Where trainees require transport to a central location for training, budget for this should be taken out of the venue fee and a venue chosen accordingly.</p> <p>Lump sum for transport (should cover 4 trips or 2 trainers to all project sites to conduct training) = <b>total cost \$8000</b></p> <p>The project will ensure that at least 30% of people trained on EbA and climate-resilient</p>



		land management are women. Therefore 30% of this budget is allocated towards the training of women specifically.
28	National Project Manager	National Project Manager (@ \$4500 per month) costs under Outcome 2. The PM role will include recruitment of consultancies to manage EbA and climate-resilient land management.
29	Community management committee meeting costs	An allowance to be used as needed for transport of community members, token venue hire (small meeting would ideally be hosted in someone's home or a free local venue), stationary/printing costs, and catering. 4 meetings per year @ \$1000 per meeting x 4 years = <b>\$20 000</b>
30	Management plan inputs	This is an annual stipend for carrying out activities identified in the community management plan. These interventions are likely to include inter alia: - Facilitated market access for NTFPs from EbA interventions and crops produced from climate-resilient agriculture = \$52 000 - \$150 p/m for each community management committee for patrols of restored land = \$7 200 x 4 years = \$28800
31	Monitoring and learning specialist	The monitoring and learning specialist will be responsible for offering technical advice and support to the project unit, local and international consultants.  60 days @ \$550/day; days per year = \$33 000 x 4 years = \$132 000 24 days in-country @ DSA \$250 = \$6 000 6 international flights @ \$2 500 /flight = \$15 000
32	National academics	Contract for national academic team to visit project sites twice annually in year 2, 3 and 4 and document the progress of EbA and climate-resilient land management interventions. Outputs of this contract will include: i) detailed reports of project progress; and ii) peer reviewed publications related to LDCF interventions across the various areas. Lessons learned from this M&E process will be integrated into <b>2.4.2</b> . \$20 00 per year over 3 years = \$60 000
33	Project vehicle	Under Component 2 the project vehicle will be used for site visits of TA and PM to Bingo and Kwanza Sul.
34	Project driver	Under Component 2 the project driver will drive the TA and PM interventions sites in Bingo and Kwanza Sulk, as required. \$1 500 x 12 x 4 years = \$72 000
35	Vehicle maintenance	Under Component 2 the project vehicle will be used for site visits of TA and PM to Bingo and Kwanza Sulk.
36	Travel for EbA	Petrol allowance: 1lt per 10km = \$1 p/l = \$300 per month for travel in Luanda, Dander and Longa x 12 x 4 = 14 400 Flights to Namibia \$400 return economy class x 6 flights per year = \$9 600 Flights to Cabinda \$320 return economy class x 6 flights per year = \$7 680
37	International Technical Advisor	Cost for an International Technical Advisor under Outcome 3. International Technical Advisor (total annual salary of \$235 537 x 2 years).  The International Technical Advisor be an expert on adaptation and will oversee deliverables of all Components. S/he will also provide additional technical input under Outcome 3.  The International Technical Advisor will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis.  The TA is responsible for the following activities under Outcome 3:  2.4.3. Engage with the private sector through relevant forums to disseminate EbA project concept notes.

		<p>3.1 (all activities). Technical support and training to CIBAC and Climate Change Cabinet.</p> <p>3.2.1. Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present economic assessments.</p> <p>3.2.3. Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present policy briefs.</p> <p>3.2.4 Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present technical guidelines.</p>
38	National Project Manager	National Project Manager (@ \$4500 per month) costs under Outcome 3.
39	National and International Adaptation Economics/Policy Expert	<p>International Adaptation Economics/Policy Expert (\$45 000 x 2 years = \$90 000)</p> <p>National Adaptation Economics/ Policy Expert (\$17 500 x 2 years = \$35 000)</p> <p>The International and National Adaptation and Economics/ Policy Expert will work together closely on the following activities:</p> <p>3.1.5 Provide training to the Secretariat of the CIBAC and Climate Change Cabinet on climate change adaptation finance and climate change adaptation investment appraisal.</p> <p>3.2.1 Undertake and present assessments of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector.</p> <p>3.2.2 Identify entry points at the national and provincial level for the integration of climate change adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions.</p> <p>3.2.3 Develop a coastal zone adaptation plan and mainstream the plan into relevant sectoral, regional and national development plans.</p> <p>3.2.4 Develop technical guidelines for GAC, sectoral ministries and the CIBAC on how to assess, plan and finance climate change adaptation interventions.</p>
40	Training, workshops and conferences under Outcome 3.	<p>Training and workshops under Outcome 3.</p> <p>3.1.5. 6 x training workshops @ \$5000 per workshop for the secretariat of the CIBAC, technical staff of member ministries, and the GCA.</p> <p>3.2.1. 5 x workshop to present economic assessments and related policy briefs @ \$5000 per workshop, including travel assistance, breakfast and lunch. The workshop could also relate to any of the other relevant content produced under Output 3.2.</p>
41	Audio Visual and Print Production Costs Outcome 3	<p>3.2.3 Costs for printing and disseminating policy briefs produced under @ \$15 000.</p> <p>3.2.4 Costs for printing and disseminating technical guidelines produced @ \$15 000.</p> <p>Printing budget could also be used to cover any of the other relevant content produced under Output 3.2.</p>
42	Communications Company	<p>Communications company @ \$375 x 160 days</p> <p>4.1.1. Design and implement awareness-raising campaigns in partnership with the TA. This will include inter alia: liaising with print and television media, conceptualising a short film, designing electronic and print materials.</p> <p>4.1.2. Disseminate lessons learned and knowledge generated through the project through appropriate national and regional networks, such as Africa Adaptation Knowledge Network.</p> <p>The awareness-raising campaign will specifically target women to ensure that at least 50% of the people reached are female. Therefore 50% of this budget is allocated towards promoting gender equity.</p>
43	Audio Visual and Print Production Costs Outcome 4	<p>4.1.1 and 4.1.2 Printing of materials (such as posters, summaries of lessons learned): \$10 426</p> <p>Production and dissemination of short video clip: \$63 000</p> <p>Layout, translation and formatting of communication materials: \$15 000</p> <p>Multi-media such as talk shows, TV and Radio spots, billboards on the national road and other means of raising awareness: \$24 500</p>

		Dissemination of knowledge through online platforms such as AAKNET and Adaptation Learning Mechanism: \$10 000
44	Training, workshops and conferences under Outcome 4.	4.1.1 Conferences and meetings for awareness-raising activities. Talks: venue, speaker, catering: \$5000 x 10 per year. 4.1.3 Conferences and workshops at academic institutions. 10 seminars from national consultants at local academic institutions @ \$1000 per seminar.
45	International Technical Advisor	Cost for an International Technical Advisor under Outcome 4. International Technical Advisor (total annual salary of \$235 537 x 2 years)  The International Technical Advisor be an expert on adaptation and will oversee deliverables of all Components. S/he will also provide additional technical input under Outcome 4. The International Technical Advisor will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis.  The TA is responsible for the following activities under Outcome 4: 4.1.1 Meet with NGOs, relevant private sector stakeholders, academic institutions and the general public at project intervention sites to engage with them on: i) climate change impacts on the coastal zone; ii) potential climate change adaptation interventions; and iii) the benefits of EbA for increasing the resilience of livelihoods and communities to climate change. 4.1.2 Disseminate lessons learned and knowledge generated through the project through appropriate national and regional networks, such as Africa Adaptation Knowledge Network and support the development of an e-library. 4.1.3 Arrange for relevant national consultants hired through the project to present the findings of their assessments or studies at local academic institutions.
46	Travel for TA	Travel budget for the TA to visit project sites and meet with relevant private sector stakeholders, academic institutions and general public to increase awareness of climate change among these non-governmental stakeholders. This travel will also allow the TA to provide technical oversight on the implementation of project activities under Component 2. Travel in Luanda, Dande and Longa = \$2000 per year x 4 = \$8 000 Flights to Namibe \$400 return economy class x 4 flights per year = \$6 400 Flights to Cabinda \$350 return economy class x 4 flights per year = \$5 600
47	National Project Manager	National Project Manager (@\$4500 per month) costs under Outcome 4.
48	Finance Manager	Finance Manager \$3 500 p/m x 12 = \$42 000 x 4 years **One year of the Finance Manager salary is included under Component 1**
49	Project Assistant	Project Assistant \$1 500 p/m x 12 = \$18 000 x 4 years
50	Telecommunications cost	Telecommunications cost including telephone and internet. \$1 000 p/m x 12 = \$12 000 x 4 years
51	Office rental	Office rental \$2 000 p/m (inclusive) x 12 = \$24 000 x 4 years
52	Miscellaneous	Miscellaneous costs. \$550 per year x 4 years.
53	Office equipment	Office equipment. Including, desks, chairs, computers, office supplies. \$30 000 over the duration of the project
54	UNDP Cost Recovery Charges	UNDP Cost Recovery charges. Estimated @10 000 per year x 4 years. Includes: I) Staff selection and recruitment; ii) Staff HR & Benefits Administration & Management;; iii) Consultant recruitment; iv) Payment process associated with consultants; v) Low value procurement; and vi) High value procurement and disposal of equipment.  Recruitment and Contracting of personnel:

