

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Climate-resilient Banjul: Enhancing Urban Resilience in the Greater Banjul Area (CLIMB)

Climate Change	3/20/2024
GEF Focal Area (s)	Submission Date
National Environment Agency (NEA)	Government
Executing Partner	Executing Partner Type
UNEP	N/A
GEF Agency(ies):	GEF Agency ID
Gambia	FSP
Country(ies)	Type of Project
Gambia	11532
Region	GEF Project ID

Project Sector (CCM Only)

Climate Change Adaptation Sector

Taxonomy

Communications, Stakeholders, Integrated Programs, Capacity, Knowledge and Research, Focal Areas, Climate Change, Climate Change Adaptation, Adaptation Tech Transfer, Innovation, Mainstreaming adaptation, Disaster risk management, Ecosystem-based Adaptation, Private sector, Sea-level rise, Livelihoods, Climate resilience, Least Developed Countries, Climate finance, Community-based adaptation, Influencing models, Deploy innovative financial instruments, Demonstrate innovative approache, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Local Communities, Behavior change, Awareness Raising, Public Campaigns, Private Sector, SMEs, Civil Society, Non-Governmental Organization, Academia, Community Based Organization, Type of Engagement, Participation, Information Dissemination, Consultation, Beneficiaries, Indigenous Peoples, Gender Equality, Gender results areas, Access to benefits and services, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Access and control over natural resources, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Sustainable Cities, Urban Biodiversity, Integrated urban planning, Green space, Urban Resilience, Learning, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Conference, Peer-to-Peer, Targeted Research, Knowledge Generation, Seminar, Workshop

Project Duration (Months)	
72	
GEF Project Non-Grant: (b)	
0.00	
Agency Fee(s) Non-Grant (d)	
0.00	

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Total Co-financing
35,444,194.00
PPG Agency Fee(s): (f)
27,000.00
Total GEF Resources: (a+b+c+d+e+f)
14,000,000.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

The Gambia is a small West African country situated predominantly within the low-lying, flood-prone Gambia River basin. This geographical setting, combined with socio-economic challenges in the region, renders the Gambian population particularly susceptible to climate change-induced impacts such as flooding, rising sea levels, and coastal erosion. The impacts of these climate hazards are most evident in the Greater Banjul Area (GBA) — a highly urbanised region with a population density of ~3,800 people per square kilometre (km²) and an average elevation of ~5 metres above sea level (masl). In this region, limited spatial planning and heavy reliance on climate-sensitive economic sectors have compounded the vulnerability of urban and periurban communities to more frequent and severe extreme climate events, including floods, droughts, and heatwaves.

Climate data indicate a trend of increasing temperatures and decreasing precipitation across The Gambia, with subsequent increases in rainfall variability. In the GBA, mean annual temperatures have increased by ~1°C since the 1960s, while average annual rainfall has decreased from ~1,000 mm to ~700 mm over the same period. This has not only resulted in increased heat stress and water insecurity for communities in the GBA, but has also led to degradation of critical ecosystems, such as mangroves, wetlands and forests. The region's climate resilience is further threatened by rising sea levels, with coastal erosion rates averaging ~2 metres per year (m/yr) since the 1990s, intensifying disaster risk in coastal areas and impacting densely populated regions and crucial tourism infrastructure. These observed changes in climate variables have been coupled with an increase in extreme weather events — for example, significant floods in 2022, which impacted ~50,000 people.

Administratively, The Gambia is divided into regions and Local Government Areas (LGAs), which serve as a foundation for localised governance and the execution of projects that enhance resilience. Despite the country's extensive frameworks for climate change adaptation (CCA) at the national scale, rapid urbanisation rates and uncontrolled urban sprawl within the GBA have led to: i) the expansion of informal settlements into high-risk areas; ii) the deterioration of infrastructure; and ii) accelerated environmental degradation. These challenges are exacerbated by the current and anticipated impacts of climate change, including shifts in rainfall patterns, sea-level rise and temperature fluctuations, which pose considerable risks to the country's natural resources, ecosystems and the well-being of its residents.

These climate impacts disproportionately affect women, Indigenous People, and local communities (IPLCs), who often have fewer resources and less access to decision-making, limiting their ability to recover from disasters and adapt to changing conditions. These groups also face higher risks of displacement, increased workloads in securing water and food, and greater health and safety challenges during extreme climate events.

The primary objective of the proposed project is to enhance the climate resilience of communities in the Greater Banjul Area by scaling up investments in urban ecosystem-based adaptation (EbA) solutions. The project strategy will address both existing vulnerabilities and those intensified by climate change, thereby enhancing the resilience of communities — particularly emphasising the roles and needs of women and IPLCs — in the GBA against negative outcomes and fostering sustainable growth. The project will also align strategically with ongoing initiatives, such as the West Africa Coastal Areas Management Program (WACA), prioritising inclusive planning and execution to envisage a resilient and sustainable future for The Gambia. To this end,

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the proposed project will support the deployment of comprehensive strategies that protect natural resources and, boost economic stability. Focusing on those in vulnerable urban and peri-urban settings.

The proposed GEF project will enhance the resilience of target communities to climate change within the GBA using an integrated approach that combines: i) gender-responsive capacity-building initiatives; ii) sustainable land-management and natural resource use; iii) the implementation of ecosystem-based adaptation (EbA) technologies and iv) enhanced knowledge management. This integrated approach will ensure that proposed project interventions synergistically address barriers related to limited urban planning, insufficient financial resources for investment in EbA and limited public awareness of climate change adaptation strategies — to attain a sustainable and transformative impact for vulnerable urban and peri-urban communities under future climate scenarios.

By incorporating a diverse range of project interventions with short-, medium-, and long-term benefits, the preferred adaptation solution will address both existing vulnerabilities and those intensified by climate change, bolstering the resilience of the target population to climate change-induced flooding, rising sea levels, droughts, and heat waves.

Indicative Project Overview

Project Objective

Enhance the climate resilience of communities in the Greater Banjul Area by scaling up investments in urban ecosystem-based adaptation (EbA) solutions

Project Components

1. Strengthening the enabling environment for climate-resilient urban planning and sustainable development

800,000.00	9,077,784.00	
GEF Project Financing (\$)	Co-financing (\$)	
Technical Assistance	LDCF	
Component Type	Trust Fund	

Outcome:

1. The regulatory and policy framework in the GBA supports and promotes gender-responsive, climate-resilient urban planning.

Output:

- 1.1 Climate resilience training and sensitisation programme designed and implemented for local government officials and urban planners in the GBA
- 1.2 Community engagement and participation framework developed and implemented for inclusive and gender-responsive urban planning
- 1.3 Policy briefs developed to enhance cross-sectoral coordination and mainstream gender-equitable urban resilience into existing institutional frameworks
- 1.4 Gender responsive Urban resilience master plan (URMP) developed for the GBA

2. Increasing resilience through integrated ecosystem-based adaptation (EbA)

Component Type	Trust Fund
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Investment	LDCF	
GEF Project Financing (\$)	Co-financing (\$)	
10,494,037.00	21,181,494.00	

Outcome:

2. Urban resilience to climate change is strengthened through an integrated EbA strategy

Output:

- 2.1 Priority ecosystems and buffer zones protected and restored
- 2.2 Gender responsive sustainable alternative livelihoods enhanced, with targeted support for women's economic empowerment
- 2.3 Multi-use public green spaces established
- 2.4 EbA solutions piloted for enhanced urban drainage, water storage and coastal defence
- 2.5 Financial mechanism for upscaling EbA solutions designed and established

3. Improving knowledge management and information dissemination

500,000.00	399,916.00
GEF Project Financing (\$)	Co-financing (\$)
Investment	LDCF
Component Type	Trust Fund

Outcome:

4. Increased awareness and dissemination of project knowledge products

Output:

- 4.1 Partnerships established for enhanced generation of knowledge, best practices and lessons learned
- 4.2 Community awareness-raising campaigns to enhance access to information shared via the existing EbA information portal

M&E

Component Type	Trust Fund	
Technical Assistance	LDCF	
GEF Project Financing (\$)	Co-financing (\$)	
300,000.00	1,000,000.00	

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Outcome:			
M&E			
Output:			
M&E			

Component Balances

		Project Components	GEF Project Financing (\$)	Co-financing (\$)
1. plannir	1.	Strengthening the enabling environment for climate-resilient urban sustainable development	800,000.00	9,077,784.00
2. (EbA)	2.	Increasing resilience through integrated ecosystem-based adaptation	10,494,037.00	21,181,494.00
3.	Impro	oving knowledge management and information dissemination	500,000.00	399,916.00
M&E			300,000.00	1,000,000.00
Subtot	al		12,094,037.00	31,659,194.00
Project	Manag	gement Cost	450,000.00	3,785,000.00
Total P	roject (Cost (\$)	12,544,037.00	35,444,194.00

Please provide justification

Grey infrastructure solutions implemented under Outcome 2 have the potential to be very costly, if not well planned. A financial analysis will be undertaken during the PPG phase to determine how much of the budget allocation for Outcome 2 should be spent on green-grey infrastructure and what type of grey infrastructure the project can afford to install. For example, the average cost of a installing a single seawall is ~US\$25,000, while revetments cost ~US\$1,000 per linear metre. Stone bunds and terracing, on the other hand, cost ~US\$10/ha and US\$60/mile, respectively.

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as

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population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

The Republic of The Gambia, located in West Africa, is bordered by the Atlantic Ocean to the west and the Republic of Senegal to the north, east and south (Figure 1). Covering an area of ~11,000 km2, The Gambia is the sixth smallest country in Africa and is located almost entirely within The Gambia River basin — one of several transboundary catchments in the West African sub-continent. The terrain of The Gambia is mostly floodplain, flanked on both banks by low laterite hills. The country is notably low-lying, with ~80% of the country having an elevation of less than 20 metres above sea level (masl).

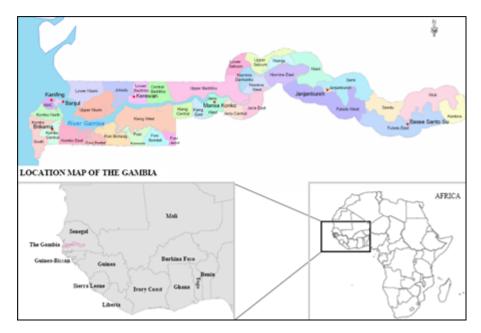


Figure 1. The geographical location of The Gambia in West Africa.

The proposed project will focus on the Greater Banjul Area (GBA), which covers an area of ~95 km2 at the mouth of the Gambia River, in the northwest of the country. The topography within this region features sandy beaches along the coastline and flat, flood-prone lands with an average elevation of ~5 masl extending into the interior and a maximum elevation of ~30 masl. This range demonstrates that while parts of Banjul and its surrounding areas are low — particularly those close to the coast and within the Tanbi Wetland — other areas, including Kombo North and Brikama, reach higher elevations.

Administrative overview

The Gambia is divided into one independent city — Banjul City — and five provinces, known as 'regions'. These five regions are: i) Upper River; ii) Central River; iii) Lower River; iv) North Bank; and v) West Coast, otherwise referred to as the Western region (Figure 2).

Figure 2. Map showing the administrative boundaries of each province - please refer to attached PIF for reference

The five regions in The Gambia are further divided into eight Local Government Areas (LGAs), namely Banjul, Kanifing, Brikama, Kerewan, Mansakonko, Kuntaur, Janjanbureh and Basse (Figure 3). Each of the eight LGAs is self-administered, with local council members elected every five years via universal adult suffrage. The Gambia's eight LGAs encompass a total of 48 districts, each overseen by a Chief (Seyfos). These districts comprise several villages and settlements, which are led by a village head (Alkalo). The LGAs outside the Greater Banjul Area are governed by area councils and headed by chairpersons.

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Figure 3. Map showing the locations of the Gambia's eight Local Government Areas (LGAs) - please refer to attached PIF for reference

The Banjul and Kanifing municipalities — together with Kombo North, South and Central districts in the Brikama LGA — are collectively known as the Greater Banjul Area (GBA), which forms the target region for the proposed urban resilience project (Figure 4). The Banjul and Kanifing LGAs are designated as municipalities, governed by municipal councils and headed by mayors, while Brikama LGA is governed by an area council.

Figure 4. Map of the Great Banjul Area (GBA) - please refer to attached PIF for reference

Socio-economic overview

The Gambia's population is estimated at \sim 2.8 million (51% women; 49% men), with an annual growth rate of \sim 3%. Despite its relatively small population size, the country has a population density of \sim 280 people per km2, positioning it among the most densely populated countries in Africa . Indeed, in 2020, the highly urbanised GBA had population density of \sim 3,800 people per km2 and a total population of 1.4 million, with this number expected to exceed 2.7 million by 2040 . In contrast, rural communities outside of the GBA usually live in scattered settlements, with populations rarely exceeding 1,000 inhabitants .

Economy

- The Gambia has a gross domestic product (GDP) of \sim US\$2.8 billion and a GDP growth rate of 4.3% per annum. The country has a small economy that relies primarily on the agricultural and tourism sectors, with \sim 75% of the population dependent on crops and livestock for their livelihoods. In recent years, however, economic growth has mainly been driven by the services sector, which includes financial services, telecommunication and construction .
- 8 In 2024, annual GDP growth is projected to reach 4.8% as a result of increased activity across all economic sectors, supported by: i) a boost in agriculture resulting from favourable rainfall; ii) increasing demand for services, driven by a recovering tourism sector; iii) an increase in private sector investment; and iv) increased public sector investment.
- Despite this positive economic outlook, the benefits of an increasing GDP in The Gambia are likely to be offset by the country's raised inflation rate, which reached ~18% in August 2023 marking the highest level in decades. This surge has primarily been driven by increased utility tariffs, currency depreciation and escalating food prices attributed to suboptimal domestic production and increased dependence on food imports, exacerbated by climate change .
- The Greater Banjul Area (GBA), known as the urban and economic hub of The Gambia, exhibits a vibrant but challenging economic landscape. The local economy primarily revolves around services, trade and tourism, which contribute considerably to the area's GDP. Despite this, a considerable portion of the population relies on agriculture for their livelihoods, reflecting a common pattern in many developing urban areas where traditional practices coexist with modern economic activities.

Agriculture

Agriculture within the GBA, although less dominant than in rural areas of The Gambia, remains a major livelihood for many, particularly in peri-urban zones. The agricultural sector mostly involves the cultivation of vegetables, fruits and root crops, often on small-scale family plots or in community gardens. These agricultural activities are typically rainfed, with some areas benefiting from irrigation during the dry

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season. Livestock rearing — particularly of goats, sheep and poultry — is also prevalent, contributing to household food security and income.

Fishing

Fishing is another important economic activity in the proposed project's target region, given the GBA's proximity to the Atlantic Ocean and Gambia River. Local communities engage in both artisanal and, to a lesser extent, commercial fishing. This sector not only provides direct employment to many locals but also supports ancillary industries such as boat building, fish processing, and the retail of fishing gear.

Trade and markets

Trade is a vital component of the GBA's economy, with numerous markets scattered throughout the area. These local markets are centres of economic activity, where local produce, textiles, crafts and imported goods are sold. Women predominantly run market stalls, which are important for their economic independence. The flow of goods within these markets underscores the GBA's role as a commercial nexus in The Gambia.

Tourism

Tourism has historically been a significant economic driver in the GBA, capitalising on the region's beaches, cultural sites and wildlife. The tourism sector offers a range of employment opportunities for local community members, from hotel and restaurant services to tour operations and craft sales. Despite this, tourism's contribution to the local economy fluctuates as a result of external factors such as global economic conditions and travel trends.

Informal sector

The informal sector also plays a substantial role in the GBA's economy, encompassing a wide array of activities such as street vending, small-scale manufacturing and services provision. This sector, while often overlooked in official statistics, provides livelihoods for a large proportion of the urban population, particularly among youth and women.

Challenges and opportunities

While the GBA boasts a diverse economic base, it faces significant challenges such as inadequate infrastructure, limited access to finance, and the impacts of climate change, particularly in agricultural and fishing communities. Opportunities for growth and enhancement of resilience lie in the sustainable expansion of sectors like ecotourism and agroforestry, which can contribute to economic diversification and environmental sustainability. The GBA's local economy, primarily driven by agriculture and tourism, stands to benefit significantly from the introduction of sustainable practices such as ecotourism, agroforestry, and aquaculture. These sectors not only align with the ecological profile of the GBA but also offer substantial value to the community by diversifying income sources and reducing dependency on traditional agriculture. The integration of these practices will encourage sustainable land use, enhance food security, and foster resilience against climate variability. Moreover, ecotourism will leverage the region's natural beauty, attracting investment and improving the socio-economic status of local communities.

Gender dynamics

Historically, women in The Gambia have participated in several economic sectors, including agriculture, trade and informal markets; however, they still face disparities in access to resources, credit and land ownership compared with men . Specific data on the percentage of women involved in agriculture, trade and informal markets is not readily available. However, general observations indicate that many women are

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engaged in agriculture, particularly in roles that include growing crops and managing livestock, though they may face inequalities such as less access to resources compared to men. Women also remain underrepresented in government and traditional leadership roles, as evidenced by the 2022 legislative elections, wherein only 8% of candidates were women and 3 of 19 women candidates were elected. In addition, while there have been improvements in girls' access to education, substantial challenges persist, particularly in rural areas, leading to lower enrolment rates and higher school dropout rates among girls compared with boys.