		<p>Selection and recruitment process - <math>3 \times \\$674 = \\$2,022</math></p> <p>F10 settlement - <math>\\$32.45 \times 5 \text{ F10/staff/year} = \\$1,947</math></p> <p>Processing direct payments:</p> <p>Payment process - <math>\\$36.39 \times 5 \text{ direct payment requests} \times 198 \text{ weeks} = \\$36,026</math></p>
55	Professional service - Audit fees	Fees for annual financial audits (USD 3,000 per year)

## Total budget and work plan- UNDP

Award ID:	00084491	Project ID(s):	00092471
Project Title:	Addressing urgent coastal adaptation needs and capacity gaps in Angola		
PIMS no.	5276		
Implementing Partner (Executing Agency)	Ministry of Environment		

SOF (e.g. GEF) Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note :
OUTCOME 3: Increased inter-ministerial coordination and institutional capacity to adapt to climate change in Angola.	UNDP	621 60	GEF LDC F	61300	Salary, Post Adj, Cst-IP Staff	0	0	117,768	117,768	235,536	1
	MINAMB			71400	Contractual Services - Individual	4,500	4,500	4,500	4,500	18,000	2
				71300	Local Consultants	-	62,500	62,500		125,000	3
				75700	Training, Workshops and Conferences	-	20,000	20,000	15000	55,000	4
				74200	Audio Visual and Print Production Costs	-	15,000	15,000	0	30,000	5
	Total Outcome 3					4,500	102,000	219,768	137,268	463,536	
OUTCOME 4: Improved awareness about climate change impacts and adaptation among non- governmental stakeholders.	MINAMB	621 60	GEF LDC F	72100	Contractual Services – Communications Company		40,000	40,000		80,000	6
				74200	Audio Visual and Print Production Costs	11,500	24,426	26,500	26,500	88,926	7
				75700	Training, Workshops and Conferences	15,000	15,000	15,000	15,000	60,000	8
	UNDP			61300	Salary, Post Adj, Cst-IP Staff	0	0	117,769	117,769	235,538	9
	MINAMB			74100	Professional Service - Audit Fees	3,000	3,000	3,000	3,000	12,000	10
				71600	Travel	5,000	5,000	5,000	5,000	20,000	11
				71400	Contractual Services - Individual	4,500	4,500	4,500	4,500	18,000	12
	Total Outcome 4					39,000	91,926	211,769	171,769	514,464	
Project Management	UNDP	621 60	GEF LDC F	74598	Direct Project Cost	5,500	5,500	5,500	5,500	22,000	13
	TOTAL PROJECT					49,000	199,426	437,037	314,537	1,000,000	

## Budget Notes

Budget Note	Description
1	<p>Cost for an International Technical Advisor under Outcome 3. International Technical Advisor (\$117,768 total annual salary) for 2 years (Year 3 and 4).</p> <p>The International Technical Advisor be an expert on adaptation and will oversee deliverables of all Components. S/he will also provide additional technical input under Outcome 3.</p> <p>The International Technical Advisor will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis.</p> <p>The TA is responsible for the following activities under Outcome 3:</p> <p>2.4.3. Engage with the private sector through relevant forums to disseminate EbA project concept notes.</p> <p>3.1 (all activities). Technical support and training to CIBAC and the GAC.</p> <p>3.2.1. Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present economic assessments.</p> <p>3.2.3. Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present policy briefs.</p> <p>3.2.4. Supervise and assist the National and International Adaptation Economics/Policy Expert to produce and present technical guidelines.</p>
2	National Project Manager \$4500 /year costs under Outcome 3 for 4 years.
3	<p>National Adaptation Economics/ Policy Expert (\$ 62,500 x 2 years = \$125,000)</p> <p>The International and National Adaptation and Economics/ Policy Expert will work together closely on the following activities:</p> <p><b>3.1.5</b> Provide training to the Secretariat of CIBAC and the GAC on climate change adaptation finance and climate change adaptation investment appraisal.</p> <p><b>3.2.1</b> Undertake and present assessments of the economic impacts of climate change on Angola's coastal zone, disaggregated by sector.</p> <p><b>3.2.2</b> Identify entry points at the national and provincial level for the integration of climate change adaptation interventions, including EbA, into relevant policies and sectoral budgets and propose policy revisions.</p> <p><b>3.2.3</b> Develop a coastal zone adaptation plan and mainstream the plan into relevant sectoral, regional and</p>

	<p>national development plans.</p> <p><b>3.2.4</b> Develop technical guidelines for GAC, sectoral ministries and the CIBAC on how to assess, plan and finance climate change adaptation interventions.</p>
<b>4</b>	<p>Training and workshops under Outcome 3.</p> <p><b>3.1.5.</b> 4 x training workshops @ \$5000 per workshop for the Secretariat of CIBAC, technical staff of member ministries, and the GCA.</p> <p><b>3.2.1.</b> 4 x workshop to present economic assessments and related policy briefs @ \$5000 per workshop, including travel assistance, breakfast and lunch. The workshop could also relate to any of the other relevant content produced under Output 3.2.</p>
<b>5</b>	<p><b>3.2.3</b> Costs for printing and disseminating policy briefs produced under @ \$15 000.</p> <p><b>3.2.4</b> Costs for printing and disseminating technical guidelines produced @ \$15 000.</p> <p>Printing budget could also be used to cover any of the other relevant content produced under Output 3.2.</p>
<b>6</b>	<p>Communications company @ \$250 x 160 days for year 2 and 3</p> <p>4.1.1. Design and implement awareness-raising campaigns in partnership with the TA. This will include <i>inter alia</i>: liaising with print and television media, conceptualising a short film, designing electronic and print materials.</p> <p>4.1.2. Disseminate lessons learned and knowledge generated through the project through appropriate national and regional networks, such as Africa AAKNET.</p>
<b>7</b>	<p><b>4.1.1 and 4.1.2</b> Printing of materials (such as posters, summaries of lessons learned): \$10 426</p> <p>Production and dissemination of short video clip: \$53 000</p> <p>Layout, translation and formatting of communication materials: \$15 000</p> <p>Multi-media such as talk shows, TV and Radio spots, billboards on the national road and other means of raising awareness: \$22 500</p> <p>Dissemination of knowledge through online platforms such as AAKNET and Adaptation Learning Mechanism: \$10 000</p>
<b>8</b>	<p><b>4.1.1</b> Conferences and meetings for awareness-raising activities. Talks: venue, speaker, catering: \$5000 x 10 per year.</p> <p><b>4.1.3</b> Conferences and workshops at academic institutions. 10 seminars from national consultants at local academic institutions @ \$1000 per seminar.</p>

<b>9</b>	<p>Cost for an International Technical Advisor under Outcome 4. International Technical Advisor (\$117,768 total annual salary) for 2 years (Year 3 and 4)</p> <p>The International Technical Advisor be an expert on adaptation and will oversee deliverables of all Components. S/he will also provide additional technical input under Outcome 4.</p> <p>The International Technical Advisor will also provide support to the GEF UNDP project entitled 'Promoting climate-resilient development and enhanced adaptive capacity to withstand disaster risks in Angola's Cuvelai River Basin' (GEF ID: 5166) on a cost-sharing basis.</p> <p>The TA is responsible for the following activities under Outcome 4:</p> <p><b>4.1.1</b> Meet with NGOs, relevant private sector stakeholders, academic institutions and the general public at project intervention sites to engage with them on: i) climate change impacts on the coastal zone; ii) potential climate change adaptation interventions; and iii) the benefits of EbA for increasing the resilience of livelihoods and communities to climate change.</p> <p><b>4.1.2</b> Disseminate lessons learned and knowledge generated through the project through appropriate national and regional networks, such as AAKNET and support the development of an e-library.</p> <p><b>4.1.3</b> Arrange for relevant national consultants hired through the project to present the findings of their assessments or studies at local academic institutions.</p>
<b>10</b>	Fees for annual financial audits (USD 3,000 per year)
<b>11</b>	<p>Travel budget for the TA to visit project sites and meet with relevant private sector stakeholders, academic institutions and general public to increase awareness of climate change among these non-governmental stakeholders. This travel will also allow the TA to provide technical oversight on the implementation of project activities under Component 2.</p> <p>Travel in Luanda, Dande and Longa = \$2000 per year x 4 = \$8 000</p> <p>Flights to Namibe \$400 return economy class x 4 flights per year = \$6 400</p> <p>Flights to Cabinda \$350 return economy class x 4 flights per year = \$5 600</p>
<b>12</b>	National Project Manager \$4500 /year costs under Outcome 4 for 4 years.
<b>13</b>	UNDP Cost Recovery charges-bills. (Direct project costs)