- Traditional and cultural norms continue to influence gender roles in The Gambia, where women are typically responsible for family and household duties and men are considered breadwinners. These gender roles are, however, gradually evolving to favour more balanced labour division as a result of increased urbanisation and global influences. The gendered dimensions of rapid urbanisation in The Gambia highlight considerable challenges, particularly for women. As urban areas expand, women often face disparities in access to employment, housing, and basic services like water and sanitation. Urbanisation can exacerbate these challenges, making it difficult for women to secure stable livelihoods or participate fully in urban economies. Additionally, rapid urban growth tends to strain the traditional support systems that many women rely on, further increasing their vulnerability in urban settings.
- To address gender disparities in the country, the government of The Gambia (GoTG) developed the Gender and Women Empowerment Policy for 2010–2020. This policy aimed to mainstream gender considerations into all national and sectoral policies, programs, plans and budgets, with a focus on achieving gender equity, equality and women's empowerment in development. The main achievements of the policy were that efforts were made to ensure food and nutrition security by promoting gender-sensitive agricultural practices and nutrition education. The policy also emphasised women's participation in disaster prevention and advocated for gender-sensitive development policies to reduce poverty and economic independence among women. There is an indication that the government is updating its gender and women's empowerment frameworks, although specific details on a new policy period or revisions is unavailable.

Urban profile

By 2030, all developing countries in Africa are expected to house more people in urban areas than rural areas. Urbanisation trends in The Gambia corroborate this projection, with ~65% of the country's population already residing in urban settlements, representing a ~25% increase since 1990. This rapid urbanisation has placed increased pressure on social services and infrastructure, exacerbating urban poverty and associated environmental challenges — particularly in the GBA, where ~60% of the population live within unplanned urban and peri-urban regions. These pressures disproportionately affect women, who are exposed to the challenge of insufficient housing and public services, impacting their health, safety, and economic opportunities. Urban and peri-urban areas are generally characterised by the prevalence of informal settlements, unpaved roads, limited drainage infrastructure, limited waste management systems and overloaded water and sanitation services, as described in Table 2 below.

Table 2. Summary description of urban features in the Greater Banjul Area.

Urban feature	Description		
Road networks	Road infrastructure is generally degraded and lacks proper drainage.		
	Most main roads and thoroughfares, including the Banjul-Serekunda highway and Kairaba Avenue, are characterised by severe potholes, uneven surfaces and limited signage.		
	Traffic congestion is common during peak hours.		
	Within informal settlements, roads are unpaved and drainage systems are not in place.		
Drainage systems	Only ~30% of The Gambia's urban areas have adequate drainage systems.		

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	Open channels, stormwater drains and culverts are among the most common drainage systems.
	Existing drainage channels are prone to clogging, frequently overflow and require maintenance
Housing and development	Unplanned, informal settlements are prevalent in the GBA, housing ~42% of the urban population.
•	Informal settlements often lack formal land tenure and basic infrastructure, resulting in overcrowding, inadequate housing conditions and limited access to services
	Mixed-use developments are emerging in the GBA, blending residential, commercial and recreational spaces within integrated neighbourhoods. One notable example is the Senegambia Strip: a commercial and entertainment hub in Kololi, featuring hotels, restaurants, shops and residential complexes.
Water and sanitation	Only ~58% of the urban population in The Gambia has access to basic sanitation services.
	Most drinking water is accesses via boreholes since most of the GBA's surface water is contaminated or characterised by high salinity levels.
	Approximately 45% of water sources in The Gambia are contaminated with <i>E. coli</i> and ~73% of households are exposed to <i>E. coli</i> in their drinking water
	Pluvial flooding resulting from inadequate drainage exacerbates sanitation challenges, frequently resulting in outbreaks of waterborne diseases
Coastal infrastructure	Many areas in the GBA — including Kololi Beach, Cape Point and the Bakau Coastal Area — are situated along the Atlantic coastline and exposed to coastal erosion.
	Rising sea levels and erosion threaten infrastructure, residential properties, fishing communities, mangrove systems and cultural heritage sites along the coastline.
	Only a limited number of seawalls, groynes and revetments have been introduced in the GBA. Many exposed and vulnerable areas do not have protective infrastructure in place
Waste management	Conventional waste management practices in the GBA have often involved the use of dumpsites, like the Bakoteh dumpsite, which have been criticised for their environmental impact and health hazards to nearby communities.
	Pollution of waterways and open land are common.
	Efforts to improve waste management in the GBA have included legislative actions, such as the drafting and validation of a waste management bill, alongside projects to introduce sustainable waste management practices focusing on recycling and composting

In addition to placing added pressure on already limited infrastructure, rapid population growth and urbanisation have resulted in unregulated urban sprawl. As a result, many settlements — including those in Banjul City, Kotu Stream, Senegambia and Oyster Creek (Figure 5) — extend into high-risk, flood-prone zones along riverbeds and the Atlantic coastline. Baseline challenges related to limited urban infrastructure within these high-risk areas have, in turn, increased community vulnerability to the impacts of climate change, discussed in further detail below. Accordingly, there is a need for enhanced urban resilience in the GBA, particularly against climate-related hazards such as flooding, rising sea levels and droughts.

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Figure 5. High-risk, flood-prone areas in the Greater Banjul Area, identified during a flood-risk assessment conducted for the World Bank-funded West Africa Coastal Management Programme (WACA) in The Gambia

Status of ecosystems and natural resources

Status of ecosystems and natural resources

- 22 Stretching across approximately 80 km of coastline adjacent to the Atlantic Ocean, the Gambia extends 200 km inland within the tidal reaches of the Gambia River's shoreline. The Gambia River, an important natural feature in The Gambia's landscape, measures ~11 km in width. This river and its tributaries, which discharge into the Atlantic Ocean, occupy a permanent surface area of ~1,300 km2 — equating to ~18% of the country's total area. Notably, during annual wet season floods, the total surface area covered by the Gambia River expands to ~1,900 km2. The river's banks are lined with extensive mangrove systems and mud flats, which serve as important breeding grounds for many aquatic species, including fishes, shrimps and oysters. Additionally, marshlands alongside the Gambia River are used by communities for rice cultivation, which constitutes an important livelihood activity for rural and peri-urban communities. On the opposing flank of the GBA, Gambia's Atlantic coastline is marked by a succession of bays and headlands, some featuring uninterrupted sandy beaches and others intersected by streams such as Kotu Stream and the River Tanji. Rice cultivation roles are distinctively gendered. For example, women predominantly engage in the cultivation of upland rice, a task that involves extensive manual labor such as planting, weeding, and harvesting. These activities are often conducted on small, rainfed lowland, tidal wetland, and irrigated fields, where women are the primary farmers. Men's roles in rice production involve the heavy labor associated with land preparation, particularly where mechanisation is used, such as in irrigated fields where power tillers might be employed.
- The country's landscape transitions from the coastal floodplain to savanna and low hills inland, with the highest elevation point in Basse in the southeastern part of the country, peaking at 53 masl. This diverse topography results in the formation of four distinct major landscapes, namely the floodplain, colluvial slopes, the lower plateau and the upper plateau, each characterised by distinct soil types. Moreover, the Gambia is divided into three main agroecological zones (AEZs), namely the Sahelian Zone, the Sudan-Sahelian Zone, and the Sudanian-Guinean Zone (Figure 6), each supporting different crops and cultivation methods based on rainfall patterns and soil types.

Figure 6. Agroecological zones of The Gambia - please refer to attached PIF for figure

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The Sahelian Zone, the smallest zone, is characterised by less than 600 mm total annual rainfall and soils of low water holding capacity. This zone is notable for early maturing, short-duration and drought-tolerant crops such as cassava, cowpea and sesame, with millet grown only intermittently . The Sudan-Sahelian Zone, the largest zone, receives 600–900 mm of annual rainfall, making it well-suited for groundnut, sorghum and cotton cultivation. Despite this, the flood plains along the Gambia River and associated lowland valley systems in the Sudan-Sahelian Zone are instead used for growing rice under tidal swamp irrigation. Lastly, the Sudanian-Guinean Zone, covering the Greater Banjul Area (GBA), lies between the 900 and 1,200 mm rainfall isohyets along the country's coast — with millet, groundnut, rice, maize, vegetable, cowpea and sesame cultivated in this zone . The cultivation of these crops across the AEZs is predominantly undertaken by women in the local communities.

Climate baseline

The Gambia has a Sahelian climate, characterised by warm year-round temperatures and fluctuating periods of rainfall and drought. Mean annual precipitation varies spatially, averaging ~700 mm in the north of the country and ~1,000 mm in the south and southeastern regions . A long dry season is observed from November to May, while a shorter wet season is experienced from June to October . These spatiotemporal precipitation patterns are influenced by the seasonal northward migration of the Inter-Tropical Convergence Zone (ITCZ) , which causes a peak in rainfall during the month of August before shifting southwards again , . At the national scale, average annual temperatures also exhibit temporal variation, ranging from 18–30°C during the dry season and 23–33°C during the wet season (Figure 7).

Figure 7. Average temperature and precipitation in The Gambia over the period spanning 1991–2020 - please refer to PIF for figure

At finer scales, The Gambia encompasses two distinct Köppen-Geiger climate types: i) a tropical savanna climate (Aw); and ii) a hot semi-arid climate (BSh). The GBA falls within the Aw climatic zone, with a mean annual temperature of 27° C, mean annual precipitation of $\sim 1,100$ mm and ~ 70 rainy days per year (Figure 8).

Figure 8. Average temperature and precipitation in the GBA over the period spanning 1991–2020 - please refer to attached PIF for reference

Frequent climate-related hazards in The Gambia include floods, droughts, storms, cold spells, heat waves, intra-seasonal drought and erratic rainfall patterns. As a result of its positioning within the Gambia River floodplain, the country is vulnerable to seasonal river flooding between the months of June and October, impacting $\sim 16,800$ people annually, . Moreover, drought conditions are prevalent for ~ 3 months of the year, with the maximum number of consecutive dry days (CDD) exceeding 200 days per year, .

Observed climate change

Over the past few decades, changes in temperature, rainfall and sea level have been observed in The Gambia as a result of anthropogenic climate change. These changes have led to increased flooding, droughts and coastal erosion, with considerable impacts on livelihoods, water security, food security and community health and safety — particularly in the low-lying, densely populated GBA.

Rainfall, floods and droughts

As shown in Figure 9, The Gambia has experienced an overall decrease in mean annual precipitation over time. Between the years 1901 and 2020, a \sim 150 mm reduction in rainfall was observed, with mean annual precipitation decreasing from \sim 1,150 mm to \sim 1,000 mm over this period . Additionally, analyses of

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wet season (July–August) rainfall data for the period spanning 1901–2020 show that wet season rainfall decreased from ~780 mm (1901–1930) to ~640 mm (1991–2020) (Figure 9), providing further evidence of a decreasing precipitation trend at the national scale.

Figure 9. Observed changes in average wet season (July–August) precipitation and annual precipitation in The Gambia (1901–2020) - please refer to attached PIF for figure

- Observed changes in precipitation in the GBA mirror trends at the national scale. Within the target region, wet season rainfall for the period spanning 1945-1965 averaged $\sim 1,000$ mm per year; however, this estimate decreased to ~ 700 mm for the 1965-2005 rainy seasons. This observed reduction in wet season rainfall has considerably impacted water availability, food security and livelihoods across The Gambia, where access to formal water and sanitation services is limited and most (>90%) crops are rainfed,
- Indeed, across the GBA, lower wet season rainfall and higher atmospheric temperatures have resulted in more frequent droughts, denoted by a higher standardised precipitation evapotranspiration index (SPEI). Within the Sudano-Guinean agroecological zone which includes the GBA the frequency and intensity of severe droughts (>SPEI 2) has increased over the past two decades, with severe drought events recorded in 1990, 1993, 1998, 2002, 2009, 2014 and 2016–2018.
- Moreover, although wet season rainfall has decreased across the target region, rainfall inter-annual variability and intensity have increased, with subsequent increases in the frequency and severity of flooding events. Indeed, extreme fluvial and pluvial flood events were recorded in 1948, 1988, 1998, 1999, 2002, 2010, 2020 and 2021. Additionally, in 2022, a pluvial flood caused by ~280 mm of precipitation in two days severely impacted the GBA and surrounding areas, affecting ~50,000 people.

Sea level rise

Coastal erosion in The Gambia's coastal areas has persisted for decades, with an increasing rate and impact in recent years. In the southern coastal region, which includes the GBA, an average coastal recession of 2 metres per year (m/yr) has been observed since the 1990s, reaching 4 m/yr at Bijilo Beach. This recession is attributed to climate change-induced Sea level rise (SLR), as well as anthropogenic drivers of coastal erosion — such as coastal development and mangrove degradation. Rising sea levels and associated coastal erosion pose a considerable threat to densely populated regions in the low-lying GBA, impacting tourism, infrastructure and service delivery.

Temperature

In The Gambia, mean annual temperatures have increased by \sim 1°C since 1960, at an average rate of 0.2°C per decade (Figure 9). The rate of increase has been most pronounced in October, November and December, at 0.3°C per decade. Moreover, the number of days with a heat index of >35°C has risen from 0 to \sim 30 days per year (days/yr) between 1951 and 2020.

Figure 10. Observed changes in mean surface air temperature (1951–2020) in The Gambia - please refer to attached PIF for reference

Projected climate change

Observed climate trends for The Gambia are expected to continue under projected climate scenarios, with some variation anticipated when different shared socio-economic pathways (SSPs) and representative concentration pathways (RCPs) are applied to climate models. In general, ensembles predict an overall decrease in mean annual rainfall, increased rainfall variability, rising sea levels and increases in atmospheric temperature by the end of the 21st century, resulting in more frequent and severe extreme climate events. Rainfall, floods and droughts

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Projected changes in mean annual rainfall across The Gambia are characterised by high uncertainty; however, all models (RCP2.6–RCP8.5) predict an overall reduction in mean annual rainfall relative to the historical reference period (1995–2014), with expected decreases of 1–25% at the 2050 horizon and 2–54% by 2100 (Figure 14).

Figure 11. Projected changes in mean annual precipitation over the period spanning 2024–2095, under different RCP emissions scenarios - please refer to attached PIF for reference

- Additionally, flood risk in the GBA is projected to increase under future climate scenarios, resulting from increased inter-annual rainfall variability. Although model outputs are highly variable, the intensity of rainfall events during the wet season (JJA) is likely to increase considerably, with average one-day precipitation increasing by 58–62% at the 2050 horizon and 54–59% by 2100, leading to more frequent and severe flooding incidents.
- Reduced annual rainfall combined with reduced humidity and increased atmospheric temperatures under future climate scenarios are expected to enhance evapotranspiration rates, further reducing soil moisture and aggravating drought conditions in the GBA. Indeed, mean annual potential evapotranspiration (PET) across The Gambia is predicted to increase by 9–29% at the 2050 horizon and 15–45% by 2100, representing and overall increase of 1,300–1,900 mm relative to the historical reference period (1995–2004). Consequently, the national SPEI, which denotes drought conditions, is expected to increase over the next few decades, with the probability of drought increasing from 0–40% in 2016 to 80–100% by 2050 and from 0–25% to 40–60% within the GBA (Figure 13).

Figure 12. A comparison of baseline (2016) and projected (2050) drought probabilities within The Gambia - please refer to attached PIF for reference

Temperature

At the national scale, mean annual temperatures in The Gambia are expected to increase by $1.7-2.1^{\circ}$ C at the 2050 horizon and 3.1-3.9 °C at the 2100 horizon, relative to the historical reference period (1950–2014) (Figure 12) , . On average, this represents an increase of $\sim 0.6^{\circ}$ C per decade, with the greatest degree of warming expected during the winter months (December–February), coinciding with the long dry season . Moreover, by the end of the 21st century, the annual number of days with a heat index of >35°C is expected to rise from ~ 30 days per year in 2020 to ~ 160 days/yr under a best-case scenario (SSP1–2.6) and ~ 290 days/yr under the worst-case scenario (SSP5–8.5), suggesting an increase in the annual number of heatwave days .

Figure 13. Projected change in mean annual air surface temperature (°C) for The Gambia under all SSPs; temperature is shown on the y-axis, while years are shown on the x-axis. - please refer to attached PIF for reference

Sea level rise

39 Current projections estimate a 19–43 cm rise in mean sea level by 2050 and a 26–98 rise in sea level by the end of the 21st century, depending on global greenhouse gas emissions scenarios. Since The Gambia is a low-lying country, with a maximum elevation of ~60 masl, a rise in sea level by one metre could potentially inundate over 8% of the country's land area and over 50% of the capital city of Banjul .Within the GBA, the areas most at risk of coastal flooding and erosion under future climate scenarios are shown in Figure 14 below, and include: i) Banjul City; ii) eastern areas of Oyster Creek; and iii) Banjul Port.

Figure 14. Areas with a high risk of coastal flooding and erosion under future climate scenarios, shown in green - please refer to attached PIF for reference

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Impacts of climate change

- Climate change in The Gambia is exacerbating existing environmental and societal challenges, with significant impacts on natural ecosystems, infrastructure, food production, water security and community health and safety. Within the GBA, the most significant climate change impacts are associated with floods, rising sea levels, droughts and heatwaves, discussed in further detail below.
- With an average elevation less than one masl, Banjul City situated on Saint Mary's Island, at the Gambia River mouth is inherently susceptible to climate change-induced sea level rise (SLR), coastal erosion and river flooding. The city's flat terrain considerably hinders natural drainage by gravity, while existing sewer systems, where present, are generally degraded or overloaded. Consequently, roads often serve as makeshift drainage channels during heavy rainfall and flood events, with overflowing water frequently damaging housing and rendering transport routes impassable. As a result, individuals are regularly displaced during annual floods and the movement of goods, services and individuals is hindered particularly during emergencies. Additionally, the majority of household water is sourced from boreholes, catering to two-thirds of the urban population; however, groundwater salinisation, exacerbated by rising sea levels, presents a growing challenge, These vulnerabilities extend to low-lying areas in Kanifing Municipality and Brikama LGA, where there are no piped sewer systems and sanitation infrastructure is largely insufficient or non-existent, exacerbating floods, public health risks and environmental degradation. Displaced residents often seek temporary housing in shelters, where women are increasingly exposed to gender-based violence (GBV) and sexual exploitation and harassment (SEAH).
- Since 1948, changes in the frequency and severity of floods, coastal storm surge and intense rainfall events have resulted in substantial infrastructure damage, injuries, fatalities and loss to agricultural crops. Indeed, the annual cost of flood risk in the Gambia is estimated at ~US\$22 million, with this amount expected to increase by ~32% over the next 20 years . Recurrent flood events were recorded in 1988, 1999, 2002, 2010 and 2020, with urban floods in 2010 impacting more than 35,000 people and damaging ~2,400 houses across the country . More recently, in 2022, torrential rains and thunderstorms caused flash flooding across the Greater Banjul Area, damaging ~7000 houses, flooding ~48,000 hectares of land including cultivated land and impacting ~208,000 people (>8% of The Gambia's total population) . As a result of improper drainage and waste disposal systems, urban flooding has also resulted in damage to roads and increased exposure to malaria and other waterborne diseases, with poor land use and unplanned urbanisation further intensifying these challenges . Women and girls, in particular, are disproportionately affected by these disasters due to their roles in agricultural production and household management, making them more vulnerable to the economic impacts and threats to personal safety .
- The GBA's dense urban layout, with few green spaces and prevalent concrete structures, has also contributed to increased urban runoff and the formation of urban heat islands (UHIs). Urban runoff accumulates pollutants and nutrients as it flows over surfaces, adversely impacting water quality and aquatic life upon entering nearby surface water bodies. Additionally, the high volume and velocity of urban runoff during extreme precipitation events inhibits water infiltration into soils, exacerbating pluvial flooding and reducing groundwater recharge rates across the GBA. Rapid urbanisation has also enhanced the UHI effect, resulting in more frequent and severe heatwaves and subsequent increases in heat-related illnesses and mortality among the target population. Outside of the GBA's urban centres, rapid urban expansion into periurban zones most notably in the Kombo districts of Brikama LGA often occurs without comprehensive spatial planning. This has led to accelerated ecosystem degradation, a reduction in arable land and the establishment of settlements in high-risk locations that are vulnerable to flooding.
- Decreasing annual rainfall trends and rising sea levels have also led to groundwater salinisation and the acidification of lowland soils, reducing water quality and the fertility of marginally productive soils. Women, who often bear the primary responsibility for household food security and agricultural labor, are particularly affected by these changes. They face greater challenges in accessing water for irrigation and

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domestic use due to groundwater salinisation, which compounds their workload. This, combined with the effects of increasing atmospheric temperatures and enhanced rainfall variability, has adversely impacted small-scale subsistence agriculture in peri-urban areas, with increased soil moisture stress limiting crop production in the Sudano-Guinean AEZ. Notably, severe droughts in 2011 and 2014 resulted in a 50% decrease in national crop outputs, severely impacting food supply chains within the GBA. Additionally, an abnormally short rainy season in 2016 further diminished agricultural production, leading to food price hikes and threatened food security in the GBA's urban and peri-urban areas.

- More frequent and severe drought conditions have also resulted in reduced aquifer recharge and groundwater salinisation, particularly where boreholes are located within close proximity to the Atlantic Ocean. Given that 100% of The Gambia's domestic water supply comes from underground aquifers, more frequent and intense droughts are expected to further reduce the quality and availability of potable water in the GBA, with subsequent impacts on water security, food security and overall public health. In these ways, more frequent and severe droughts not only limit access to basic services within urban and peri-urban areas, but also contribute to economic instability through reduced labour productivity and inflated food prices, which threaten communities' livelihoods and drive unsustainable natural resource use in the GBA, with peri-urban communities becoming more heavily reliant on natural ecosystems for the provision of fuelwood, sustenance, building materials, medicinals and other provisioning ecosystem services. Indeed, according to the African Energy Commission, fuelwood which is derived from the forest resources and accounts for approximately 82% of the country's biomass is the Gambia's main energy source, driving mass deforestation in the GBA.
- 46 In terms of climate change impacts on ecosystems, marshlands and forests — including coastal mangroves forests — in the GBA have undergone noticeable changes resulting from increasing temperatures, rising atmospheric carbon dioxide (CO2) concentrations, modified rainfall patterns and SLR. Marshlands and coastal mangroves, which provide ecosystem services related to flood attenuation, shoreline protection, enhanced biodiversity and carbon sequestration, are increasingly threatened by rising sea levels and saltwater intrusion. The resultant decline in natural vegetation has negatively impacted regulatory ecosystem services, as well as species that rely on mangroves and salt marshes for habitat provision and the communities that depend on them for livelihoods. For example, mangroves provide important nursery habitat for breeding fish, directly supporting local fisheries, which many communities depend on for food security and income. Under a progressively drier climate, large-scale mangrove mortality in the GBA is very likely, with anticipated impacts on the fishing and tourism industries. Additionally, the extent of productive terrestrial forest areas is projected to decrease as a result of limited water availability during drought, thereby creating uncertainty for the wood processing industry and reducing the provision of ecosystem services related to soil stabilisation and water retention. This has, in turn, reduced the suitability of land for agricultural production and human settlements, forcing communities to migrate in high-risk areas that are prone to flooding and coastal erosion.

Root causes of vulnerability

The proposed project focuses on enhancing urban resilience in the Greater Banjul Area (GBA) and aligning with existing initiatives, such as the West Africa Coastal Areas Management Program (WACA), to foster synergy and facilitate landscape-level transformative change. Several factors render the GBA particularly vulnerable to flooding, coastal erosion, droughts, and sea-level rise, necessitating urgent adaptation efforts. A flood and coastal erosion risk assessment conducted under WACA has identified the root causes of vulnerability within the target region of the proposed project. These vulnerabilities are described below.

Widespread poverty in urban communities inhibits resilience to climate change impacts

48 Urban poverty undermines communities' resilience to the impacts of climate change, creating a negative feedback loop that exacerbates existing socio-economic challenges. This cycle is particularly evident in the Gambia, which is already exposed to extreme climate change and environmental degradation.

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Challenges such as rising sea levels, erratic rainfall patterns and land degradation have negatively impacted agriculture, the main livelihood activity for a large proportion of the population. These challenges threaten food security and undermine communities' ability to access essential services such as clean water, shelter, health facilities, and quality education. Women, girls and IPLCs are disproportionately impacted by these climate-induced hazards, which exacerbate their vulnerability and burden in securing water and food, caring for family health, and maintaining household stability. As these climate-induced hazards strain the already limited resources, poverty worsens, reducing the local community's adaptive capacity. This creates a cycle where baseline poverty increases vulnerability to climate change impacts, which, in turn, aggravates socioeconomic deprivation, making it increasingly difficult for affected communities to escape poverty.

Limited and outdated urban infrastructure

Over the past 30 years, The Gambia has experienced rapid urbanisation, with the population density reaching \sim 280 people per km2 in 2024 — a considerable increase from \sim 120 people per km2 in 1994 . Unfortunately, the establishment and maintenance of urban infrastructure has not kept pace with The Gambia's increasing population, resulting in the growth of informal settlements. In these areas, service provision and infrastructure are generally insufficient to meet the needs of local communities, with limited access to arable land, water and sanitation services exacerbating communities' vulnerability to climate change hazards such as floods and droughts .

Topography and geographic location

By 2050, sea levels in The Gambia are projected to rise by 19–43 cm. As a result of the GBA's low-lying terrain and location between the Gambia River and Atlantic Ocean, target communities in Banjul, Kanifing and the Kombos are inherently vulnerable to coastal storm surge and flooding. In addition, ~20% of the country is covered by wetlands and swamps, which are generally flood-prone, subjecting local populations to life-threatening situations, displacement and infrastructure damage. The GBA's proximity to the Atlantic Ocean also creates considerable challenges for urban development and land regeneration, with shoreline changes and ongoing coastal erosion limiting the availability of land for urban expansion .

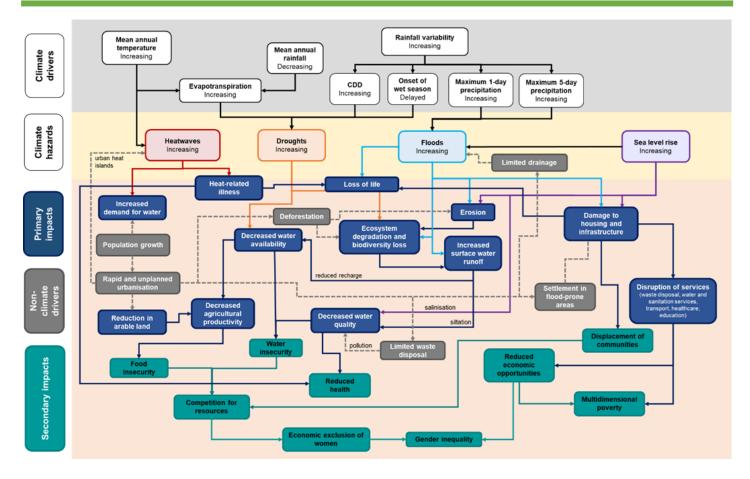
Problem statement

Over the past 30 years, rapid and unplanned urbanisation in the Greater Banjul Area has placed increased pressure on already limited natural resources, infrastructure and social services, with subsequent increases in multidimensional poverty and vulnerability to the impacts of climate change. As of 2024, ~60% of The Gambia's urban population resides in unplanned peri-urban areas characterised by limited drainage systems, insufficient waste disposal, reduced arable land and limited water and sanitation services. Moreover, as a result of unregulated urban sprawl, communities have settled in high-risk, flood-prone regions along the Gambia River and Atlantic coastline. Consequently, housing and infrastructure are frequently damaged during seasonal floods, displacing vulnerable communities and hindering transportation — particularly during emergencies. Under future climate scenarios, rising sea levels and more severe fluvial floods are likely to exacerbate these challenges, given that Banjul City has an average elevation of 0.8 m above sea level. Additionally, extensive land transformation in urban and peri-urban areas has resulted in large-scale ecosystem degradation and the creation of urban heat islands. This has, in turn, negatively impacted the provision of ecosystem services — including flood regulation, water infiltration and enhanced albedo — with subsequent negative impacts on climate change resilience, livelihood security and community health and safety. Under future climate scenarios, the impacts of floods, droughts and rising sea levels in the GBA are expected to intensify, necessitating enhanced focus on urban resilience. The problem tree in Figure 15 below provides a visual representation of the climate change and anthropogenic challenges communities in the GBA of the Gambia are currently facing.

Figure 15. Problem tree showing the impacts of climate change and anthropogenic factors on urban and periurban communities in the Greater Banjul Area of The Gambia

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Preferred solution

To address the climate adaptation challenges described above, the preferred solution, described in further detail below, will involve an integrated approach that combines EbA interventions and sustainable livelihood activities to enhance climate resilience in urban and peri-urban areas. Using this integrated approach, the proposed project will ensure sustainable, transformative change is achieved by addressing both baseline and climate vulnerabilities in the GBA, thereby enhancing the short- and long-term resilience of target communities. The integrated ecosystem-based approach will consist of:

nature-based solutions (NbS), which are relatively cost-effective methods for adapting to the climate change impacts experienced by communities by enhancing ecosystem services provision. The restoration and protection of wetlands, forests, mangroves and other coastal and estuarine ecosystems in The Gambia will enhance flood attenuation, water retention and soil stabilisation, while afforestation and urban greening will reduce soil erosion, increase albedo and support sustainable land-use and livelihoods. Using an EbA and restoration-focused approach in the GBA will address challenges related to unsustainable land-use and ecosystem degradation; however, climate change adaptation benefits may take longer to accrue than grey infrastructure solutions, which provide more immediate benefits, but are more costly and less sustainable in the long-term. Additionally, without interventions focused on other non-climate drivers of degradation — for example, the types of livelihood activities communities are engaged in (inter alia, charcoal production and logging) — ecosystem degradation may resume once the project lifespan has passed. These NbS encourage the equitable sharing of benefits derived from enhanced ecosystem services, providing women with more opportunities for economic and social participation, thus fostering social inclusion. Additionally, by focusing on community-led, sustainable practices, NbS help reduce the vulnerability of marginalised groups, particularly women and IPLCs, to climate impacts, enhancing community resilience and ensuring that both men and women can contribute to, and benefit from, sustainable development efforts.

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Livelihood diversification approach: Introducing climate-resilient and gender responsive sustainable livelihoods is an effective strategy for synergistically addressing socio-economic challenges and climate change impacts in vulnerable communities such as women and IPLCs, particularly where existing livelihoods are reliant on natural resources. The uptake of income-generating activities that reduce pressure on ecosystems and promote biodiversity conservation — such as eco-tourism, agroforestry, recycling and biofuel production — will provide sustainable economic opportunities for communities and womens groups already involved, while enhancing ecosystem services and reducing vulnerability to extreme climate events in the long-term. As a caveat, although adopting sustainable livelihood activities will encourage a shift towards less extractive industries, thereby reducing pressure on limited natural resources, if used alone, this approach may not be enough to reverse existing ecosystem degradation in a timely manner. By introducing activities like eco-tourism, agroforestry, recycling, and biofuel production, this strategy empowers women by providing them with additional income sources. Such diversification fosters social inclusion by engaging all community members, including other marginalised groups, in sustainable practices that enhance their resilience to climate impacts and promote a more equitable distribution of resources.

Grey infrastructure approach: A grey infrastructure approach involves constructing physical, engineered structures like sea walls, dams, and drainage systems to address climate adaptation challenges. This method provides immediate benefits by directly managing water flow, preventing flooding, and controlling erosion. However, one limitation is its high cost, both financially and environmentally. Grey infrastructure often requires significant investment for construction and maintenance and may disrupt natural ecosystems and biodiversity, leading to long-term sustainability challenges.

The sustainability of the preferred adaptation solution — which will integrate sustainable livelihoods and land management, EbA and the establishment of grey infrastructure — will be supported by interventions that: i) strengthen the enabling environment for climate change adaptation and urban resilience; ii) support continued investment in successful adaptation measures beyond the project lifespan; and iii) enhance knowledge management and information dissemination related to urban resilience and climate change adaptation.

Justification for preferred solution

The proposed project strategy is designed to address the multifaceted climate and socio-economic challenges faced by urban and peri-urban communities in the Greater Banjul Area. To enhance the justification for these interventions, a deeper analysis of their financial sustainability, cost-effectiveness and institutional alignment is provided below.

Financial and institutional sustainability

- Ecosystem-based Adaptation (EbA): EbA interventions such as wetland restoration, afforestation and urban greening are cost-effective in the long term, as they leverage natural processes that require less maintenance than engineered solutions. Financial sustainability is further supported by engaging local communities in the management and monitoring of these interventions, reducing reliance on extensive government funding. Institutionally, these interventions align with The Gambia's national priorities on climate resilience and biodiversity conservation, ensuring ongoing support from various governmental bodies.
- Sustainable livelihood activities: Initiatives like agroforestry, ecotourism, and aquaculture are designed to create economic opportunities that are directly linked to the preservation of natural resources, thus promoting a sustainable funding model through income from these activities. By providing technical support and inputs for these practices, the project aligns with existing agricultural and tourism development policies, enhancing institutional support and integration.
- Financial mechanisms for upscaling: Long-term financial sustainability can be achieved through innovative financing mechanisms such as green bonds or climate resilience funds, which the project aims to explore and develop. Institutional frameworks will be strengthened to support the maintenance and operation of these structures, ensuring their integration into broader urban planning and climate adaptation strategies.

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Cost-effectiveness:

The integrated approach proposed by the project ensures that project costs are balanced over short-term needs and long-term benefits. EbA solutions and sustainable livelihoods provide continuous socio-economic and environmental returns, reducing future expenditures on disaster response and recovery.

Validation of assumptions through community engagement

To ensure that the proposed solutions are relevant and impactful, the project will engage beneficiary populations during all stages of project development, categorised by urban location and gender. This engagement will involve participatory assessments to understand the specific vulnerabilities and needs related to their livelihood activities. Workshops and focus groups will be employed to validate the project assumptions about the viability and desirability of the proposed sustainable livelihood activities. By understanding the specific contexts and preferences of these communities, the project can tailor interventions that effectively reduce vulnerability to climate impacts while promoting economic empowerment.

Relevance and impact

The relevance of each intervention is ensured through a design that is responsive to the articulated needs and priorities of the target communities, as identified through initial assessments and ongoing engagement. The potential project impact is maximised by integrating these interventions within a framework that not only addresses immediate climate risks but also promotes long-term social and economic resilience.

Barriers to the preferred solution

Several barriers currently inhibit the effective implementation of climate resilience initiatives in The Gambia. The proposed project design will address each of these barriers, to enhance the long-term success of the proposed project and subsequent projects in the country. The main barriers to urban resilience in the GBA are identified and described below.

<u>Barrier 1:</u> Limited urban planning resulting from conflicting policy mandates and limited cross-sectoral coordination

59 Despite The Gambia's robust framework for climate change adaptation (CCA) and sustainable development, there is a considerable gap in implementation at the sub-national level. This disconnect stems from coordination challenges. For example, existing urban planning and CCA institutional frameworks are hindered by the disjointed and competitive nature of cross-departmental arrangements, often driven by departmental conflicts of interest over access to physical and financial resources. This is exacerbated by the non-compliance and insufficient enforcement of National Environment Agency (NEA) guidelines and regulations. In addition, the Agriculture and Natural Resource Working Group (ANRWG) — the primary entity responsible for cross-sectoral coordination — does not meet regularly and requires a revised mandate for learning and knowledge sharing on CCA and ecosystem-based adaptation (EbA) challenges. In these ways, conflicting policy mandates in climate-resilient urban planning diminish the adaptive capacity of urban systems and communities —including marginalised groups such as women and IPLCs —, impairing their ability to withstand climate impacts. Addressing these challenges requires a comprehensive approach that includes revising and applying urban planning guidelines. In addition, there is a need for local capacitybuilding, the development of district-level urban resilience plans that are gender-responsive and enhanced coordination within and between communities.