## **Annex G: Workplan**

<b>Work plan: lead consultant for each activity</b>	INDUSTRY EXPERT	
	Vulnerability Assessment Consultancy	
	International Meteorological/ EWS Specialist	
	National EWS Consultant	
	International EbA/ agriculture Specialist	



	Community Engagement Specialist	
	Consultancies overseeing EbA/ climate-resilient land management	
	Training consultancies for EbA	
	Monitoring and Learning Specialist	
	National Academics	
	International Technical Advisor	
	International Adaptation economics/ Policy Expert	
	National Adaptation Economics/Policy Expert	
	Communications Company	

	Annual breakdown				Quarterly breakdown															
					Year 1				Year 2				Year 3				Year 4			
Activity	Y 1	Y 2	Y 3	Y 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4

Activity	Annual breakdown				Quarterly breakdown															
					Year 1				Year 2				Year 3				Year 4			
	Y 1	Y 2	Y 3	Y 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q4
1.1.1																				
1.1.2																				
1.1.3																				
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	Annual breakdown				Quarterly breakdown															
					Year 1				Year 2				Year 3				Year 4			
Activity	Y 1	Y 2	Y 3	Y 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q4
3.2.3																				
3.2.4																				
4.1.1																				
4.1.2																				
4.1.3																				

## Annex H: Tracking Tool

### Tracking Tool for Climate Change Adaptation Projects

Project Identification			
Project title:	Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola		
Country:	Angola	GEF Project ID:	5230
GEF Agency	UNEP, UNDP	Agency Project ID:	
Executing Partners:	MINAMB	Council/CEO Approval date	
Project status at submission		Tool submission date:	

Project baselines, targets and outcomes						
Objective 1: Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate						
Outcome 1.3: Climate resilient technologies and practices adopted and scaled up						
Indicator	Unit of measurement	Baseline at CEO Endorsement	Target at CEO Endorsement	Actual at mid-term	Actual at completion	Comments (e.g. specify unit of measurement)
Indicator 4: Extent of adoption of climate-resilient technologies/practices	number of people	0	500			
	% female	0	30%			
	% of targeted	To be determined from site reports	~1%			
	number of ha (mangrove restored)	0	561			
	% of targeted	0	N/A			

Objective 2: Strengthen institutional and technical capacities for effective climate change adaptation						
Outcome 2.1: Increased awareness of climate change impacts vulnerability and adaptation						
Indicator	Unit of measurement	Baseline at CEO	Target at CEO	Actual at	Actual at	Comments (e.g. specify

		<b>Endorsement</b>	<b>Endorsement</b>	<b>mid-term</b>	<b>completion</b>	<b>unit of measurement</b>
Indicator 5: Public awareness activities carried out and population reached	Yes/No	No	Yes			
	number of people	0	1000			
	% female	0	50			

<b>Objective 3: Integrate climate change adaptation into relevant policies, plans and associated processes</b>						
<b>Outcome 3.1: Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes established and strengthened</b>						
<b>Indicator</b>	<b>Unit of measurement</b>	<b>Baseline at CEO Endorsement</b>	<b>Target at CEO Endorsement</b>	<b>Actual at mid-term</b>	<b>Actual at completion</b>	<b>Comments (e.g. specify unit of measurement)</b>
Indicator 11: Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes	Frequency of annual meetings of CIBAC inter-ministerial commission on biodiversity and climate change	No regular, systematic meetings	At least 3 CIBAC meetings planned per year			

## Annex I: OFP Endorsement Letter



Republic of Angola  
Ministry of Environment

20 th December 2012

To: Maryam Niamir-Fuller  
Director, GEF Coordination Office  
UNEP, Nairibi

Subject: Endorsement for Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola.

In my capacity as Focal Point Operational to the GEF of the Republic of Angola, I confirm that the above project proposal: (a) is in accordance with the government's national priorities (including, if available, the priorities identified in the National Adaptation Plan of Action and/or National Capacity Self-Assessment) and our commitment to the relevant global environmental conventions; (b) and was discussed with relevant stakeholders, including the Global Environmental Convention Focal Points.

I am pleased to endorse the preparation of the above project proposal with support of the GEF Agency listed below. If Approved, the proposal will be prepared and implemented by UNEP. I request the GEF Agency(ies) to provide a copy of the project document before it is submitted to the GEF Secretariat for CEO endorsement.

The total finance /from GEFTF, LDCF and / or SCCF) being requested for this project is **US\$ 6.931.350,00** inclusive of project preparation grant (PPG), if any Agency fees for project cycle management services associated with the GEF grant. The financing requested for Angola is detailed in the Table below:

Source of Funds	GEF Agency	Focal Area	Amount (in USD)			
			Preparation Project	Project	Fee	Total
LDCF	UNEP	CC	150.000,00	5,180.000,00	506.350,00	5.836.350,00
(LDCF)	(UNDP)	(CC)		1.000.000,00	95.000,00	1.095.000,00
(select)	(select)	(select)				
(select)	(select)	(select)				
Total GEF Resources			150.000,00	6,180.000,00	601.350,00	6.931.350,00

Sincerely,

Dr. Carlos Avelino Manuel Cadete

National Director of Statistics, Planning and Studies Cabinet

## **Annex J: Co-finance Letters**



REPÚBLICA DE ANGOLA  
**MINISTÉRIO DA ENERGIA E ÁGUAS**  
GABINETE DO MINISTRO

AO  
GABINETE DE  
SUA EXCELÊNCIA  
SENHORA MINISTRA DO AMBIENTE

LUANDA

REF.ª 1763/GAB.MINEA/15

**ASSUNTO: PROJECTO "ANGOLA NECESSIDADE DE DIRIGIR-SE  
URGENTEMENTE A ADAPTAÇÃO DAS ORLAS COSTEIRAS E  
AS LACUNAS DE CAPACITAÇÃO EM ANGOLA"**

Fazemos referência ao vosso ofício 685/10.22/GAB.MINAMB/15, datado de 06 de Novembro de 2015, sobre o assunto em epígrafe.

Por incumbência de Sua Excelência Ministro da Energia e Águas, somos a solicitar-vos, que por vosso intermédio seja enviado o ofício em anexo, dirigido a Exma. Senhora, Naoko Ishii.

Sem mais de momento, queira aceitar, os nossos

Distintos cumprimentos

GABINETE DO MINISTRO DA ENERGIA E ÁGUAS, EM LUANDA, AOS 20 DE  
NOVEMBRO DE 2015.

A DIRECTORA DE GABINETE

TERESA DIAS DOS SANTOS





REPÚBLICA DE ANGOLA  
**MINISTÉRIO DA ENERGIA E ÁGUAS**  
GABINETE DO MINISTRO

Á  
EXMA  
SENHORA  
NAOKO ISHII  
DIRECTORA EXECUTIVA DO FUNDO  
GLOBAL PARA O AMBIENTE  
WASHINGTON, D.C.  
U.S.A.

REF.ª 1743/GAB.MINEA/15

**ASSUNTO: PROJECTO "ANGOLA: NECESSIDADE DE DIRIGIR-SE  
URGENTEMENTE A ADAPTAÇÃO DAS ORLAS COSTEIRAS E AS  
LACUNAS DE CAPACITAÇÃO EM ANGOLA"**

Exma. Senhora,

O Ministério da Energia e Águas está a implementar o Projecto de Desenvolvimento Institucional do Sector de Água em Angola (PDISAA) financiado pela Associação Internacional de Desenvolvimento (AID) do Banco Mundial (BM). O projecto iniciou em 2010 e será implementado ao longo de um período de cinco anos. PDISAA fortalecerá a capacidade institucional e a eficiência das agências no sector da água para melhorar o acesso e a confiabilidade do fornecimento de água.