<u>Barrier 2:</u> Limited financial resources to implement EbA interventions and establish climate-resilient infrastructure

In The Gambia, a critical barrier to developing climate-resilient urban infrastructure is the scarcity of financial resources, with vulnerable communities in the GBA having limited access to financial resources, market support, and specialised knowledge in CCA and EbA. Additionally, a significant barrier to implementing innovative financing mechanisms for climate resilience in The Gambia is the underdeveloped

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regulatory framework. Current legislation does not fully support the flexibility required by innovative financing models such as green bonds or climate resilience funds. Strengthening these frameworks will involve not only revising existing laws but also ensuring that these new regulations are harmonised across sectors to facilitate easier access to capital for climate resilience projects.

This hinders the implementation, upscaling of adaptation projects and the growth of local enterprises that could bolster climate-resilient economic development. The limitation severely restricts the country's capacity to maintain existing infrastructure against the escalating threats of climate change or invest in new, more resilient solutions. As a result, vital adaptation projects cannot be initiated or upscaled, and the potential for local enterprises to contribute to a climate-resilient economy is considerably undermined. Addressing this barrier requires increased investment in adaptation initiatives and enhanced market support particularly for women-led organisations. Moreover, strengthening international and local partnerships will provide essential financial and technical support to community-based livelihoods, building local capacity for sustainable adaptation efforts.

Barrier 3: Limited public awareness and access to specialised knowledge related to climate change adaptation There is a considerable gap in the public awareness and dissemination of information related to CCA and EbA strategies among the general population and relevant stakeholders of The Gambia . . The situation is worsened for vulnerable groups such as women and Indigenous Peoples and local communities (IPLCs) who's access to information sharing technologies and literacy rates are limited. This limited awareness and access to specialised knowledge hinders the capacity of communities, policymakers, and practitioners to make informed decisions and implement effective adaptation measures. It also limits the capacity for local innovation and the development of context-specific solutions that address the unique challenges faced by The Gambia. Overcoming this barrier will necessitate introducing education and outreach programs, developing accessible information platforms, and strengthening the capacity of local institutions to generate and disseminate specialised knowledge on CCA. The design of education and outreach programs will consider gender inequities in access to technology.

Enablers for the preferred solution

- To effectively implement the preferred solution of integrating ecosystem-based adaptation (EbA), sustainable livelihood activities, and grey infrastructure to enhance climate resilience in urban and peri-urban areas of The Gambia, several important enablers are essential, as described below.
- <u>Strengthened institutional frameworks and policy alignment:</u> A robust enabling environment is critical. This includes aligning policies across urban planning, environmental protection, and climate adaptation to support the project's integrated approach. Institutional strengthening will facilitate better coordination across government departments and agencies, ensuring that policies are effectively implemented and sustained.
- <u>Community engagement and empowerment:</u> Active participation of local communities, especially women and Indigenous Peoples and Local Communities (IPLCs), is vital. By involving communities in the planning and execution phases, the project ensures that interventions are culturally appropriate and directly address the needs of those most affected by climate impacts. Community ownership will also promote the sustainability of the project outcomes.
- <u>Capacity building</u>: Developing local capacities in technical, financial, and managerial aspects of climate resilience is crucial. Training and capacity-building initiatives will empower local stakeholders, including government personnel, community leaders, and civil society organisations, to manage and scale up climate adaptation efforts effectively.
- <u>Innovative financing mechanisms:</u> Access to sustainable and innovative financing is necessary to support the extensive needs of climate adaptation projects. This might include establishing local climate funds, leveraging international climate finance, and promoting public-private partnerships to fund both immediate and long-term adaptation strategies.
- <u>Infrastructure development and maintenance</u>: The construction of grey infrastructure should be complemented with ongoing maintenance and integration with natural systems to prevent ecological

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disruption. Investments should prioritise resilience and sustainability to handle future climate scenarios while supporting biodiversity.

- <u>Integrated data and knowledge management</u>: Developing a comprehensive knowledge management system that captures lessons learned and disseminates best practices is essential for replicating success and adapting strategies over time. This system should also support decision-making by providing timely and accurate data on climate impacts and adaptation efficacy.
- <u>Legal and regulatory support:</u> Adapting and enforcing regulations that support climate resilience activities, protect natural resources, and promote sustainable land use and building practices will solidify the gains from the project. Regulatory frameworks should facilitate rather than hinder adaptive responses to climate variability.
- These enablers, if effectively leveraged, will ensure that the integrated approach proposed for The Gambia not only addresses immediate climate vulnerabilities but also builds a foundation for sustainable, long-term resilience in the face of ongoing and future climate challenges.

Baseline projects

To enhance project complementarity and minimise duplication of efforts within the target region, the proposed project will ensure alignment with ongoing and planned initiatives relevant to urban resilience, EbA, SLM and climate change adaptation in The Gambia. To this end, several baseline projects have been identified and described in Table 3. In addition, Table 4 presents a summary of lessons learned and best practices drawn from past climate change adaptation and urban resilience projects in The Gambia, to be incorporated into the final project design during PPG phase.

Table 3. Overview of baseline projects and additionality of proposed LDCF project

Baseline project information	Summary of project	Additionality of proposed LDCF project
(budget value, implementation period, Executing Entity, fund)		
West Africa Coastal Areas (WACA) Management	The WACA programme was developed to target populations exposed to the immediate risks of	A scaling up approach will be used between the proposed project and the WACA programme. This
Program	coastal erosion and flooding in the Gambia.	will be achieved by targeting the five hotspots
US\$40 million	Activities implemented under WACA combine: i) on-the-ground and capacity-building interventions; ii) physical and social investments; and iii) an	identified in the flood risk assessment. In addition, the project will pilot ecosystem-based adaptation solutions to safeguard communities against rising
2022–2027	ecosystem-based adaptation (EbA) approach. In 2019, a comprehensive flood and coastal risk	sea levels and floods (Outcome 2). This will include several measures, namely: i) restoring and
Ministry of Environment, Climate Change and Natural Resources (MECCNAR)	assessment was completed for the Greater Banjul Area (GBA). This led to the identification of five hotspots and a list of priority risk reduction interventions. The WACA project is currently implementing interventions in the Kotu Stream area.	protecting priority ecosystems and buffer zones (Output 2.1); ii) establishing sustainable urban drainage systems; iii) enhancing rainwater harvesting and water storage systems; and iv) piloting coastal defence infrastructure to
WORLD DAILK	Examples of flood risk reduction measures introduced under the WACA project include:	complement ongoing flood risk reduction and coastal erosion management efforts undertaken by the WACA project (Output 2.4).
	developing accessible green river parks;	
	implementing and upgrading existing drainage systems; and	
	improving secondary drainage systems such as retention ponds, tanks and wetlands.	
	Other interventions for improving living conditions and promoting sustainable development in Kotu	

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	Stream include, <i>inter alia</i> , supporting waste management efforts and building the resilience of the communities through awareness campaigns.	
Large-scale ecosystem- based adaptation in the Gambia River basin: Developing a climate resilient, natural resource- based economy US\$20.5 million (GCF) and US\$4.9 million (co- financing)	The primary objective of this ongoing project is to build the climate resilience of rural Gambia communities and facilitate the development of a sustainable natural resource-based green economy. This will be achieved by implementing large-scale EbA measures within agricultural areas, community-managed forest reserves and wildlife conservation areas. The project has been developed in response to ongoing concerns about droughts and floods reducing agricultural production.	Although the ongoing GCF project focuses on rural communities, the proposed GEF project will utilise similar EbA measures to safeguard urban populations against droughts and floods in the GBA. For example, priority ecosystems and buffer zones will be protected and restored (Output 2.1) and multi-use green urban spaces that incorporate climate-smart urban agricultural systems, retention ponds and recreational areas for ecotourism will be introduced (Output 2.3).
2017–2025		Additionally, the proposed GEF project will leverage market linkages established under the GCF
UNEP		project to support the uptake of sustainable livelihood practices in the GBA and ensure
GCF		producers in the target region have access to buyers for natural resource-based goods and services (Output 2.2). In this way, the proposed GEF project will upscale ongoing efforts to develop the green economy in The Gambia.
Landscape planning and restoration to improve ecosystem services, and livelihoods, expand and effectively manage protected areas US\$5.6 million (GEF) and US\$10 million (co-financing) 2020—ongoing UNEP GEF-LDCF	This ongoing project aims to conserve ecosystem services in productive and protected land- and seascapes across The Gambia through improved land use and marine spatial planning policies and management. Key objectives include addressing land degradation and biodiversity loss, enhancing sustainable land management (SLM) practices and expanding protected areas for biodiversity conservation. Main components of the project involve: i) improving planning and enforcement systems; ii) enabling frameworks for SLM; iii) implementing integrated land use management plans (ILUMPs); and iv) expanding protected area (PA) management. The project emphasises gender mainstreaming, stakeholder engagement and capacity development for sustainable agriculture, forestry and natural resource management.	Both projects focus on enhancing ecosystem resilience and management, with the urban resilience project emphasising urban and peri-urban areas and the landscape project focusing on broader land- and seascapes. Activities introduced under Output 2.1 will focus on restoring or protecting priority ecosystems and natural buffer zones in the GBA — including, inter alia, mangrove forests, wetlands, seagrass meadows, beaches and terrestrial forests — to enhance the provision of ecosystem services that minimise the impacts of flooding, rising sea levels, droughts and heatwaves in hotspot areas. This will ensure that ecosystem conservation across The Gambia is reinforced by urban planning initiatives, leading to a cohesive approach to mitigating climate change impacts and enhancing biodiversity conservation across the GBA.
Enabling the National Adaptation Plan formulation and implementation process and other adaptation planning processes in The Gambia US\$3 million 2023—ongoing UNEP GCF	The main objective of this Readiness proposal is to create and enhance the enabling environment of the Gambia to facilitate the development of a National Adaptation Plan (NAP). In addition, the project will develop several sectoral adaptation strategies. The Readiness proposal has identified several challenges in the built environment and infrastructure sector, one of the target sectors for intervention. Ultimately, fulfilment of the NAP process will be achieved by: i) strengthening adaptation planning governance and institutional coordination; ii) producing an evidence basis to design adaptation solutions for maximum impact: iii) catalysing private sector engagement in adaptation; and iv) establishing mechanisms to increase adaptation finance.	The proposed LDCF project will align with the readiness proposal for developing a National Adaptation Plan (NAP) in The Gambia by directly addressing the key areas of intervention and challenges outlined in the NAP process. Through climate resilience training and sensitisation programmes (Output 1.1), the project will strengthen adaptation planning, governance and institutional coordination, enhancing the capacity of local government officials. The development of a community engagement framework (Output 1.2), policy briefs (Output 1.3) and an Urban Resilience Master Plan (Output 1.4) will contribute to the design of impactful adaptation solutions, particularly in the built environment and infrastructure sector. Outputs such as establishing market linkages (Output 2.2) and developing an innovative financing mechanism (Output 2.5) will catalyse private sector engagement in adaptation efforts. Additionally, the promotion of green spaces and ecotourism (Output 2.2) and the establishment of partnerships for knowledge sharing (Output 3.1) will work towards increasing adaptation finance, supporting the overall fulfilment of the NAP process objectives in The Gambia.

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Kanifing Environmental Transformation Programme

- US\$3.3 million
- 2021–2024
- Peterborough City Council
- European Union

This ongoing project seeks to enhance the environmental well-being of Kanifing municipality residents by: i) planting large scale trees in 19 wards across the municipality to improve urban resilience, enhance air quality and increase biodiversity, thus contributing to improved living conditions for residents; ii) developing community parks and community transfer stations for sustainable waste management constructed; iii) facilitating training programs focused on improving women's knowledge and practices pertaining to biodegradable waste management; and iv) establishing community radio stations to promote sustainable living practices and encourage behavioural change.

The proposed GEF-8 PIF aligns well with the objectives of the Kanifing Environmental Transformation Project. Outputs such as the development of climate resilience training and sensitisation programmes (Output 1.1), the creation of multi-use public green spaces (Output 2.3) and the implementation of plastic waste management systems (Output 2.4) directly support large-scale tree planting, the development of community parks, and sustainable waste management practices, respectively.

Additionally, the focus on enhancing sustainable livelihoods (Output 2.2) and promoting urban green spaces and ecotourism (Output 2.2 and 2.3) will contribute to biodiversity and air quality improvement. Training programs aimed at improving women's knowledge on plastic pollution management will be complemented by community engagement and capacity-building efforts (Outputs 1.2, 3.2) outlined in the proposed GEF-8 PIF. Moreover, the establishment of community radio stations for promoting sustainable living in the Kanifing project mirrors the awareness-raising campaigns (Output 3.2) designed to enhance access to information on environmental best practices.

City-Link Ostend-Banjul Sustainable City Development

- US\$3.2 million
- Banjul City Council (BCC)
- European Union

BCC in collaboration with the City-Link Ostend-Banjul secured funding for the implementation of five components that will contribute to strengthening urban governance in Banjul. These components include: i) facilitating the implementation of good governance in Banjul; ii) enabling the creation of a sustainable development centre in Crab Island; iii) supporting a more effective and environmentally friendly city waste management systems; iv) sustainably greening the city by using local resources; and v) making healthcare and hygiene practices more accessible.

The proposed LDCF project will align with the Sustainable City Development project in several ways. First, the development of a gender responsive Urban Resilience Master Plan (URMP) under Output 1.4 of the proposed GEF project will contribute to facilitating good governance in the GBA. Second, the proposed project will develop policy briefs to enhance cross sectoral coordination and mainstream urban resilience into relevant frameworks (Output 1.3). This will align with the component to implement good governance. Lastly, establishing plastic pollution management systems to reduce waste in waterways (Output 2.4) will align with creating environmentally friendly waste management systems under the Sustainable City Development project.

To ensure intervention efficacy, the proposed project will incorporate lessons learned from ongoing projects to inform the design and implementation of activities related to building local-level institutional capacity, enhancing capacity on applying ecosystem based adaptation approaches, establishing safeguards against climate change impacts and ensuring widescale dissemination of knowledge products from the proposed project. By scaling up and building on successful interventions for improved ecosystem management and sustainable, climate-resilient livelihoods, the project will maximise investment potential to create transformative change.

Table 4. Overview of past projects, best practices and lessons learned to be incorporated into the proposed LDCF project.

Baseline project	Summary of project	Lesson learned and best practices
information		
(budget value,		
implementation period,		
Executing Entity, fund)		

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Strengthening of The Gambia's climate change early warning systems

- US\$930,000 (GEF) and US\$1.5 million (co-financing)
- 2011-2015
- **UNEP-UNDP**
- **GEF-LDCF**

The early warning systems (EWS) project in Gambia responded directly to the priorities and actions identified in the NAPA of Gambia, which articulates the need for securing, transferring and installing critical technologies such as early warning and information sharing mechanisms — and developing systems for climate change-related information to inform decision-making processes.

The points below indicate the main lessons learned from implementing the project's activities:

- The project has promoted partnerships and dialogue at national, sub-national and local levels in the Gambia which has made collaboration and sharing of data and information among stakeholders more effective.
- Learning-by-doing capacity building results in ownership of project results and impact.
- Long-term impacts will more likely accrue if EWS forms part of a wider framework for adaptation planning and socio-economic development.
- Alignment of projects with national and local needs and priorities enhances ownership and strong coordination, and should therefore be promoted in design and implementation of projects.
- Projects should take monitoring and evaluation (M&E) seriously at both project design and implementation.
- Gender dimensions of the project will also be reported and monitored on

Enhancing the resilience of vulnerable coastal communities to climate change in the Republic of Gambia

- US\$8.9 million (GEF) and US\$39.5 million (cofinancing)
- 2014-2020
- **UNDP**
- **GEF-LDCF**

As a result of the insufficient institutional capacity to systematically identify and address climate-driven changes in risk patterns, the Government of Gambia proposed a project to reduce the vulnerability of coastal communities to climate change-induced risks in five districts (Kotu, Tanji, Bintang, Darsilami and Tendaba). The project was based on the components below.

Component 1: policy and institutional development for climate risk management in coastal zones.

Component 2: physical investments in coastal protection against climate change risks.

Component 3: strengthening the livelihood of coastal communities at risk from climate change.

The project utilised a feedback loop between these three components to enable successful community-based adaptation approaches in coastal areas. Additionally, the project was designed to reduce Gambia's vulnerability to rising sea levels and the associated impacts of climate change by improving coastal defences and enhancing the adaptive capacities of coastal communities.

The points below indicate the main lessons learned from implementing the project's activities:

- A formal handover process of the soft engineering schemes and equipment to local communities needs to be established. The communities can only take responsibility once such ownership is handed over.
- The project needs to handover to local government with an official community stakeholder committee developed.
- The government should consider a tourist tax to pay for urban coastal area protection; and a national green tax to contribute to river ecosystem-based adaptation (EbA).
- A 10-year national mangrove restoration plan needs to be produced.

Gambia Protected Areas Network and **Community Livelihood** Project (PAN)

- US\$1.3 million (GEF) and US\$4.6 million (cofinancing) 2014-2020
- **UNDP**

This project sought to strengthen to the national protected areas network by focussing on the management effectiveness of several priority protected areas (PAs). Additionally, the project aimed to improve land and natural resource management in the target priority PAs and the adjacent communities by introducing biodiversity-friendly sustainable land and natural resource management practices.

The main lessons learned from the project are: i) ongoing collaboration with agricultural, rural development and environmental initiatives around the targeted PAs is required to sustain and replicate livelihood benefits to surrounding communities and reduce pressure on natural resources; ii) a systemic improvement approach that aims to build systemic capacity for biodiversity conservation and PA management to become self-sustaining is needed to break the lack of progress achieved from the projects.

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GEF TF

ACP-EU Natural Disaster Risk Reduction Program

- US\$605,768
- 2012–2015
- World Bank
- European Union

This project supported the development of standard operating procedures for disaster risk management, including preparedness, prevention, response, recovery and rehabilitation. The main activities of the project included: i) using geospatial tools, construct a historical database of six major hazards namely, droughts, floods, windstorms, oil spill, coastal erosion and wildfires over the past ten years; ii) compiling an inventory of existing studies, data, and national capabilities, as well as national disaster risk reduction (DRR) practices; and iii) carrying out a comprehensive study to assess capacities of partners at the central, regional, and local levels including public, private and non-government organisations/community-based organisations (NGOs/CBOs) to ascertain their level of preparedness and ability to form a productive partnership with the National Disaster Management Agency (NDMA).

The points below indicate the main lessons learned from implementing the project's activities:

- An integrated approach to disaster risk reduction that considers various hazards, vulnerabilities, and capacities is more effective than addressing each element in isolation. This includes integrating DRR into development planning and policies.
- The dynamic nature of hazards and risks requires a flexible approach to disaster management. Continuous monitoring, evaluation, and updating of plans and strategies are necessary to adapt to changing circumstances and emerging threats.
- The outline of hazard-prone areas and the development of an internet mapping service is essential for the use and collection of data and technology in disaster management.

Integrated Coastal and Marine Biodiversity Management Project (ICAM) PHASE II

- US\$985,104
- 2009–2012
- WWF
- GEF TF

The main objective of this project was to conserve and sustainably manage globally significant biodiversity in coastal, marine and wetland ecosystems in The Gambia. This was achieved through three components: i) strengthening of the National Conservation System and Network; ii) participatory conservation area management; and iii) capacity building and awareness promotion. Phase II of the project focused on sustainable land management and introducing training for modern oyster farming practices. In addition, the project spearheaded the establishment of community oyster groups within the GBA and supported micro-financing enterprises by providing seed funding to women's oyster communities for resilient building.

The points below indicate the main lessons learned from implementing the project's activities:

- Focusing on building the capacity of women oyster collectors was crucial for enabling women to create their own oyster farms annually without support.
- Facilitating partnerships between government conservation bodies and locally/regionally based international conservation NGOs can help lay the foundations for long term working relationships, which help promote ongoing capacity building and bring about long term conservation outcomes.
- Building strong partnerships between the government, local communities and other partners is a key element of protected area conservation.

Sustainable management of small pelagic fish stocks and critical habitats in West Africa

- US\$7.3 million
- 2018–2022
- MAVA foundation

This project focused on conserving small pelagic fish stocks' nursing, spawning and breeding. This was achieved through four strategies, namely: i) improving data collection systems and scientific knowledge of stocks and critical habitats in the West African subregion; ii) strengthening partnerships and ensuring their sustainability; iii) advocating for fisheries' good governance and transparency; and iv) building stakeholder capacity for effective and sustainable management of critical habitats and fish stocks in the Rampao member marine protected areas (MPAs).

The points below indicate the main lessons learned from implementing the project's activities:

- Sustainable use and restoration of habitats should be mainstreamed in the management plans of the most vulnerable mangrove ecosystem in the GBA and Tanbi Wetland National Park.
- Sustainable fishing standards training should focus on artisanal fishery stakeholders and MPA managers.
- Providing appropriate equipment and training in participatory monitoring programmes to key stakeholders like managers and members of management committees contributed to better involvement of local fishermen.
- Mobilising civil society had a positive effect on fisheries governance.

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Including small pelagic fish and their critical
habitats in management plans reinforced
sustainable resource management.

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

B. PROJECT DESCRIPTION

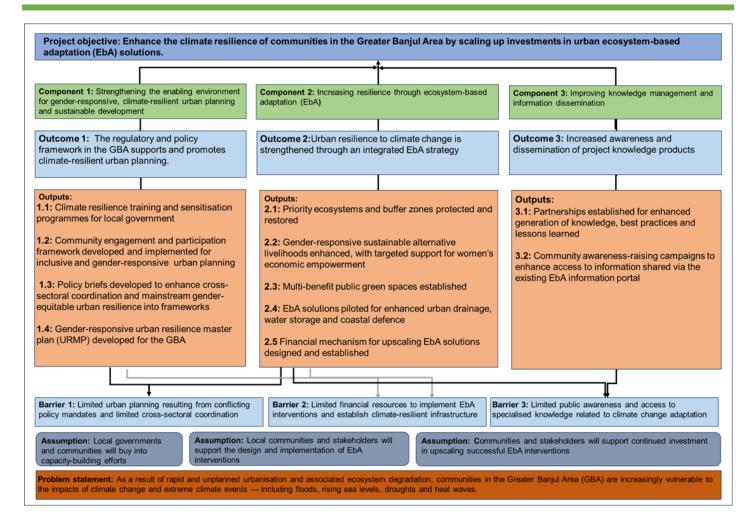
- As a result of rapid and unplanned urbanisation and associated ecosystem degradation, communities in the Greater Banjul Area (GBA) are increasingly vulnerable to the impacts of climate change and extreme climate events including floods, rising sea levels, droughts and heat waves. The proposed project will use an integrated approach to enhance urban resilience against floods, droughts and rising sea levels in the GBA by: i) strengthening the enabling environment for climate-resilient urban planning and sustainable development; ii) facilitating the uptake of Ecosystem based Adaptation solutions; iii)) improving knowledge management and information dissemination related to urban resilience and climate change adaptation. The overall objective of the proposed project is to enhance the climate resilience of communities in the Greater Banjul Area by scaling up investments in urban ecosystem-based adaptation (EbA) solutions. Figure 16 below outlines the theory of change for the proposed project.
- The interconnected project design is intended to maximise the project's efficiency and effectiveness, resulting from the mutual reinforcement of the outcomes. The outputs related to institutional strengthening from and capacity building in Outcome 1, for example, will establish a platform to implement related activities under Outcome 2 effectively. The implementation of activities and solutions in Outcome 2 will be underpinned by the resilience plan developed in Output 1.4. Similarly, the financing mechanism developed under output 2.5 will be guided by the policy briefs and urban resilience master plan developed in Outcome, and lessons learned from the EbA solutions and livelihood activities piloted in Outcome 2. The finance mechanism will serve to generate domestic resources for adaptation.

Outcome 3 will generate knowledge and lessons learned from the implementation of EbA in Outcome 3, as well as link to capacity building efforts under Outcome 1 through community awareness campaigns. Simultaneously, an M&E system will be developed to track and monitor the outcomes, targets and indicators of the project and to support the internalisation of lessons learned to promote improvements in future urban resilience projects.

Figure 16. Theory of change for the proposed project

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Assumptions

The project is based on several assumptions, that if not met can impact the effectiveness of the project interventions. First, it is assumed that local governments and communities will buy into capacity building efforts. Project activities under Outcome 1 (output 1.1 and 1,2) related to sensitization, engagement and participation will serve to ensure buy in from local government and communities.

The second assumption relates to local communities and stakeholders not supporting the design and implementation of EbA interventions. Extensive stakeholder engagement and validation will be convened wherever possible, to ensure that all outcomes are representative of the needs and priorities of, inter alia, public sector stakeholders and local communities.

Lastly, the third assumption is that communities, stakeholders and local government will support continued investment in upscaling successful EbA activities. A finance mechanism will be developed under output 2.5 to provide incentives for investment in EbA Activities. In addition, knowledge and lessons learned gathered through Outcome 3 will help to provide enough positive examples of scale up initiatives.

A detailed overview of the strategic approaches incorporated within the project design to systematically address the barriers identified in Section A is provided in Table 4 below.

Table 4. Strategies for overcoming barriers to upscale climate-resilient urban development in the Greater Banjul Area in The Gambia.

Barrier	Barrier removal strategy

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Barrier 1: Limited urban planning resulting from conflicting policy mandates and limited cross-sectoral coordination	Enhancing the effectiveness and responsiveness of urban planning by creating mechanisms public participation in decision-making processes (Output 1.2). Developing training materials and policy briefs for enhancing cross-sectoral coordination for urban resilience and climate change adaptation in the GBA, based on a policy review and gap analysis conducted under the WACA initiative (Outputs 1.1 and 1.3). Developing and implementing a gender responsive urban resilience master plan (URMP) that incorporates specialist knowledge, insights from past and ongoing initiatives and inputs from local community members and local government officials (Output 1.4; Outputs 2.1–2.4).
Barrier 2: Limited financial resources to implement EbA interventions and establish climateresilient infrastructure	Developing and implementing a budgeted gender responsive urban resilience master plan, which provides recommendations for the allocation of financial and human resources towards different investment options in hotspot areas (Output 1.4; Outputs 2.1–2.5).
	Providing opportunities for the uptake of sustainable, natural resource-based income-generating opportunities that incentivise SLM and ecosystem protection, while enhancing livelihood security for local communities (Output 2.2).
	Establishing gender responsive market linkages between producers and buyers (Output 2.2), to facilitate access to markets for sustainable products, potentially increasing income for local communities and woman led organisations and funding for EbA projects.
	Designing innovative financing mechanisms (Output 2.5) that looks into creating new funding opportunities, making it easier to finance and upscale EbA interventions and climate-resilient infrastructure.
Barrier 3: Limited public awareness and access to specialised knowledge related to climate change adaptation	Conducting gender responsive campaigns that educate the public on the environmental and health impacts of traditional fuel sources and the benefits of switching to biofuels and charcoal alternatives (Output 2.2). The awareness raising campaign will target women's groups as well as IPLCs.
	Training and capacity-building activities associated with restoring ecosystems and developing sustainable alternative livelihoods serve as platforms for knowledge exchange, raising awareness about climate change impacts and adaptation strategies (Outputs 2.1 and 2.2).
	Establishing market linkages (Output 2.2) to facilitate the exchange of knowledge about gender responsive sustainable practices and climate-resilient livelihoods among different stakeholders – including womens groups and IPLC's
	Enhancing collaborative partnerships for the generation of knowledge, best practices and lessons learned (Outputs 4.1) and directly engaging with the target community through awareness campaigns that increase public understanding of climate change adaptation by disseminating user-friendly information through various mediums, such as the EbA information portal (output 4.2).

Component 1: Strengthening the enabling environment for climate-resilient urban planning and sustainable development

Baseline

- In the GBA, urban planning and development processes are being increasingly challenged by climate change impacts such as sea-level rise, coastal erosion and urban flooding. Although a number of national-level policies and frameworks exist for integrating climate change into development including, inter alia: i) The Gambia 2050 Climate Vision; ii) the Third National Communication of the Gambia under the UNFCCC; and iii) The Gambia's Long-term Climate-neutral Development Strategy a master land-use plan has not yet been developed for the Gambia and there is there is a paucity of municipal and local-level development plans that integrate climate change adaptation and climate-resilient urban planning. Consequently, conflicting policy mandates have resulted in inter-departmental conflicts over natural resource use at the municipal level, inhibiting land-use planning, sustainable development and the protection of important ecosystems within the GBA. In this context, existing local governance structures, policy frameworks and planning mechanisms require further development to effectively address observed and projected climate change impacts and enhance urban resilience under future scenarios.
- To date, the WACA investment has initiated efforts to address these challenges by: i) conducting a comprehensive coastal erosion and flood risk assessment, which identifies hotspot areas for climate change adaptation in the GBA and provides investment options for climate change adaptation in these regions; ii) conducting a policy review to identify gaps and inconsistencies in the regulatory framework; and iii)

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developing training programmes for local government officials and stakeholders in the Kotu Stream area, to enhance their understanding of coastal management challenges and resilient infrastructure planning. While these efforts provide a strong foundation for climate change adaptation in the GBA, there is a need to upscale ongoing WACA interventions into hotspot areas outside of Kotu Stream, and additional training and sensitisation programmes are needed to strengthen cross-sectoral coordination and capacity to implement climate change adaptation plans at all administrative levels.

Project approach

Component 1 of the proposed GEF project will focus on enhancing policy frameworks to address climate change adaptation and resilience in the GBA. Under this component, regulatory mechanisms for climate change adaptation, urban resilience and sustainable development will be strengthened — ensuring alignment between local initiatives and broader national and district strategies — to address challenges related to conflicting policy mandates and limited cross-sectoral coordination (Barrier 1). Additionally, the WACA flood and coastal erosion risk assessment will be used to inform the design of a gender responsive urban resilience master plan (URMP) that has mainstreamed the human rights approach. The URMP will identify and respond to critical climate risk areas and adaptation needs in the GBA, particularly in the four hotspot areas outside of Kotu Stream. The development of an URMP and policy briefs addressing gaps identified under the WACA investment will facilitate strategic resource allocation based on a comprehensive strategy that integrates community insights and scientific evidence, thereby ensuring an informed approach to climate resilience. Consequently, Component 1 will address barriers associated with the limited availability of financial resources for EbA and climate-resilient development (Barrier 2).

Outcome 1: The regulatory and policy framework in the GBA supports and promotes climate-resilient urban planning

- 73 Project interventions under Outcome 1 will focus on reinforcing existing institutional frameworks and integrating climate change adaptation into departmental policies, to strengthen the enabling environment for climate-resilient urban planning in the GBA. Although The Gambia has comprehensive frameworks for climate change adaptation and sustainable development at broader scales, insufficient cross-sectoral coordination and conflicting departmental mandates have resulted in limited urban planning and implementation gaps at the municipal level, exacerbating existing vulnerability to climate change in the GBA. The proposed project will address these challenges by: i) strengthening existing coordination structures (Output 1.1); ii) developing frameworks for community engagement and participation in inclusive urban planning (Output 1.2); iii) drafting policy briefs for enhanced cross-sectoral coordination and climate-resilient development (Output 1.3); and iv) incorporating both specialist and local knowledge into an Urban Resilience Master Plan (URMP) for the GBA, (Output 1.4). These outputs will be delivered in a gender-responsive manner, promoting equal participation by men and women. Additionally, engaging local community members and gender experts under Output 1.2 will ensure that interventions introduced under Outcome 1 support country ownership by leveraging locally endorsed committees and incorporating local knowledge into master urban resilience plans.
- Output 1.1 will deliver a series of training and sensitisation programmes to local government officials and urban planners within the GBA, including representatives of Banjul City Municipal Council, Kanifing Municipal Council and Brikama Area Council, as well as Seyfos and Alkalos for districts, wards and villages within the GBA. Members of the existing Agriculture and Natural Resources Working Group (ANRWG) a cross-sectoral working group chaired by the Permanent Secretaries of the Ministries of Agriculture, Fisheries and Water Resources and Ministry of the Environment, Climate Change and Natural Resources will also be invited to attend training and sensitisation events, to enhance coordination across local and national administrative levels. Training materials and workshops developed under Output 1.1 will focus on, inter alia: i) reinstating quarterly meeting periods for cross-sectoral working groups; ii) introducing systems for more effective reporting and accountability; iii) providing a forum for coordinated urban planning and

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natural resource management; iv) mainstreaming gender sensitivity into policies, plans and strategies; and v) enhancing knowledge management and dissemination.

- Output 1.2 of the proposed GEF project will develop a framework for enhancing community engagement and participation in decision-making for urban resilience and sustainability projects. This framework will be developed in collaboration with Seyfos and Alkalos and will outline methods for effective communication with project beneficiaries particularly women and marginalised groups. By establishing forums for gathering community input on a regular basis, the proposed project will enhance the relevance, effectiveness and sustainability of adaptation interventions in the GBA, leading to more resilient urban communities.
- Using insights obtained from regular ANRWG coordination meetings, municipal council meetings, community engagements and the existing policy review conducted under the WACA project, policy briefs will be developed under Output 1.3 of the proposed project, to encourage the integration of urban resilience into existing institutional frameworks, promoting local-level management and prioritisation of urban resilience across competing departments. These policy briefs will enhance the capacities of municipal- and ward-level decision makers to engage effectively with community-based organisations and community leaders, thereby addressing the disjointed nature of cross-departmental arrangements and conflicts of interest (Barrier 1).
- Under Output 1.4 of the proposed project, the WACA flood and coastal erosion risk assessment and investment options report will be used to inform the design of a gender responsive Urban Resilience Master Plan for the GBA (Output 1.4). The design of the URMP will be further supported by a vulnerability assessment focused on determining hotspot areas for exposure to drought and heatwaves, to supplement efforts undertaken by the WACA project. This assessment will be conducted in a participatory and gender-sensitive manner, considering the differential impacts experienced by men and women within the target region. The assessment will also make use of gender-disaggregated data as well as surveys and focus group discussions (FGDs) targeted at men and women.
- The framework for community engagement and participation (Output 1.2) will be adhered to during all stages of URMP development, ensuring active community participation and securing local buy-in for long-term sustainability. The URMP will be the capstone of Outcome 1, synthesising insights from ongoing and planned vulnerability assessment and policy integration efforts. This plan will lay out a strategic pathway for urban resilience in the GBA including ward-level recommendations for the allocation of resources to different hotspot areas and specific targets for gender equity. Accordingly, the development of an URMP for the GBA will address challenges related to fragmented urban planning (Barrier 1) and the limited availability of financial resources for EbA and climate-resilient urban infrastructure (Barrier 2).