O projecto é composto por 4 componentes: i) o desenvolvimento de instituições no abastecimento de água e subsector de saneamento; ii) a gestão de recursos hídricos; iii) a reabilitação dos sistemas de abastecimento de água; e iv) a capacitação e gerenciamento de mudanças para fortalecer a habilidade do governo em melhorar o abastecimento de água.

O PDISAA, conforme descrito acima, está bem alinhado com o projecto financiado pelo GEF LDCF intitulado: "Necessidade de dirigir-se urgentemente a adaptação das orlas costeiras e as lacunas de capacitação em Angola". Particularmente, a componente 4 do PDISAA vai directamente ao encontro do projecto GEF LDCF.

Mod. 1 - Org. Moké, Lda



## MINISTÉRIO DA ENERGIA E ÁGUAS

Esta carta tem como finalidade confirmar que o Ministério de Energia e Água apoiará com USD 3.000.000,00 através da AID como co-financiamento para o projecto GEF LDCF em Angola. Esta colaboração proporcionará benefícios mútuos e reforço dos resultados para ambos os projectos.

Aproveitamos a oportunidade para reiterar-lhe os protestos da nossa elevada estima e consideração.

GABINETE DO MINISTRO DA ENERGIA E ÁGUAS, EM LUANDA AOS 16 DE NOVEMBRO DE 2015.

  
**JOÃO BAPTISTA BORGES**



REPÚBLICA DE ANGOLA  
MINISTÉRIO DAS TELECOMUNICAÇÕES E TECNOLOGIAS DE INFORMAÇÃO  
GABINETE DO MINISTRO

Á  
SUA EXCELENCIA  
MINISTRA DO AMBIENTE  
DR<sup>a</sup> MARIA DE FATIMA JARDIM

LUANDA

S/Referência:

S/Comunicação:

N/Ref: 182/GAB.MTTI/2015

Assunto: PROJECTO ``ANGOLA: NECESSIDADE DE DIRIGIR-SE  
URGENTEMENTE A ADAPTAÇÃO DAS ORLAS COSTEIRAS  
E AS LACUNAS DE CAPACITAÇÃO EM ANGOLA``

Em atenção ao **ofício n.º 683/10.21/GAB.MINAMB/15**, somos a informar que, foi aprovado pelo Executivo, através do **Decreto Presidencial o Plano de Desenvolvimento Estratégico (PDE)**, para o **INAMET** financiado pelo Governo de Angola. O plano estará operacional durante o período de **2012-2018**. O objectivo primário é o de tornar o Instituto Nacional de Meteorologia e Geofísica (**INAMET**) em uma Instituição Pública moderna e capaz de dar suporte ao desenvolvimento sustentável do País.

Consequentemente, o PDE tem 3 prioridades:

- i. **Promoção da boa governação e reforço da capacidade técnica do INAMET;**
- ii. **Aplicação de dados climáticos e geofísicos, para apoiar diversas actividades socioeconómicas;**
- iii. **Concepção de uma política de recursos humanos no INAMET, capaz de tornar o Instituto numa Instituição de investigação científica.**

O PDE descrito acima está, portanto alinhado com o projecto financiado pelo GEF LDCF intitulado: “Necessidade de dirigir-se urgentemente a adaptação das orlas costeiras e as lacunas de capacitação em Angola”.

Reiteramos o nosso compromisso no apoio ao desenvolvimento do projecto com os meios disponiveis e com as dotações refletidas no Orçamento Geral do Estado do Sector para 2016, nos seguintes projectos de actividade:

1. Est portal agrometereologico on line de apoio a Agricultura;
2. Estruturação do sistema de previsão do tempo;
3. Formação e capacitação de quadros;
4. Massificação do uso das TICs;
5. Operacionalização das infra-estruturas Institucionais;
6. Promoção e regulação do Desenvolvimento da Ciência e Tecnologia.

Cujo montante global dos projectos referenciados é de 922.429.051,00Kz (novecentos e vinte e dois mil e quatrocentos e vinte e nove mil e cinquenta e um Kwanza)

Queira aceitar as nossas cordiais Saudações.

GABINETE DO MINISTRO DAS TELECOMUNICAÇÕES E DAS  
TECNOLOGIAS DE INFORMAÇÃO, em Luanda, aos 29 de Dezembro de 2015.-

O MINISTRO  
JOSÉ CARVALHO DA ROCHA



## UNITED NATIONS ENVIRONMENT PROGRAMME

Programme des Nations Unies pour l'environnement      Programa de las Naciones Unidas para el Medio Ambiente

Программа Организации Объединенных Наций по окружающей среде      برنامج الأمم المتحدة للبيئة

联合国环境规划署



Reference : DEPI/GEFCCA

1 March, 2016

**Subject: UNEP co-financing commitment to the LDCF project "*Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola*"**

UNEP helps developing countries to reduce vulnerabilities and build resilience to the impacts of climate change. UNEP builds and strengthens national institutional capacities for vulnerability assessment and adaptation planning, and supports national efforts to integrate climate change adaptation measures into development planning and ecosystem management practices. The project entitled "Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola" is built upon and contributes to the on-going projects and programs implemented by UNEP.

More specifically, this LDCF project will be aligned and build upon and provide mutual benefits to the UNEP-European Commission project on 'Building Capacity for Coastal Ecosystem-based Adaptation in Small Island Developing States (SIDS)' (2014-2016). This project will assist countries and regions develop and apply ecosystem-based adaptation approaches to maintain and enhance the resilience of tropical coastal ecosystems and the services they provide to coastal communities in SIDS. This project will contribute to building a knowledge portal and advisory tool for helping communities select EbA options. It has also produced a guide on 'Options for Ecosystem-based Adaptation in Coastal Environments' which will be promoted as a planning tool in this project as a broader guide for EbA interventions in Angola.

This letter serves to confirm UNEP's commitment to the above-mentioned GEF LDCF project to provide co-financing through the project detailed here. This project will contribute 150,000 USD in co-financing towards the LDCF project "*Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola*".

We look forward to your continued cooperation.

Yours sincerely,

Keith Alverson

Coordinator, Climate Change Adaptation & Terrestrial Ecosystem Branch

---

DIVISION OF ENVIRONMENTAL POLICY IMPLEMENTATION (DEPI)

P.O. Box 30552-00100, Nairobi, Kenya

Tel: (+254 20) 762 6707

Email: keith.alverson@unep.org



## UNITED NATIONS ENVIRONMENT PROGRAMME

Programme des Nations Unies pour l'environnement    Programa de las Naciones Unidas para el Medio Ambiente  
Программа Организации Объединенных Наций по окружающей среде    برنامج الأمم المتحدة للبيئة

联合国环境规划署



Dr. Naoko Ishii  
CEO & Chairperson  
Global Environment Facility  
1818 H Street, NW  
Washington DC 20433, USA  
Email: [nishii@thegef.org](mailto:nishii@thegef.org)

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Tel: (+254 20) 762 6707

Email: [keith.alverson@unep.org](mailto:keith.alverson@unep.org)



## **Annex K: Environmental and Social Safeguards**

### **Environmental and Social Safeguards Checklist**

As part of the GEFs evolving Fiduciary Standards that Implementing Agencies have to address ‘Environmental and Social Safeguards’. To fill this checklist:

- STEP 1: Initially assess E&S Safeguards as part of PIF development. The checklist is to be submitted for the CRC.
- STEP 2 : Check list is reviewed during PPG project preparation phase and updated as required.
- STEP 3 : Final check list submitted for PRC showing what activities are being undertaken to address issues identified

### **UNEP/GEF Environmental and Social Safeguards Checklist**

<b>Project Title:</b>	<b>Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola</b>		
<b>GEF project ID and UNEP ID/IMIS Number</b>	5230	<b>Version of checklist</b>	One
<b>Project status (preparation, implementation, MTE/MTR, TE)</b>	Preparation	<b>Date of this version:</b>	18 February 2015
<b>Checklist prepared by (Name, Title, and Institution)</b>	Nina Raasakka, Task Manager, GEF CCAU, DEPI UNEP.		

In completing the checklist both short- and long-term impact shall be considered.