Component 2: Increasing resilience through ecosystem-based adaptation (EbA)

Baseline

- As described in Section A above, existing environmental challenges faced by communities the GBA include the degradation of natural ecosystems resulting from unsustainable land management practices and the vulnerability of infrastructure to climate change impacts such as flooding and sea-level rise. These challenges highlight the urgent need for integrated approaches that combine sustainable land management (SLM), and ecosystem-based adaptation (EbA) to increase urban resilience.
- The WACA initiative is currently implementing a strategy to reduce climate change impacts in the GBA using mangrove reforestation and the rehabilitation of wetlands to enhance natural buffers against climate variability, particularly in the Kotu Stream area. Additionally detailed vulnerability assessments have been conducted under the WACA Programme, to identify critical of areas and infrastructure at risk. These

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efforts have been undertaken to inform the development of targeted solutions — such as sea walls, groynes, revetments and green belts — to reduce exposure and increase resilience against environmental hazards while integrating natural and engineered solutions. In parallel, WACA emphasises capacity-building and the development of climate-resilient infrastructure to ensure sustainable interventions. Training programs are offered to local stakeholders on sustainable land management (SLM) and ecosystem-based adaptation (EbA) practices, aimed at improving land-use planning and ecosystem management. These actions collectively work towards safeguarding urban areas from climate-related threats while promoting ecological balance; however, as a result of limited financial and human resources, the intervention area for the WACA project is limited to the Kotu Stream region. The proposed GEF project will upscale successful WACA interventions into other hotspot areas across the GBA, in line with the URMP developed under Output 1.4.

Project approach

Component 2 of the proposed project will focus on bolstering the climate resilience of urban and periurban communities in the GBA by facilitating the uptake of ecosystem-based adaptation (EbA) strategies to reduce the impacts of extreme climate events in high-risk areas outside of the WACA intervention area. Interventions introduced under Component 2 will leverage both natural systems and innovative infrastructure solutions to address existing gaps in ecosystem protection, infrastructure development and services provision resulting from limited urban planning (Barrier 1). Additionally, the promotion of sustainable livelihood options and the use of cost-effective EbA solutions — as opposed to more costly grey infrastructure solutions — will address challenges associated with limited financial resources for investment in climate-resilient urban development at both local and municipal scales (Barrier 2). In these ways, Component 2 will contribute significantly to the overall resilience and sustainability of urban and peri-urban areas in the GBA.

Outcome 2: Urban resilience to climate change is strengthened through an integrated EbA strategy

- Under Outcome 2, the proposed GEF project will enhance communities' resilience to extreme climate events by: i) protecting and restoring priority ecosystems and buffer zones; ii) facilitating the uptake of sustainable livelihood practices that incentivise ecosystem protection; iii) establishing multi-use green spaces within urban areas—to serve as buffer zones during flood events, dissipate heat during heatwaves and provide socio-economic incentives for maintaining green corridors; v) piloting ecosystem based adaptation solutions for enhanced urban drainage, water storage and coastal defence; and vi) developing/scoping of a financial mechanism for upscaling EbA solutions. This integrated approach to sustainable land management and sustainable development will strengthen the ecological foundation of urban areas and enhance ecosystem services provision—particularly related to flood attenuation, coastal protection, water infiltration and reduced surface runoff—thereby reducing community vulnerability to climate change impacts and supporting the well-being of urban communities under future climate conditions. This outcome will be delivered via five outputs, described in more detail below.
- Activities introduced under Output 2.1 will focus on restoring or protecting priority ecosystems and natural buffer zones in the GBA including, inter alia, mangrove forests, wetlands, seagrass meadows, beaches and terrestrial forests to enhance the provision of ecosystem services that minimise the impacts of flooding, rising sea levels, droughts and heatwaves in hotspot areas. To maximise the success of ecosystem restoration efforts in the GBA and ensure alignment with other EbA initiatives, the proposed project coordinate with the ongoing GEF project titled 'Landscape planning and restoration to improve ecosystem services, and livelihoods, expand and effectively manage protected areas' to upscale successful restoration interventions in hotspot areas identified by the WACA vulnerability assessment. The exact locations and extent of ecosystems to be restored or protected will be determined via assessments conducted during the full project preparation phase (PPG phase) and the target sites and protocols for ecosystem restoration will be outlined in the URMP (Output 1.4).

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- To further incentivise the protection of priority ecosystems and limit ecosystem degradation, activities under Output 2.2 will provide technical support and inputs to local communities and stakeholders to facilitate the adoption of sustainable livelihood activities that are environmentally friendly and reduce pressure on natural resources, for example:
- Agroforestry
- Horticulture
- Indigenous bivalve and crustacean aquaculture
- kelp farming
- Apiculture (bee keeping)
- Ecotourism
- Biofuel production
- Notably, the promotion of biofuel production as a sustainable livelihood activity under Output 2.2 will be supported by awareness-raising activities that incentivise a transition to cleaner energy sources across all economic sectors, since large-scale deforestation for charcoal production contributes to altered water and sedimentation flows in the Gambia River basin, exacerbating the impacts of floods, rising sea levels and droughts in the GBA. Awareness-raising campaigns and capacity-building activities will specifically target women's groups and IPLCs. The mode for dissemination of awareness raising materials will be assessed during the PPG phase of the project and incorporated into a comprehensive communication plan, implemented under Outcome 3.
- By providing targeted support through women's groups already involved in aquaculture and apiculture activities, Output 2.2 will enhance women's access to resources, skills, and opportunities, enabling them to engage in economically beneficial activities. This approach will not only diversify income sources but also strengthen women's roles in their communities, increasing their financial independence and decision-making power. Such empowerment is crucial for promoting gender equality and improving the overall economic health of local communities in the GBA.
- Additionally, to ensure sustainable livelihood activities introduced under Output 2.2 are commercially viable in the long term, the proposed project will implement measures to enhance market linkages and establish long-term partnerships between local producers and consumers, thereby strengthening value chains for goods and services derived from sustainable livelihood practices. To this end, the project will build on the transactional networks and public-private partnerships (PPPs) already set up by the ongoing GCF EbA project, ensuring efforts are not duplicated but rather synergised to maximise impact and promote environmentally sustainable and economically viable value chains in areas like organic agriculture, sustainable fisheries, plastic pollution management and the crafting of goods from sustainable materials.
- Activities implemented under Output 2.2 will include targeted capacity building and training for local entrepreneurs and community members, with a focus on essential skills such as business management, sustainable production techniques, and market access strategies. Moreover, efforts to expand market access will leverage modern digital platforms, trade fairs and direct linkage programmes to create channels for sustainably-produced goods to reach broader markets, both locally and internationally. Moreover, the utilisation of multi-use urban green spaces established under Output 2.3 will offer physical venues for community markets, where project beneficiaries can offload goods produced via livelihood activities enhanced under the proposed project.

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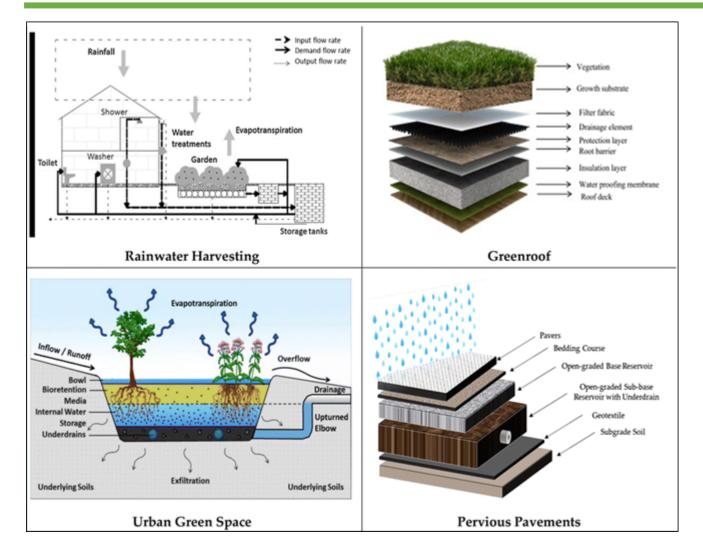


- 89 Sustainable livelihoods, land management and urban resilience will be further supported by the establishment of multi-use urban green spaces under Output 2.3. These public green spaces will be established on unoccupied state-owned land, to prevent urban expansion into untransformed areas and better regulate land-use in urban and peri-urban settings. Although public green spaces established under the proposed project will double as recreational areas for target communities, the primary objective of their establishment will be to provide adaptation benefits related to flood attenuation, water retention and heat dissipation. To this end, multi-use public green spaces introduced under the proposed project will: i) incorporate indigenous vegetation and retention ponds, to enhance soil stabilisation, increase water infiltration and reduce urban runoff during floods and extreme precipitation events; ii) contribute to urban greening for heat dissipation, to reduce the UHI effect; iii) serve as green corridors for protecting biodiversity; iv) provide dedicated areas for small-scale urban agriculture and market gardening, to enhance food security and reduce pressure on natural ecosystems; v) serve as premises for community markets, where goods from sustainable alternative livelihoods can be offloaded; and vi) provide recreational spaces for urban and peri-urban communities, thereby providing opportunities for ecotourism and public green investment within highly urbanised areas.
- Activities implemented under Output 2.4 will support urban resilience via piloting of ecosystem-based adaptation solutions for enhanced urban drainage during flood events, improved water harvesting and storage during droughts and increased coastal defence against SLR and coastal erosion. Under this output, sustainable urban drainage systems (SuDS) will be installed to manage stormwater more effectively, reduce flooding risks and enhance water quality in the GBA. SuDS use EbA principles to mimic natural processes related to absorbing, detaining and slowly releasing surface water, thereby reducing stress on conventional urban drainage systems. Some examples of SuDS are shown in Figure 17 and include, inter alia:
 - - rainwater harvesting systems;
 - - detention basins;
 - - permeable or pervious pavements;
 - - green roofs;
 - - wetlands;
 - - bioretention strips; and
- retention ponds.
- The exact target sites for SuDS, and the types of SuDS to be installed, will be determined at PPG phase and refined during project implementation, to ensure alignment with the URMP (Output 1.4) and ongoing initiatives, such as the WACA project.

Figure 17. Examples of SuDS

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- To maximise the effectiveness of climate-resilient water infrastructure in the GBA, Output 2.4 will include awareness-raising and capacity-building activities that support local waste management organisations to strengthen plastic pollution management systems including recycling and composting systems to reduce the pollution of overburdened waterways and drainage systems. Plastic pollution management interventions under this output will aim to limit the amount of solid waste entering and clogging drainage systems, which exacerbates pluvial flooding. Additionally, strengthened plastic waste management systems will contribute to reducing pollution, conserving resources, creating sustainable value chains and reducing pressure on limited natural resources. Examples of activities under this output might include: i) establishing or upscaling community-based recycling initiatives; ii) the collection of plastic for constructing 'ecobricks'; and iii) collecting and using plastic pollution to fill gabions and coastal revetments, for enhanced protection against intense wave action and coastal erosion. The types of plastic pollution management systems implemented under Output 2.4 will be determined during the PPG phase.
- Additionally, under Output 2.4, community resilience to droughts will be enhanced through the establishment of rooftop rainwater harvesting systems and water storage infrastructure including communal tanks and cisterns in public spaces. These systems will improve water security under increasingly dry conditions by enhancing access to freshwater for non-potable uses, such as irrigation and flushing toilets. This will reduce demand on municipal water supplies, particularly in areas prone to droughts. Additionally, rainwater harvesting infrastructure will increase capture and storage of runoff during extreme precipitation events, thereby reducing surface water flow and pressure on overburdened drainage systems in the GBA. In this way, enhanced rainwater harvesting and storage will also increase urban resilience to the

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impacts of flooding under future climate scenarios. The exact locations of rainwater harvesting systems and storage facilities will be detailed in the URMP (Output 1.4).

Finally, coastal defence EbA solutions established under Output 2.4 will combine natural elements such as mangrove restoration — with engineered structures to provide effective and sustainable coastal protection to protect vulnerable communities and infrastructure against coastal storm surges and erosion. Examples of coastal EbA solutions to be assessed during PPG phase are:

- - living seawalls (Figure 18);
- protective treelines
- terracing;
- gabions;
- groynes;
- stone bunds:
- artificial reefs; and
- vegetated revetments.
- The exact sites for and the types of EbA solutions employed will be determined at PPG phase and refined during project implementation, to ensure alignment with the project vulnerability map and URMP (Output 1.4), maximise cost-effectiveness and impact potential, and expand on ongoing initiatives such as the WACA project and Kanifing Environmental Project.

Figure 18. A living sea wall, combining grey infrastructure with nature-based, 'green' technologies



Lastly, output 2.5 will focus on the development of innovative financing mechanisms (IFMs) for upscaling project interventions and investing in climate-resilient infrastructure. This will include incentives that promote investments in women-led climate-resilient infrastructure and businesses. These IFMs include a range of options such as Corporate Social Responsibility (CSR) mechanisms, green bonds, certification schemes, climate insurance and access to climate funds.

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CSR mechanisms can harness private sector investments toward climate-resilient projects, aligning corporate objectives with sustainable development goals. Green bonds provide a mechanism for raising capital for projects with environmental benefits, providing investors with reliable returns on sustainable investments. Certification schemes can enhance market access and premium pricing for products derived from sustainably managed ecosystems (Output 2.2), encouraging practices that contribute to climate resilience. Climate insurance products can mitigate the financial risks associated with climate-related disasters, making it more feasible for communities and businesses to invest in resilience and finally, leveraging national and international climate funds can provide the necessary financial backing for large-scale implementation of climate adaptation and resilience projects.

Table 5 summarises the main elements of Component 2, linking specific climate hazards to their impacts, the underlying causes of vulnerability and the interventions proposed to mitigate these challenges. The proposed interventions are designed to address both the symptoms and root causes of vulnerability to climate hazards, leveraging sustainable land management (SLM) practices and ecosystem-based adaptation (EbA) to enhance urban resilience.

Table 5. Summary of main elements under Component 2 of the proposed GEF project

Climate	Impacts	Underlying causes of	Proposed interventions	Private sector investment
hazard Drought	Reduced water quality and	vulnerability Unsustainable land and	Promoting small-scale	opportunities Amenable
	availability, impacting water security Reduced agricultural production at the national scale, with impacts on food prices and food security in	water management Dependence on groundwater Deforestation and subsequent reductions in	urban agriculture in public green spaces (Output 2.2 and 2.3) Promoting sustainable livelihood practices that incorporate water-saving	Establish public-private partnerships (PPPs) for technology transfer and financing models that
	urban areas Degradation of priority ecosystems	water infiltration Limited water harvesting and storage infrastructure	Installing rooftop rainwater harvesting and enhanced	include microfinancing for smallholders including women and marginalised groups.
			water storage systems (Output 2.4)	Organising community markets in public green spaces to enhance access to buyers of sustainably produced goods and services generated under Output 2.2
				Certification schemes for businesses that meet sustainable water-use criteria.
Heatwaves	Increased heat stress and associated health risks	Urban heat island effect	Establishing multi-use green spaces and restoring	Partly amenable
		Limited public green	ecosystems to reduce UHI effect (Output 2.1 and 2.3)	
	Reduced labour productivity Ecosystem degradation	spaces	Promoting alternative energy sources to reduce deforestation for charcoal (Output 2.2)	Green space development offers CSR opportunities for local businesses. Multi-use recreational areas provide opportunities for ecotourism
Sea level rise and coastal erosion	Land degradation Damage to infrastructure	Limited coastal defence infrastructure	Mangrove reforestation and wetland rehabilitation (Output 2.1)	Highly amenable
	Saline intrusion	Rapid urbanisation into low-lying coastal areas	Adoption of sustainable livelihood practices that	Coastal protection projects can attract investment from

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		Reduction in natural barriers such as mangroves and wetlands	incentivise ecosystem protection (Output 2.2) Coastal defence infrastructure (Output 2.4)	tourism and real estate sectors. Scale-up through innovative financing mechanisms — such as green bonds and climate funds — with government and international backing (Output 2.5).
Flooding	Damage to property and infrastructure Health risks Water contamination Ecosystem degradation	Location within The Gambia River Basin Rapid urbanisation into low-lying, flood-prone terrain Limited drainage systems Deforestation and reduction in natural ecosystems and buffer zones Impermeable urban surfaces	Restoring ecosystems and natural buffer zones and promoting sustainable land use (Output 2.1 and 2.2) Sustainable urban drainage systems (SuDS) installation (Output 2.4) plastic pollution management systems to reduce drainage blockage (Output 2.4)	Infrastructure projects like SuDS have potential for PPPs. Plastic pollution management can attract private investment in recycling and energy recovery. Scale-up with investment in green infrastructure bonds and leveraging climate adaptation funds (Output 2.5).

Component 3: Improving knowledge management and information dissemination

Baseline

In addressing Component 3 of the Greater Banjul Area urban resilience project, it is critical to understand the current landscape of knowledge management and information dissemination related to climate change adaptation in The Gambia. Historically, the target region has faced challenges in accessing and sharing information on climate impacts and adaptation strategies, largely resulting gaps in systematic data collection, analysis and dissemination. This scenario hampers effective adaptation planning and implementation, limiting community and decision-maker capacities to respond aptly to climate vulnerabilities.

The ongoing WACA and GCF EbA initiatives have already introduced several efforts to mitigate these challenges. Among these initiatives are comprehensive data collection and analysis activities focused on coastal erosion, sea-level rise and other climate threats. WACA has also prioritised capacity building through training sessions and workshops for stakeholders at various levels, enhancing understanding and engagement around climate change impacts and ecosystem-based adaptation approaches. Additionally, WACA has fostered information sharing across West African countries via platforms designed to facilitate the exchange of knowledge, experiences and best practices in coastal resilience and climate adaptation. Moreover, an EbA information portal has been established under the GCF EbA project entitled 'Large-scale ecosystem-based adaptation in the Gambia River basin' (2017–2025). The planned LCDF project will leverage these investments to support increased awareness and dissemination of project knowledge products - specifically those related to adaptation in an urban setting.

Project approach

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Component 3 of the proposed initiative is designed to overcome challenges related to limited public awareness and restricted access to specialised knowledge on climate change adaptation (Barrier 3). This component acknowledges the important role that informed and active communities play in the effective implementation of climate resilience strategies. By utilising innovative communication strategies, modern technology and strategic partnerships, Component 3 will promote the collation and dissemination of relevant information, best practices and lessons learned generated under the proposed project via a single outcome (Outcome 3). Enhanced knowledge management under Outcome 3 will foster widespread understanding of the impacts of climate change and the need for adaptation interventions among target community members and stakeholders, thereby encouraging collective action towards a more resilient future.