#### **Section A: Project location**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
Is the project area in or close to:		
densely populated area	Yes	Coastal areas in Angola are densely populated relative to the interior, as over ~50% of the population lives in coastal provinces.  The EbA interventions of the project will be carried out in collaboration with four village-scale communities in Angola’s coastal zone. These include: i) Chiloango (population of ~34 000); ii) Barra do Danda (population of ~24 000); iii) Longa (population of ~ 1700); and iv) Bero (population of ~200).
cultural heritage site	No	

protected area	No	None of the pilot sites are located in a protected area.
wetland	Yes	Chiloango is in the proximity of a wetland.  The project aims to build resilience of communities by rehabilitating and demonstrating the adaptation potential of wetlands using an EbA approach. Consequently, there is no expected negative impact.
mangrove	Yes	The following of the selected intervention sites are in the proximity of mangroves: i) Longa; ii) Chiloango; iii) Barra do Dande.  The project aims to build resilience of communities by rehabilitating and demonstrating the adaptation potential of mangroves using an EbA approach. Consequently, there is no expected negative impact.
estuarine	Yes	The following of the selected intervention sites are in the proximity of an estuarine area: i) Bero river mouth; ii) Longa; and iii) Barro do Dande.  The project aims to build resilience of communities by rehabilitating and demonstrating the adaptation potential of coastal ecosystems using an EbA approach. Consequently, there is no expected negative impact.
buffer zone of protected area	No	
special area for protection of biodiversity	No	
will project require temporary or permanent support facilities?	Yes	Infrastructure for EWS will be included in the project interventions.
<i>If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.</i>		

### **Section B: Environmental impacts**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
Are ecosystems related to project fragile or degraded?	Yes	The project aims to rehabilitate and build resilience of degraded coastal ecosystems such as mangroves and wetlands.
Will project cause any loss of	No	The project seeks to enhance ecological functions. The installation of weather and hydrological monitoring stations are physically small in

precious ecology, ecological, and economic functions due to construction of infrastructure?		size. Additionally, these stations will promote long term ecological and economic health through assisting climate planning and preparation as response to climate change and variability – i.e. early warning.
Will project cause impairment of ecological opportunities?	No	This project seeks to increase ecological opportunities. Short-, medium- and long-term impacts will be beneficial for local ecosystems.
Will project cause increase in peak and flood flows? (including from temporary or permanent waste waters)	No	Project activities such as ecological restoration will reduce the likelihood of flooding and will regulate the flow of water. No temporary wastewater will be generated by project activities. Therefore, the resilience of local communities to floods will be increased.
Will project cause air, soil or water pollution?	No	No pollution will be generated by the project activities.
Will project cause soil erosion and siltation?	No	Soil stability and water infiltration will be enhanced through reforestation and vegetation at pilot sites. This will reduce erosion and sedimentation.
Will project cause increased waste production?	No	No pollution will be generated by the project activities.
Will project cause Hazardous Waste production?	No	No pollution will be generated by the project activities.
Will project cause threat to local ecosystems due to invasive species?	No	The project will focus on the control of invasive species. It will promote planting indigenous and/or non-invasive tree species instead of exotic tree species.
Will project cause Greenhouse Gas Emissions?	No	Project activities are likely to reduce the emissions of greenhouse gases in identified pilot sites through the restoration of degraded ecosystems – such as mangroves and wetlands – thereby increasing soil and plant carbon sequestration.
Other	No	The project might result in a temporary increase in traffic because of



environmental issues, e.g. noise and traffic.		the transport of materials to sites.
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

### **Section C: Social impacts**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
Does the project respect internationally proclaimed human rights including dignity, cultural property and uniqueness and rights of indigenous people?	Yes	All project interventions have been developed in accordance with internationally proclaimed human rights, in conformity with UN guidelines. In addition, all activities were developed together with various stakeholders to ensure that no rights or laws are infringed by the proposed activities.
Are property rights on resources such as land tenure recognized by the existing laws in affected countries?	Yes	The project facilitates participatory approaches for avoiding any conflicts. In addition, the project will adhere to national and local laws on land rights and land tenure.
Will the project cause social problems and conflicts related to land tenure and access to resources?	No	The project will promote a community-based natural resources management approach. Consultations with community members will be continued throughout the implementation phase to avoid any problems or conflicts. The project will adhere to national and local laws on land rights and land tenure.
Does the project incorporate measures to allow affected stakeholders' information and consultation?	Yes	The project seeks to reduce the vulnerability of stakeholders by providing information on climate risks and opportunities and of promoting participatory practices in the rehabilitation of ecosystems. This occurred during the PPG and will occur throughout all implementation phases. Additionally, all on-the-ground activities are implemented by local communities, and are preceded by and include stakeholder consultations together with training and information workshops. Technical briefs will be prepared to ensure that all stakeholders are fully informed.
Will the project affect the state of the targeted country's (-ies') institutional context?	Yes	The project will be beneficial to Angola's institutional context as it seeks to enhance the systemic capacity of the country for adaptation to climate change. New institutional mechanisms will be established to respond to climate change during implementation. Local institutions will also be provided with EbA training.
Will the project cause change to beneficial uses of land or resources? (incl. loss of downstream beneficial uses (water supply or fisheries)?	No	
Will the project cause technology or	No	

land use modification that may change present social and economic activities?		
Will the project cause dislocation or involuntary resettlement of people?	No	
Will the project cause uncontrolled immigration (short- and long-term) with opening of roads to areas and possible overloading of social infrastructure?	No	
Will the project cause increased local or regional unemployment?	No	The project, through various activities and interventions, will generate employment at local levels. Community members will be employed for short periods to achieve specific project objectives where necessary. Livelihoods of communities in project sites will be enhanced in order to improve community resilience under conditions of climate change.
Does the project include measures to avoid forced or child labour?	Yes	The project conforms to all national and international guidelines and laws regarding forced labour. Extensive community engagement will prevent the use of forced labour, and all required labour (short term employment only for establishing specific objectives) will be provided through community engagement and remunerated in accordance with national law.
Does the project include measures to ensure a safe and healthy working environment for workers employed as part of the project?	Yes	The project will conform to all national and international guidelines and laws regarding health and safety for workers employed as part of the project. Community training will ensure that health and safety regulations are understood.
Will the project cause impairment of recreational opportunities?	No	The project aims to increase the ecological opportunities and ecosystem services despite the negative impacts of climate change. Short-, medium- and long-term impacts will be beneficial for local ecosystems. As such, it is expected that the project will create improved recreational opportunities.
Will the project cause impairment of indigenous people's livelihoods or belief systems?	No	All project implementation will be carried out after stakeholder consultation and in accordance with local belief systems. Livelihoods of people in project sites will be improved through the project activities. In addition, the project will enhance understanding of the climate system, thereby allowing local communities to adapt to climate change effectively.
Will the project cause disproportionate impact to women or other disadvantaged or vulnerable groups?	No	Women's rights will be promoted in accordance with national legislation, appropriate strategies and UN guidelines for interaction within Angola. Gender has been taken into account throughout the project design and document including. Gender disaggregated indicators have also been incorporated. Additionally, the involvement of women in the project is considered in the results based management framework. Additionally, the project will help reduce the exposure of climate vulnerable groups including women, youth, farmers and artisanal fisherman.
Will the project involve and or be complicit in the alteration, damage or	No	No cultural heritage will be impacted through project operations.