Outcome 3: Increased awareness and dissemination of project knowledge products

Improved knowledge management under Outcome 3 will be delivered via two separate outputs. Under Output 3.1, the project will establish partnerships with local and international organisations, academic institutions, government entities and Project Steering Committees (PSCs) from past and ongoing climate change projects in The Gambia, to facilitate knowledge-sharing related to the proposed project interventions. The proposed project will ensure that the knowledge products include gender-disaggregated data, where applicable. In addition, the project will utilise knowledge products generated by both men and women, communication, and public education material developers, to ensure diversity of perspectives and approaches is reflected. Collaboration with a broad range of institutions and industry specialists will foster the exchange of knowledge regarding urban resilience, climate change adaptation and EbA technologies, such that cutting-edge research, innovative solutions and practical lessons in climate resilience are communicated and tailored to fit the specific needs of the target population. Partnership with the University of The Gambia will contribute to the country's long-term research objectives. Activities under this output will also explore opportunities that would engage the University of Gambia students, and young local entrepreneurs to develop and demonstrate a suite of urban EbA solutions in the local context - this could take the form of innovation challenges.

In this way, the proposed project will make the process of knowledge generation inclusive and representative of a broad spectrum of experiences and insights. Potential activities implemented to deliver Output 3.1 might include: i) gender responsive stakeholder mapping to identify important partnerships for enhanced knowledge management; ii) hosting joint workshops, conferences and seminars to train stakeholders on how best to use the existing EbA information portal established under the project entitled 'Large-scale ecosystem-based adaptation in the Gambia River basin' (2017–2025); iii) conducting studies and publishing per-reviewed research papers in collaboration with the University of The Gambia, to enhance the country's long-term research on EbA; and iv) arranging internships within local government institutions, to ensure institutional knowledge is transferred to future cohorts. These activities will be captured via the development of a comprehensive communication plan. This plan will include urban ecosystem-based adaptation and locally led innovation mechanisms as thematic options in the learning, partnership and knowledge exchange programme. By implementing these measures, the proposed project will strengthen the existing database of resources for EbA and climate-resilient development in The Gambia, ensuring they are accessible to all stakeholders involved.

Under Output 3.2, targeted community awareness campaigns will be launched to boost engagement with the existing EbA information portal — a central repository of resources and tools designed to support the implementation of EbA strategies in The Gambia and other comparable settings. These public awareness campaigns will employ a variety of communication channels — including social media, radio broadcasts, community workshops and educational materials — to ensure that valuable information reaches a broad audience, including rural communities outside of the project target region and those with limited internet access. Potential activities under Output 3.2 include: i) developing user-friendly, multimedia content tailored to diverse audiences, highlighting the benefits of EbA practices and how individuals and communities in urban and peri-urban areas could adopt them; ii) organising interactive sessions, such as community forums

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and question and answer (Q&A) sessions, to provide hands-on guidance and address common questions or concerns about climate resilience; and iii) launching a mobile application to facilitate easier access to the EbA information portal, offering offline capabilities for users that do not have continued access to internet in remote areas.

Monitoring and evaluation (M&E)

Effective monitoring and evaluation will be integral to ensuring the success and impact of the project. During the PPG phase, a detailed M&E plan will be developed. This plan will include:

- - regular monitoring of the effectiveness of the proposed adaptation solutions using both quantitative and qualitative metrics;
- - assessments to determine the impact of knowledge management activities on urban resilience and climate change adaptation; and
- - evaluation of the reach and engagement levels of communication campaigns and educational programmes.

By implementing these measures, the project will not only enhance the existing database of resources for EbA and climate-resilient development in The Gambia but also ensure these resources are accessible and beneficial to all stakeholders involved, maximizing the impact of adaptation solutions

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

- Project execution will rest with the NEA, as the Executing Entity (EE). The NEA will be responsible for the management and administration of all project activities. Accordingly, tasks undertaken by the NEA during project execution will include, inter alia: annual planning, coordination, implementation, management and reporting. During implementation, the project will be guided by the Project Board (Steering Committee). For the proposed GEF project, the Project Steering Committee (PSC) will be chaired by a senior representative from the NEA and membered by the Minister of Environment, Climate Change and Natural Resources (MECCNR), Mayors from target districts, Alkalos, Seyfos and other relevant local authorities within the GBA. The PSC will be co-chaired by the UNEP Resident Representative.
- Implementing partners will include Kanifing Municipal Council (KMC), Brikama Area Council (BAC), Banjul City Council (BCC), The National Roads Authority and the Gambia Tourism Board. Additional partners will be identified to lead on specific components or activities. Further details of the project execution arrangements will be finalised during the PPG phase. The project development team will establish and strengthen linkages with other agencies and institutions that are implementing or planning to implement relevant projects (further details of the relevant projects have been included under the Baseline Project section). Additionally, during the PPG phase, stakeholders will be consulted to inform comprehensive structures for project implementation and management that ensure a Whole-of-Society Approach.
- UNEP, as the Implementing Agency, will ensure the project is implemented in a timely manner, in accordance with both UNEP and GEF standards. The responsibilities of UNEP will include: i) providing

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technical oversight; ii) approving financial advances; iii) quality assurance; iii) conducting monitoring and evaluation audits; iv) organising spot checks; v) monitoring risks; and vi) producing annual Project Implementation Reports (PIRs).

Please refer to tables 3 and 4 under section A. project rationale for additional information on how the project will cooperate with ongoing initiatives and build on past projects.

Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

META INFORMATION	N – LDCF		
LDCF true	SCCF-B (Window B) on	SCCF-A (Window-A) on climate Change adaptation	
LDCI TIUE	technology transfer		
	false	false	
Is this project LDCF SCCF	challenge program?		
false			
This Project involves at le	east one small island developing S	State(SIDS).	
false	, ,		
	east one fragile and conflict affec	ted state	
false	case one magne and commet arrec	ted state.	
	direct adaptation benefits to the	private coctor	
	unect adaptation benefits to the	private sector.	
false			
This Project is explicitly r	elated to the formulation and/or	implementation of national adaptation plans (NAPs).	
false			
This project will collabora	ate with activities begin supporte	d by other adaptation funds. If yes, please select below	
Green Climate Fund	Adaptation Fund	Pilot Program for Climate Resilience (PPCR)	
true	false	false	
This Project has an urbar	n focus.		
true			
	engage local communities in proj	ect design and implementation	
		eet design and implementation	
This project will support	South-South knowledge exchang		
	South-South knowledge exchang	е	
false		LL 4000(1 M	
	ollowing sector(s)[the total should		
Agriculture		0.00%	
Nature-based manageme		40.00%	
Climate information serv		0.00%	
Water resources manageme		20.00%	
Water resources manage Disaster risk managemen		20.00% 0.00%	
Other infrastructure	IL .	0.00%	
Tourism		20.00%	

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false		false	
Land degradation	Coastal and/or Coral reef	Groundwater quality/quantity	
		true	
true	true	variability	false
Sea level rise	Change in mean temperature	Increased climatic	Natural hazards
This Project targets the	following Climate change Exacerbat	ed/introduced challenges:*	
Total		.00.00%	
, , ,	*	0.00%	
Other (Please specify co	omments)		

CORE INDICATORS - LDCF

	Total	Male	Female	% for Womer
CORE INDICATOR 1				49.00%
Total number of direct beneficiaries	350,000	178,500.00	171,500.00	43.00%
CORE INDICATOR 2				
(a) Area of land managed for climate resilience (ha)	3,000.00			
(b) Coastal and marine area managed for climate resilience (ha)	0.00			
CORE INDICATOR 3				
Number of policies/plans/ frameworks/institutions for to	10.00			
strengthen climate adaptation				
CORE INDICATOR 4				50.00%
Number of people trained or with awareness raised	87,680	43,840.00	43,840.00	
CORE INDICATOR 5				
Number of private sector enterprises engaged in climate change adaptation and resilience action	10.00			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Increasing variability: Unforeseen natural hazards, such as floods, droughts and landslides, could potentially render adaptation measures ineffective, particularly if these hazards occur during construction or implementation. Mitigation strategy: Project investments will be climate-proofed — in terms of their locations, designs and capture capacities — to ensure they can withstand forecasted climate stresses. EbA measures and infrastructure designs will be based on projected temperature and rainfall predictions from the worst-case (RCP 8.5) climate scenario. Detailed hydrological assessments based on peak flows will also be undertaken during the PPG phase. These assessments will be used to size and cost proposed water management interventions, such as storage and diversion infrastructure, to ensure they are adequately climate resilient.

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		To minimise the impact of drought on EbA activities, active ecosystem restoration interventions will be timed to occur during the wet season, such that water availability for plants is maximised. Conversely, grey infrastructure will be built during the dry season to prevent potential damages from flooding or landslide events during construction.
Environmental and Social	Low	Environmental risks: Interventions associated with water mobilisation and storage infrastructure have the potential to lead to unanticipated environmental impacts. Mitigation strategy: A detailed Environmental and Social Screening Procedure (ESMP) or Environmental and Social Management Framework (ESMF) will be undertaken during the PPG phase to: i) identify potential environmental risks; and ii) inform the design of project activities to ensure they mitigate or prevent these impacts. Additionally, a comprehensive environmental and social impact assessment (ESIA) will be undertaken at the beginning of project implementation before any on-the-ground interventions are started. Gender-equitable access: Men and women may not benefit equally from the results of project activities — for example, improved access to water and other natural resources. Conventional gender roles may also limit women's participation in community consultations and decision-making processes during project implementation. Mitigation strategy: During the PPG phase, a Gender Assessment and Action Plan (GAAP) will detail gender-related challenges within the target sites and propose additional measures to ensure project interventions are gender-responsive and inclusive of all minority groups. Further to this, a Gender Specialist will monitor project interventions during implementation to ensure gender is mainstreamed throughout project design and implementation.
Political and Governance	Moderate	Limited resources in local government: Municipal councils may have limited resources and capacity to engage fully with the project Mitigation strategy: The project interventions have been designed to be responsive to district and local government capacity needs and will fill gaps to ensure enough resources are available for project implementation. Regular engagement between municipal councilmembers and the NEA will safeguard against any impacts to the project implementation. Outputs 1.1, which focuses on climate resilience training and sensitisation programs for local government officials, will build local capacity and empower municipal councils to engage more effectively with project activities. Additionally, the development of an Urban Resilience Master Plan (URMP) under Output 1.4 will provide a strategic framework that aligns with local capacities and resource availability. Outputs 4.1 and 4.2, which establish partnerships for knowledge generation and enhance community awareness, respectively, also support the strengthening of local government capacities by facilitating access to best practices, lessons learned, and shared information resources. These combined efforts ensure that local governments are not only better equipped to participate in the project but also benefit from enhanced

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		resource allocation and capacity building facilitated through strategic partnerships and co-financing arrangements.
INNOVATION		
Institutional and Policy	Low	Changes in national priorities: If The Gambia's national priorities shift during the project development process, there may be a misalignment between national goals and project objectives by the time project implementation begins. Mitigation strategy: The project has been designed to fit within The Gambia's well-established, long-term strategies; therefore, changes to short-term policies will not impact project success. Additionally, the design of activities during the PPG stage will be responsive to community and institutional needs, and can, therefore, be adjusted to reflect national priorities at the time. Close collaboration with government institutions (the NEA) will further ensure the project is responsive to national- and regional-level strategies, while also responding to community needs. The development of policy briefs (Output 1.3) to enhance cross-sectoral coordination and the creation of an Urban Resilience Master Plan (URMP) for the GBA (Output 1.4) are key in ensuring the project's objectives remain integrated with national frameworks, regardless of short-term policy changes. The establishment of partnerships for enhanced knowledge generation (Output 4.1) and the implementation of innovative financing mechanisms (Output 3.2) will further ensure the project's adaptability to national and community needs. These outputs, along with ongoing collaboration with government institutions like the National Environment Agency (NEA), equip the project with the necessary flexibility and responsiveness to align with both current and evolving national priorities, mitigating the risk of misalignment and ensuring project success.
Technological		
Financial and Business Model	Moderate	Financial sustainability: Adaptation interventions may not be financially sustained after project termination. Mitigation strategy: The proposed project will incorporate a financial management and procurement strategy — developed during the PPG phase — that leverages insights gained from the recent micro-HACT assessment conducted for the NEA, the executing entity. This strategy will include establishing clear financial management protocols and capacity-building efforts specifically designed to enhance the NEA and other stakeholders' abilities in efficient financial planning, management and procurement processes. Training will be tailored to ensure that project beneficiaries and implementing agencies are well-equipped with the necessary skills for sustainable financial oversight, procurement practices and the strategic reinvestment of profits generated from enhanced livelihood activities and value chain development under Outputs 2.2 and 3.1. These efforts aim to ensure that adaptation interventions remain financially

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		sustainable post-project, leveraging structured financial planning and reinvestment strategies to maintain and scale project gains.
EXECUTION		
Capacity	Moderate	Limited technical capacity: Limited on-the-ground technical expertise for implementing project interventions could result in the ineffective implementation of interventions or project delays. Mitigation strategy: The capacity of relevant implementation partners will be strengthened via on-the-ground training, to ensure project activities are implemented and monitored effectively. Under Output 1.1, specialised climate resilience training and sensitisation programs will be developed for local government officials, incorporating modules on the technical aspects of project interventions. Output 2.2's focus on enhancing sustainable alternative livelihoods will include skill development and technical training for community members in sustainable practices. Additionally, the development of the Urban Resilience Master Plan (URMP) under Output 1.4 will involve training sessions for planners and implementers on integrating resilience into urban planning. For Outputs involving infrastructure, such as Output 2.4, technical training will ensure that local engineers and technical staff are equipped with the necessary skills for construction, maintenance, and monitoring. Each of these activities will be supported by on-the-ground training sessions, technical oversight by UNEP staff and/or advisors, and the involvement of international experts to facilitate knowledge transfer, all scoped and detailed during the PPG phase.
Fiduciary	Moderate	Micro-HACT assessment showing moderate risk overall, During the PPG phase we will continue discussions with the NEA about an execution structure that ensures effective implementation and prudent use of resources. We will develop a fiduciary risk management plan during the PPG phase. In addition, during project implementation, a robust financial management system will be established, including regular audits, transparent procurement processes, and continuous monitoring by a dedicated financial oversight team. Training for all stakeholders involved in financial transactions will ensure adherence to best practices in financial management. After applying these mitigation strategies, the residual risk is expected to be low, reflecting strong controls and oversight measures designed to ensure proper handling and allocation of project funds.
Stakeholder	Moderate	Insufficient community ownership: If a participatory, community-based approach is not employed, the project design may be ineffective as a result of limited community ownership or insufficient understanding on the part of those involved in sustainable livelihood development or land management approaches. Mitigation strategy: Output 1.3 of the proposed project will develop and implement a framework for enhancing community engagement and participation in decision-making processes. All project activities will be implemented in adherence with the

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framework developed under Output 1.3. Additionally, under Output 1.4, an urban resilience master plan (URMP) will be developed in collaboration with local government authorities from municipal councils and area councils within the GBA. At the livelihood level, community cooperatives and other community-based systems supported by the project will be capacitated to maintain introduced equipment, infrastructure and practices. This will be facilitated using existing systems of peer-to-peer learning that have a proven track record of success under other initiatives. During the PPG phase, communities will be engaged with regularly and consultations will be ongoing to ensure specific needs and concerns are addressed. This will encourage continuous community buy-in during and after implementation.

Other

Low

High turnover: High staff turnover in relevant government departments and implementing agencies may result in the loss of institutional knowledge, reduced familiarity with project details and project delays. Mitigation strategy: PMU staff will be recruited competitively. They will be responsible for transferring technical knowledge to new staff within government departments and implementing agencies over time. The proposed mitigation strategy will be directly supported by several project outputs. Output 4.1, focusing on establishing partnerships for enhanced knowledge generation, will play a crucial role in institutionalising technical knowledge through structured partnerships and collaborations. This will be reinforced by Output 4.2, which involves community awareness-raising campaigns and will also extend to government departments and implementing agencies, ensuring widespread understanding and access to project insights. Under Output 1.1, training and sensitisation programmes for local government officials will establish a broad base of knowledge that remains within institutions despite staff changes. Additionally, a project-specific knowledge management system will be developed during the project implementation stage, to archive lessons learned and best practices, ensuring that institutional memory is preserved and accessible even as personnel change. Through these integrated activities, the project aims to mitigate the impact of high staff turnover.

Overall Risk Rating

Moderate

Overall risk rating for the project is moderate

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

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For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

Alignment with GEF LDCF Strategic Priorities

The proposed project is aligned with LDCF programming priorities, including: i) agriculture, food security and health; ii) water; and iii) nature-based solutions, all within an urban context. This project also aligns with GEF's long-term vision to halt nature loss and ensure the world is nature-positive by 2030 and carbon neutral and pollution-free by 2050 and all three LDCF transformation levers. Component 1 contributes to Lever 1: Policy coherence and mainstreaming of climate adaptation by integrating adaptation and climate resilience into national and subnational policies, plans, and budgets. Moreover, the capacity building and training provided in Component 1 will improve adaptation planning in all levels of governance, from national to community, and across several sectors, thereby contributing to Lever 2: Strengthened governance for adaptation. Lastly, Component 3 contributes to Lever 3: Knowledge exchange and collaboration by ensuring that adaptation solution best practices are shared.

The proposed project has been designed to align with the LDCF strategic priorities, incorporating key areas such as: i) scaling up finance; ii) innovation; iii) technology transfer; iv) private sector engagement; and v) a whole-of-society approach.