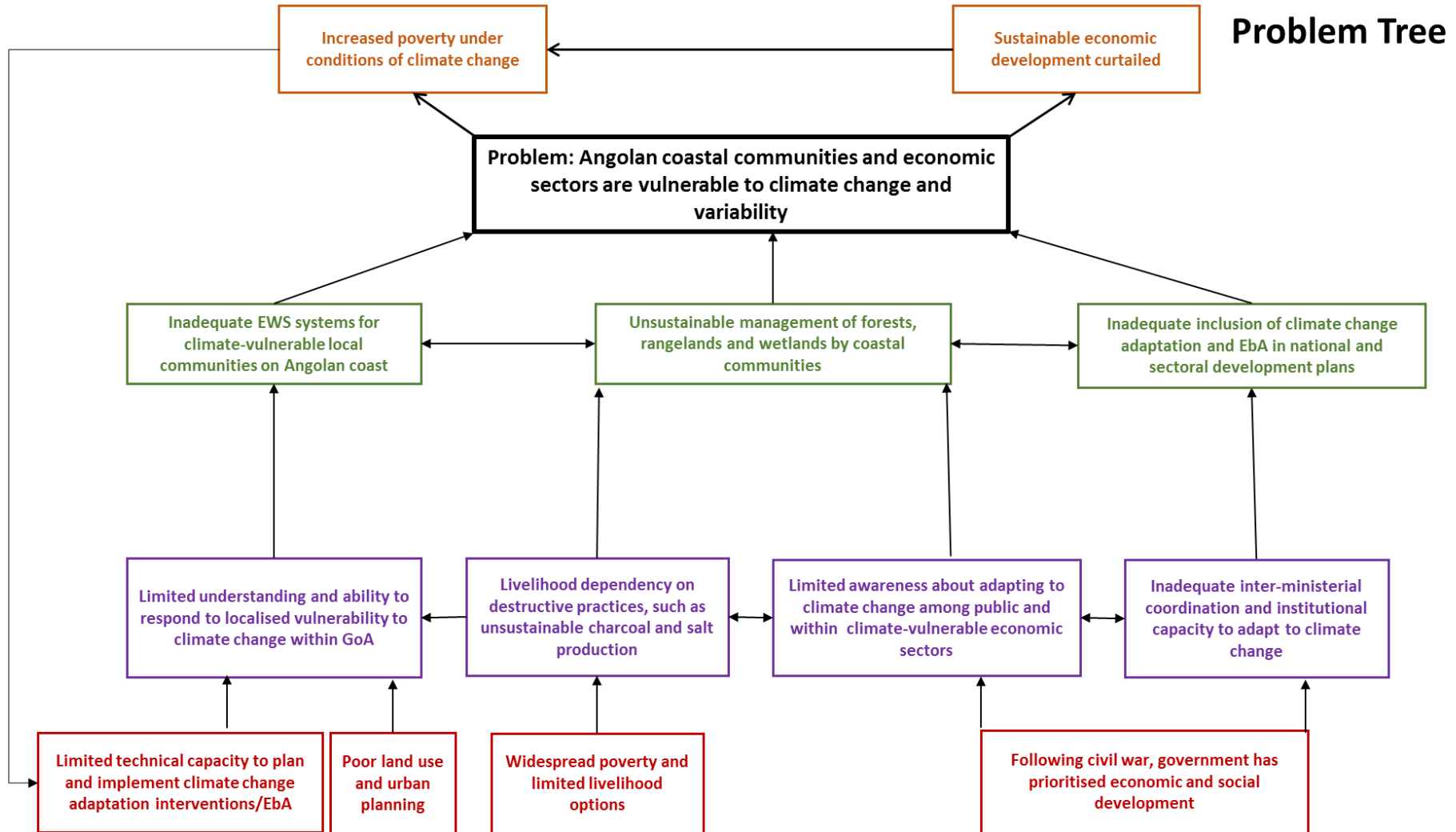
removal of any critical cultural heritage?		
Does the project include measures to avoid corruption?	Yes	As per UNEP's norms and standards, all project disbursements will be monitored by UNEP administrative structures. Regular reporting by the project management team will promote financial and transparency throughout the project. Corruption within the selected EA is limited due to strong internal governance and stringent protection measures.
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

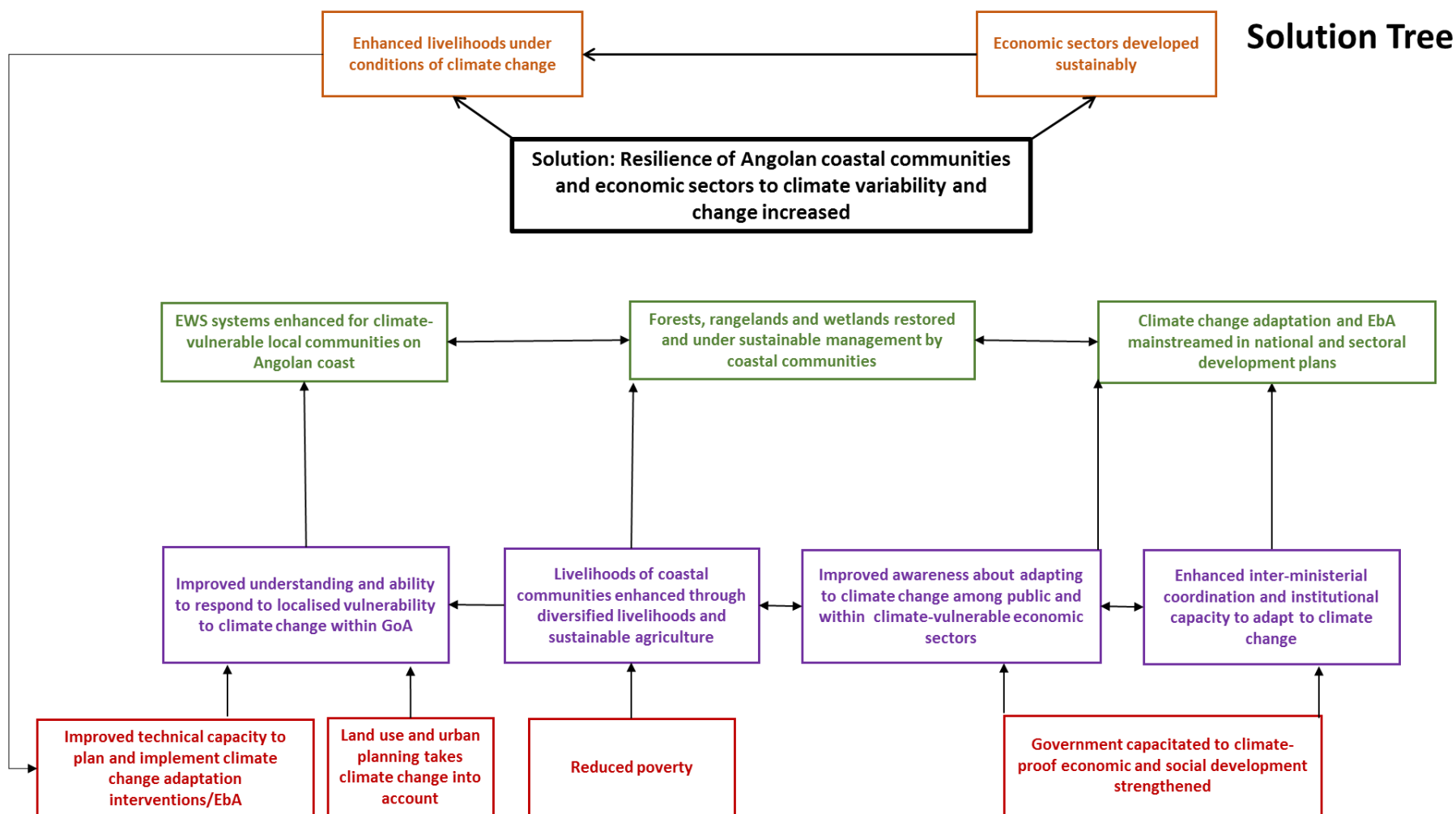
#### **Section D: Other considerations**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

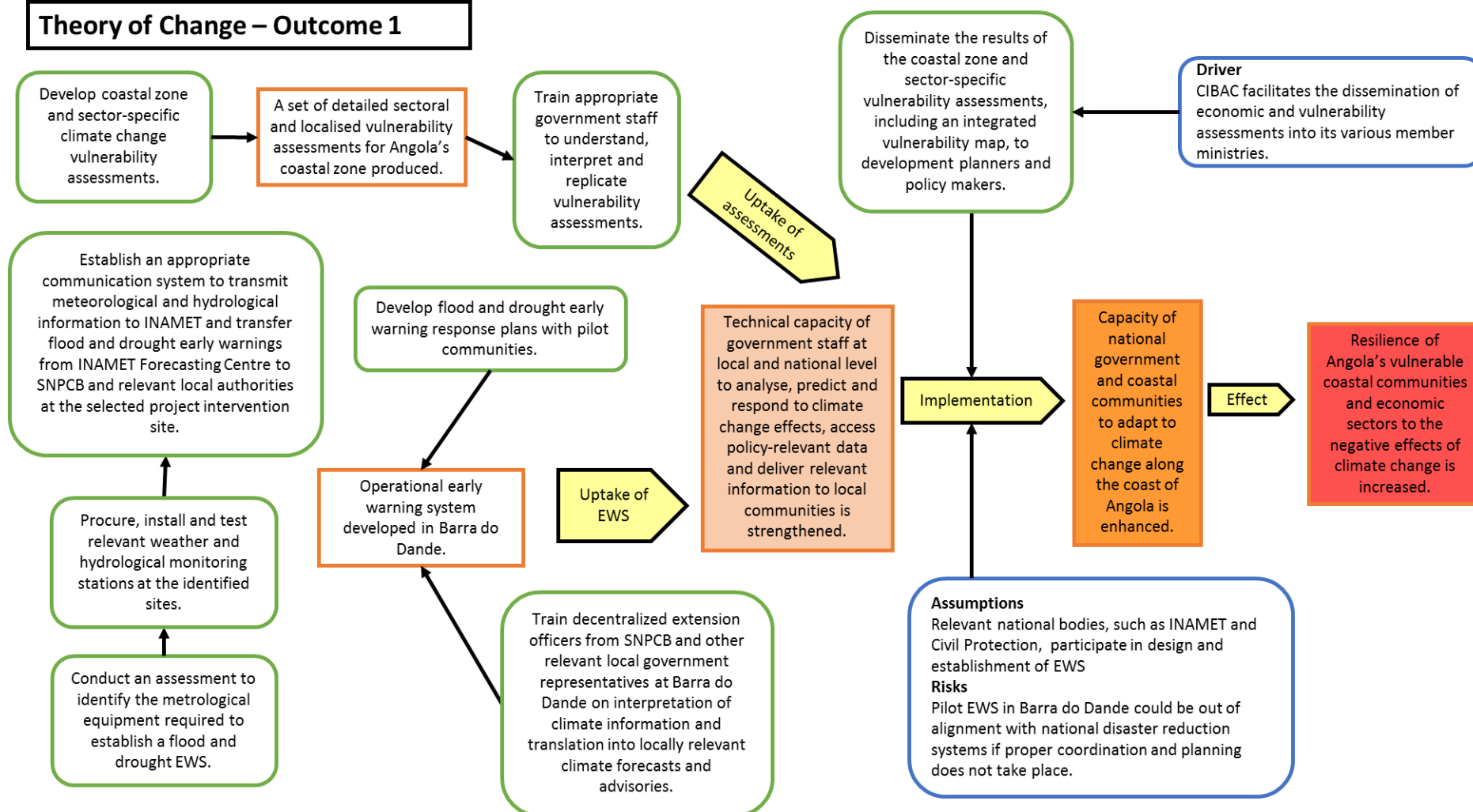
	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
Does national regulation in affected country (-ies) require EIA and/or ESIA for this type of activity?	No	During the PPG, national stakeholders have stated that EIAs are not necessary for project interventions.
Is there national capacity to ensure a sound implementation of EIA and/or SIA requirements present in affected country (-ies)?	N/A	
Is the project addressing issues, which are already addressed by other alternative approaches and projects?	No	The project will implement activities that are additional to baseline activities.
Will the project components generate or contribute to cumulative or long-term environmental or social impacts?	No	The project will promote only positive, cumulative environmental and social impacts through EbA and climate-resilient land management. .
Is it possible to isolate the impact from this project to monitor E&S impact?	N/A	

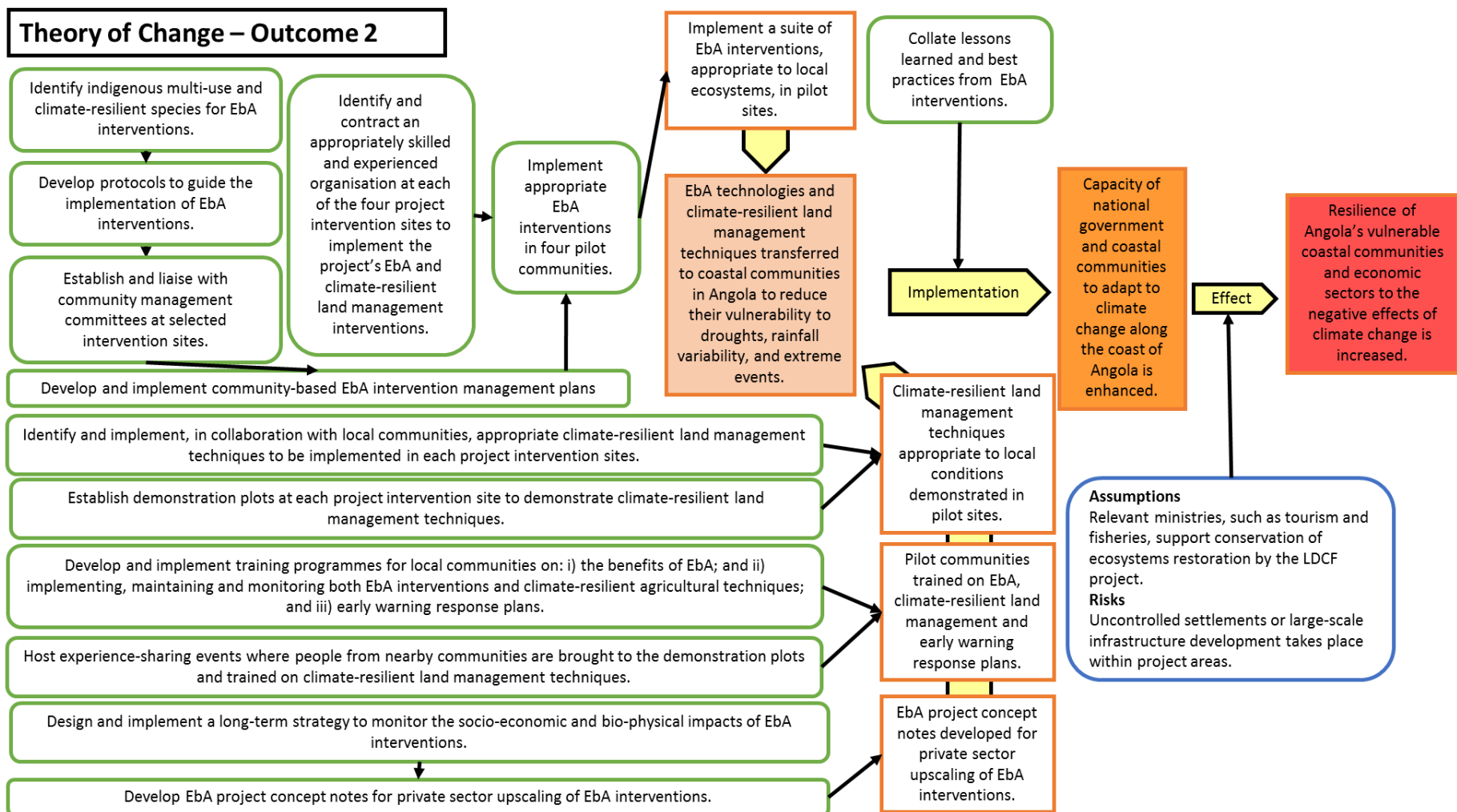
## Annex K: Theory of Change

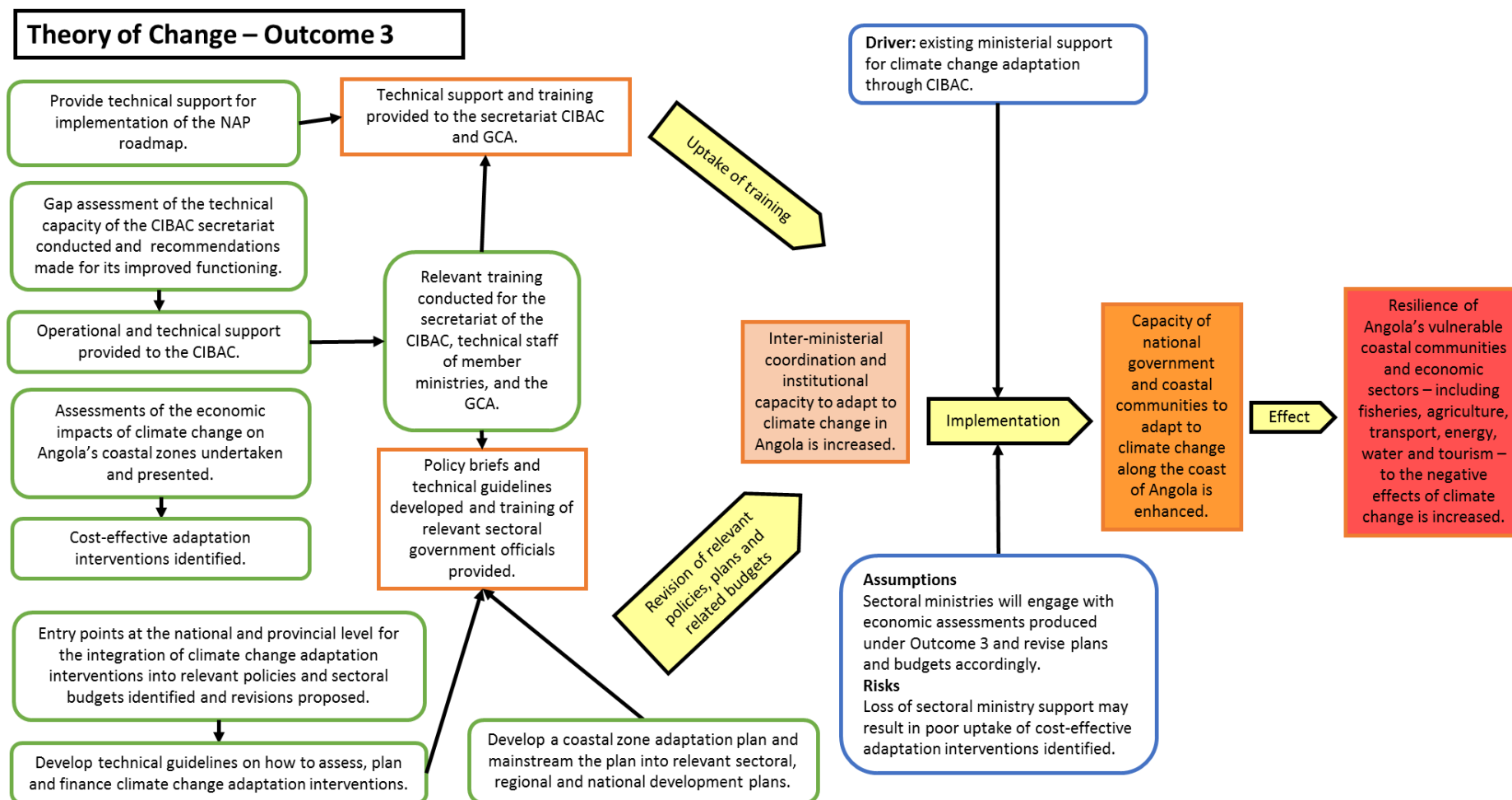




## Theory of Change – Outcome 1

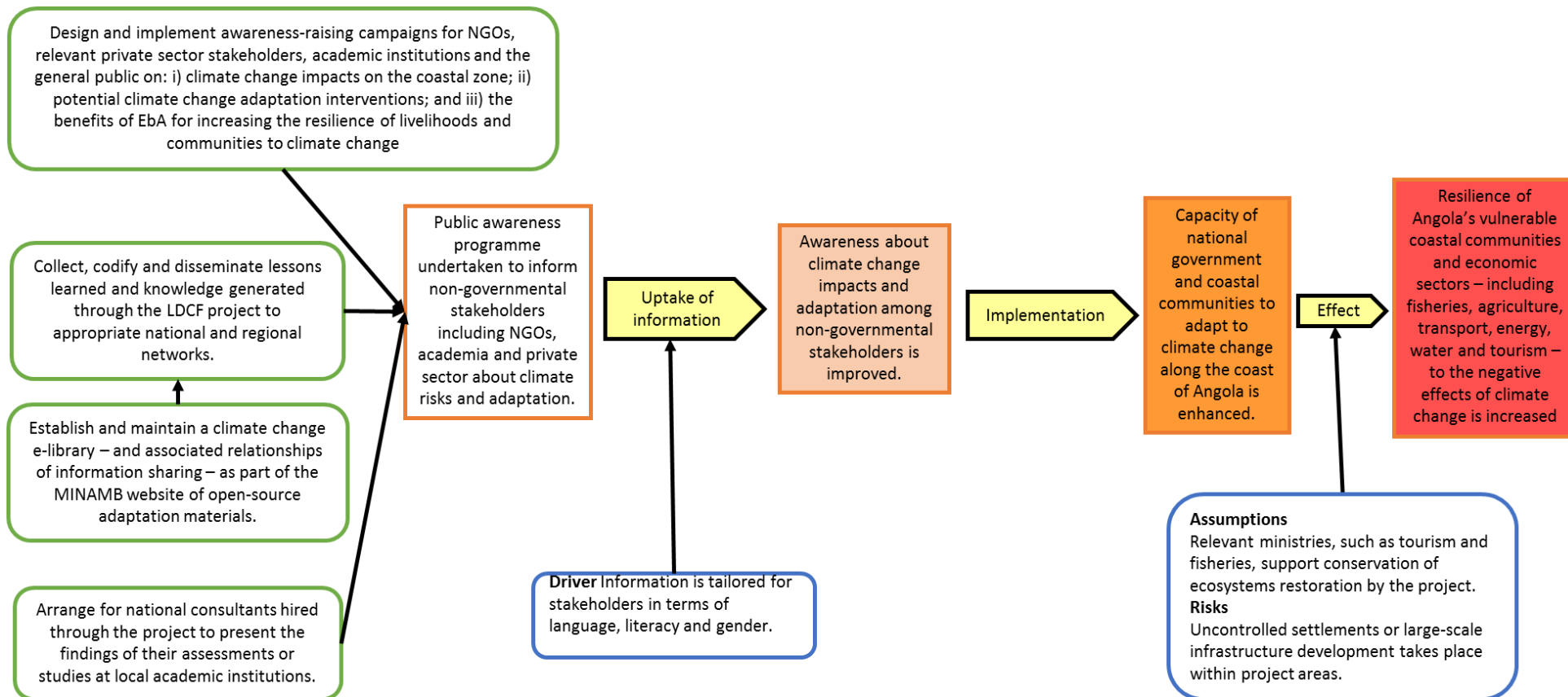








## Theory of Change – Outcome 4





## **Annex I: Acronym list**

AAKNET	African Adaptation Knowledge Network
AfDB	African Development Bank
<i>CIBAC</i>	Inter-ministerial Commission for Climate Change and Biodiversity
<i>CNPCB</i>	Civil Protection Services and Fire Brigade
COSPE	Cooperation for the Development of Emerging Countries
CSI	Corporate Social Investment
<i>DNAAS</i>	National Directorate for Water Supply and Sanitation
<i>DNIIP</i>	National Directorate of Infrastructure and Fisheries Industry
<i>DNPA</i>	National Directorate of Fisheries and Aquaculture
DW	Development Workshop
EbA	Ecosystem-based Adaptation
EIA	Environmental Impact Assessment
<i>EDLP</i>	Long Term Development Strategy
EWS	Early Warning System
FAO	Food and Agriculture Organisation of the United Nations
FAS	Local Development Project
FFEWS	Famine and Flood Early Warning System
FM	Financial Manager
<i>FSSP</i>	Support to the Fisheries Sector Project
FSP	Full-Sized Project
GAC	Climate Change Cabinet
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GoA	Government of Angola
GSA	Cabinet of Food Security
IDA	Institute of Agricultural Development
<i>INAMET</i>	National Institute of Meteorology
<i>INARH</i>	National Institute of Hydrologic Resources
<i>INIP</i>	National Institute for Fisheries Research
<i>INRH</i>	National Institute for Water Resources
<i>IPA</i>	Development of Artisanal Fisheries and Aquaculture Institute
LDCF	Least Developed Country Fund
<i>MINAGRI</i>	Ministry of Agriculture and Rural Development
<i>MINAMB</i>	Ministry of the Environment
<i>MINEA</i>	Ministry of Energy and Water
<i>MINTRANS</i>	Ministry of Transport
<i>MININT</i>	Ministry of the Interior
<i>MINPET</i>	Ministry of Petroleum
<i>MINPES</i>	Ministry of Fisheries
MLS	Monitoring and Learning Specialist
MTR	Mid-Term Review
<i>MTIT</i>	Ministry of Telecommunications and Information Technologies
NAP	National Adaptation Plan

NAPA	National Adaptation Programme of Action
NDP	National Development Plan
PA	Project Administrative Assistant
<i>PASA</i>	Environmental Sector Support Project
<i>PDPA</i>	Artisanal Fisheries Development Plan
PMU	Project Management Unit
<i>PNFFSAC</i>	National Policy on Forestry, Fauna and Areas of Conservation
<i>PDISA</i>	Angola Water Sector Institutional Project
<i>PNIEG</i>	National Policy for Gender Equality and Equity
<i>PRODEL</i>	National Energy Production Company
SADC	Southern African Development Community
SDMP	INAMET's Strategic Development Master Plan
SLM	Sustainable Land Management
<i>SNPC</i>	National Civil Protection System
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change