Scaling up finance for adaptation

The proposed GEF project will look into leveraging sustainable finance to scale up investment in climate change adaptation measures.. This approach is in direct response to the LDCF's priority of increasing the availability of adaptation finance. By establishing innovative financing mechanisms and promoting sustainable investment models under Component 2, the project will ensure a steady flow of resources towards climate-resilient development initiatives in The Gambia. The establishment of market linkages and the development of financial instruments for upscaling investments exemplify the project's commitment to mobilising additional resources from both public and private sectors to support adaptation interventions. By leveraging private sector partnerships to support sustainable livelihood practices, the project will create a transformative impact on the landscape, facilitating a more rapid and extensive change than would be possible without such collaborations. This strategy not only opens avenues for financial innovation and technology transfer but also exemplifies a commitment to a whole-of-society approach, engaging various stakeholders in a unified effort towards environmental sustainability.

Innovation, technology transfer and private sector engagement

Innovation is an important driver of the proposed project, particularly in the areas of sustainable land management and the integration of EbA to increase resilience. The proposed GEF project will introduce and scale innovative livelihood practices, pilot EbA solutions and technologies for adaptation under Component 2, aligning with the LDCF's focus on innovation and technology transfer. Additionally, planned engagement with the private sector, particularly through the development of market linkages and sustainable investment models, exemplify the project's innovative approach to financing climate resilience. Moreover, the project's focus on improving knowledge management and information dissemination (Component 3) leverages technology to enhance access to climate-related data and best practices, facilitating informed decision-making and promoting the replication of successful adaptation strategies. Knowledge-sharing initiatives, alongside the collection and dissemination of best practices, underscore the project's commitment to leveraging technology and information for sustainable land management and climate resilience. These efforts ensure that the project's outcomes are not only sustainable beyond its lifespan but also complementary to future GEF and GCF projects or programmes in The Gambia, thereby aligning with the LDCF's strategic vision of creating a resilient and inclusive green economy.

Whole-of-society approach

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Emphasising the importance of a comprehensive societal engagement, the project design adopts a whole-of-society approach to enhance climate resilience. This will be achieved by strengthening the enabling environment for gender-responsive, climate-resilient urban planning and sustainable development (Component 1), and by increasing community engagement and participation in sustainable land management practices and ecosystem restoration initiatives (Component 2). By enhancing local capacities and ownership, the project sets a foundation for replicating successful interventions and scaling up impact. In these ways, the proposed project will foster a culture of collaboration and co-ownership of climate resilience initiatives among various stakeholders — including government entities, local communities and the private sector. By enhancing institutional capacities and facilitating cross-sectoral coordination, the project supports a coordinated response to climate challenges, ensuring that adaptation efforts are inclusive and effective across different layers of society.

Alignment with national and regional priorities

The proposed GEF project is also well aligned with national and regional priorities and strategies. This alignment is evident across several dimensions, including environmental sustainability, economic development and social well-being, reflecting a comprehensive approach to tackling climate change's challenges within the framework of national development goals and regional commitments to sustainability and resilience.

Alignment with national priorities and strategies

National Development Plan (NDP): The project supports The Gambia's National Development Plan, which prioritises environmental protection, sustainable urban development and climate change adaptation. By focusing on urban resilience in the GBA, the project directly contributes to the NDP's goals of reducing vulnerability to climate-related hazards and ensuring sustainable urban growth that is resilient to climate change impacts.

Nationally Determined Contributions (NDCs): The main objectives of The Gambia's NDC is to reduce greenhouse gas emissions, enhance climate resilience in key sectors such as agriculture and water resources, and promote sustainable land use practices. The proposed project contributes to the NDC's objectives to adopt specific enabling conditions so that The Gambia can transition to a low-emissions, climate-resilient development pathway.

National Adaptation Programme of Action (NAPA): The Gambia's NAPA outlines the country's strategy for addressing the urgent and immediate adaptation needs to climate change. It focuses on identifying and implementing priority adaptation projects and measures to build resilience and reduce vulnerability at the community level. The urban resilience project aligns with these plans, highlighting the importance of adaptive urban planning, infrastructure advancement, and ecosystem-focused strategies to alleviate the negative impacts of climate change and build the adaptive capacity of local communities.

Long-Term Climate-Neutral Development Strategy 2050 (LTS): Alignment with The Gambia's LTS is evident in the emphasis on gender-responsive climate resilience, sustainable land management (SLM), ecosystem-based adaptation (EbA), sustainable finance and knowledge management. The LTS focuses on reducing greenhouse gas emissions and enhancing climate resilience across key sectors, including energy, agriculture, waste management, transport, and land use, which are integral to achieving The Gambia's climate neutrality goal by 2050.

National Climate Change Policy: The Gambia's National Climate Change Policy outlines strategies for adaptation, mitigation, and resilience-building across key sectors. The urban resilience project is in harmony with these strategies, emphasising the importance of adaptive urban planning, infrastructure development, and ecosystem-based approaches to mitigate the adverse effects of climate change.

National Gender Policy: The Gambia's National Gender Policy (See the Gender Dynamics subsection) aims to promote gender equality and empower all genders through strategic interventions across various sectors to ensure equitable access to resources and opportunities. Integrating gender considerations in the Urban Resilience Master Plan and awareness raising material of the proposed project directly aligns with the overarching objective of the National Gender Policy.

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Vision 2020 and Beyond: Vision 2020 outlines The Gambia's long-term development objectives, including environmental sustainability and improved living standards. The proposed project aligns with the Vision's extension towards building a resilient and sustainable future. It addresses critical aspects such as urban planning, green infrastructure and community-based adaptation efforts, which are pivotal for achieving the vision's goals.

Third National Communication (TNS): The proposed GEF-8 project for The Gambia aligns well with the climate change strategy and priorities detailed in the country's Third National Communication (TNC) under the UNFCCC. This document emphasises The Gambia's commitment to addressing climate change through mitigation and adaptation measures, sustainable land management, the promotion of gender-responsive policies and the leveraging of sustainable finance for climate change efforts, which the proposed project design directly supports.

Gambia UNSDCF: The proposed project aligns with strategic priority 1: Green resilient and inclusive livelihoods through activities under component 2 and 3 of the project related to increasing resilience of urban communities to the effects of climate change. Strategic priority 1 of the UNSDCF focuses on ensuring that women, children, displaced people, youths, and persons with disabilities (PWDs) in rural and urban disaster and conflict-prone areas are resilient to climate-related and other shocks and have access to sustainable food, health, and water, sanitation, and hygiene (WASH) systems. The project will also contribute to strategic priority 2: human development, social inclusion, and people centred governance, through activities under component 1 of the project which relate to institutional strengthening, capacity building and inclusive planning.

Gambia Common Country Analysis: The proposed project aligns with the key opportunities highlighted in the Gambia CCA through promoting private sector initiatives that will promote diversification and resilience, programmes for skills development and job creation, and supporting The Gambia's participation in and accessing regional and international climate change financing adaptation which has been highlighted as a critical area of concern.

Alignment with regional priorities and strategies

Economic Community of West African States (ECOWAS) Policy on Disaster Risk Reduction: The project aligns with the ECOWAS policy on disaster risk reduction, which emphasises the need for resilient infrastructure and urban planning to mitigate the impacts of natural disasters, many of which are exacerbated by climate change.

Strategic Program for Climate Resilience (SPCR): The proposed GEF-8 project will contribute to the SPCR's climate proof urban planning and plastic pollution management priority area by promoting climate-resilient urban planning and increasing ecosystem restoration activities and sustainable livelihood promotion.

African Union Agenda 2063: The proposed project supports the African Union's Agenda 2063 — particularly its aspirations towards inclusive growth, sustainable development and enhanced resilience of African countries to climate change impacts. By implementing sustainable urban resilience practices, the project contributes to the realisation of these continental goals.

West African Coastal Areas Management Programme (WACA): The initiative complements the WACA programme's objectives to address coastal erosion, flooding and other climate change-related challenges in West African coastal cities. Through targeted interventions in the GBA, through targeted interventions in the GBA, the project contributes to regional efforts to protect vulnerable coastal communities and ecosystems.

Alignment with UNEP Programme of Work

The proposed LDCF project contributes directly to the following 5 outcomes under the Climate action subprogramme of UNEP's Programme of Work for 2022-2023: 1.1 Policy/decision-making for climate action is informed by the latest science-based analysis and data generation; 1.4 Sectoral partnerships and access to technologies and solutions for decarbonization, dematerialization and resilience are enhanced; 1.5 Private and public financial flows are aligned with the goals of the Paris Agreement; 1.6 The private sector and financial markets apply sustainability and climate-friendly standards and norms as core values of the economy; and 1.7 Public support and political engagement for climate action are catalysed and linked with other agendas (for

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example, restoration). In addition, the project contributes to 4 outcomes under the Nature Action Subprogramme (Outcomes 2.1, 2.2, 2.3 and 2.7).

UNEP comparative advantage

- UNEP has been present in the Gambia as an Implementing Agency in the adaptation sphere since 2011. Strengthening of The Gambia's Climate Change Early Warning Systems funded by the LDCF and the AF, with a grant of USD1,028,500 with national coverage, focusing on end users of climate information in the Gambia and the main national climate information provider in the country, the National Meteorological and Hydrological Services (NMHS) in the Meteorology Division of the Department of Water. A follow on early warning systems project was approved by GEF in 2014 with a LDCF grant of USD5 million. In 2017, Large-scale Ecosystem-based Adaptation in The Gambia: Developing a Climate-Resilient, Natural Resource-based Economy was approved by the Green Climate Fund, for a grant of USD20 million. In 2023, GCF approved a National Adaptation Planning project for a grant of USD3 million, with UNEP as Delivery Partner.
- UNEP's comparative advantage centres around its position as the lead agency for environmental issues within the UN family, with a mandate to provide guidance for the world on environmental issues and assist with environmental best practices in the UN. As such, it is well positioned to implement this project focusing on Ecosystem-based Adaptation (EbA) approaches given its experience in the Gambia and globally and is in fact currently supporting over 45 EbA-focused projects around the world. This extensive experience means that UNEP can effectively build on a wealth of lessons learned across its portfolio of projects, and continuously improve performance in its projects to bring greater efficiency and effectiveness in implementation.

Alignment with UN coordination approach

- 123 Coordination and capacity-building efforts under the proposed GEF-8 project will provide a robust framework for engaging with the UNEP Regional Coordinator (RC) and the UN Country Team (UNCT). This engagement is crucial for ensuring the project's alignment with joint UN processes and regional coordination strategies, thereby enhancing its effectiveness and sustainability.
- Ways in which the proposed project will support alignment with the UN coordination approach are detailed below.

Project alignment with UNEP and UNCT objectives: All project components are aligned with the priorities and objectives of both UNEP and the UNCT in The Gambia. The proposed project focuses on areas such as climate change adaptation, biodiversity conservation, sustainable land and water management and green economy initiatives, which contribute to the United Nations' regional and global agendas. Alignment with these objectives ensures that the project supports broader UN goals for environmental sustainability and climate resilience.

Collaborative planning and implementation: During the PPG phase, consultations with the UNCT and RC will help identify synergies with existing UN initiatives and programmes in The Gambia and West African region. By coordinating efforts, the project can leverage additional resources, avoid duplication of efforts and ensure a unified approach to addressing climate change and sustainable development challenges.

Joint advocacy and awareness-raising: During project implementation, the PMC will collaborate with the UNCT to conduct joint advocacy and awareness-raising campaigns. This will involve promoting the benefits of sustainable land management practices, the importance of climate-resilient infrastructure and the role of sustainable finance in climate change adaptation. Joint campaigns will reach a broader audience and amplify the project's messages, contributing to increased public and stakeholder engagement.

Regional coordination and knowledge sharing: Under Component 3 of the proposed project, UNEP's RC will be engaged to facilitate knowledge sharing and regional coordination on climate change adaptation and sustainable development in The Gambia and West African region. This will involve participation in regional forums, workshops and networks to share project experiences, lessons learned and best practices. Regional

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coordination will also help identify opportunities for scaling up successful project interventions and fostering cross-border collaboration on environmental and climate issues.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

Consultations, Engagement and Collaboration with the World Bank WACA Project team in the Development of the CLIMB Project Proposal:

125. In the development of the Climate-resilient Banjul: Enhancing Urban Resilience in the Greater Banjul Area (CLIMB) project proposal, extensive and proactive engagement with the West Africa Coastal Areas (WACA) project has been a taken seriously, given the complementarities between the two projects. Thes engagement has been directly through the Ministry of Environment, Climate Change, and Natural Resources (MECCNAR), the executing partner of WACA in The Gambia, and The WACA project itself.

Formal consultations began with a meeting on August 31, 2023, at the GIS Center of the National Environment Agency. This meeting aimed to introduce the initial concept of the CLIMB project and to familiarize all potential stakeholders with its objectives and scope. Bintu Gasamma, representing MECCNAR, attended this meeting, underscoring the high level of collaboration between the CLIMB project team and WACA representatives.

A stakeholder consultation was held on February 8, 2024, at the NaNA Conference Center. This event was crucial for the development of the Project Identification Form (PIF) for the CLIMB project. Key MECCNAR representatives, including Karamba Jabbi and Bouba Touray, participated, ensuring that the project development was closely aligned with WACA's objectives and strategies.

A meeting on March 7, 2024, at the Documentation Center of the National Environment Agency, represented another critical juncture. This meeting, attended by Masanneh Landing Ceesay of WACA and Bintu Gasamma from MECCNAR, focused on discussing the potential roles of partners and addressing issues

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related to the co-financing of the CLIMB project. This session was pivotal in securing alignment and commitment from all parties involved.

In addition to these formal gatherings, there were two informal consultations between the Executive Director of the National Environment Agency and the Permanent Secretary of MECCNAR. These discussions helped to cement the foundational support and strategic guidance from MECCNAR for the CLIMB project.

Table 6. Digital summary of all stakeholders consulted during PIF development stage

Date	Type of stakeholder engaged	Stakeholder(s)	Envisaged role in proposed project
14 February 2024	Public sector	National Environment Agency (NEA)	Regulatory oversight and environmental impact assessment.
		Ministry of Environment, climate Change and Natural Resources (MECCNR)	Policy guidance and coordination of climate adaptation strategies.
		Department of Parks and Wildlife Management	Conservation and management of protected areas within the project scope.
		Department of Forestry	Technical support in afforestation and reforestation activities.
		Ministry of Lands and Regional Governments including the: i) Department of Land and Surveys (DLS); and ii) Department of Physical Planning and Housing (DPPH).	Land allocation, urban planning, and housing development oversight.
		Ministry of Finance and Economic Affairs	Financial management, funding acquisition, and budget allocation.
		Ministry of Transport, Works and Infrastructure	Infrastructure planning and implementation.
		National Road Authority (NRA)	Oversight of road infrastructure integration with project activities.
		National Climate Change Secretariat	Coordination of national climate change initiatives and integration with the project.
		Gambia Police Force	Security provision and enforcement of regulations in project areas.
		National Disaster Management Agency (NDMA)	Risk assessment and disaster response planning.
		Gambia Tourism Board (GTBOARD)	Integration of tourism-related projects and

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		promotion of
		ecotourism.
	Gambia Ports Authority	Management of
		coastal infrastructure
		affected by the
		project.
	Department of Agriculture	Support for urban
	including the Directorate of	agriculture
	Urban Agriculture	initiatives under
		the project.
	Local Government Authorities	Local governance,
	(Municipalities/Councils for	community
	respective hotspot areas)	engagement, and facilitation of
		ground-level
		activities.
	University of Science,	Research
	Engineering, and Technology	collaboration and
	(USET)	technical expertise
	II. 'A CAL C A'	provision.
	University of the Gambia	Research collaboration and
		technical expertise
		provision.
	Newspapers	Media coverage
	1- Standard,	and public
	2- Voice,	awareness
	3- Point,	campaigns.
	4- Teranga	
Private sector	5- Foroya Gambia Chamber of	Business
1 11 vate Sector	Commerce	engagement,
		private sector
		investment, and
		advocacy.
	Recycling associations and	Implementation of
	companies (e.g. Mbolo, based	plastic pollution
	in Tujereng),	management and recycling
		components.
NGOs, CSOs	Gambia Environmental	Environmental
and CBOs	Alliance	advocacy and
		community
		mobilisation.
	Green Up Gambia	Environmental
		advocacy and community
		mobilisation.
	The Association of Non-	Coordination
	Governmental Organizations	among NGOs for
	(TANGO)	project support.
	Women's Initiative Gambia	Gender
		mainstreaming and
		empowerment activities.
	Gambia Ocean Heroes	Marine
	(GREAT Institute)	conservation
	<u> </u>	efforts and
		educational
		outreach.
Development	UNEP	Technical and
agencies		financial support,
		monitoring and evaluation of
		project impacts.
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		World Bank (Representative of WB-funded WACA project, situated within the MECCNAR)	Technical and financial support, monitoring and evaluation of project impacts.
	Other	Dr Genesis Yengoh (National Consultant)	Expert advice, project evaluation and reporting.
07 March 2024	Public sector	Kanifing Municipal Council	Local administration and regulatory compliance, facilitation of urban project components.
		Banjul City Council NEA	

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE			
Medium/Moderate						

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Total GE	F Resourc	ces (\$)				12,544,037.00	1,128,963.00	13,673,000.00
UNEP	LDCF	Gambia	Climate Change	LDCF Country allocation	Grant	12,544,037.00	1,128,963.00	13,673,000.00
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

300000

PPG Agency Fee (\$)

27000

Total PPG	Amount (\$)		1		300,000.00	27,000.00	327,000.00
UNEP	LDCF	Gambia	Climate Change	LDCF Country allocation	Grant	300,000.00	27,000.00	327,000.00
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)

Please provide justification

Sources of Funds for Country Star Allocation

Total GEF Resource	es				0.00
		Regional/ Global			
GEF Agency	Trust Fund	Country/	Focal Area	Sources of Funds	Total(\$)

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
CCA-1-1	LDCF	1,216,667.00	9077784

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Total Project Cost		12,544,037.00	35,444,194.00
CCA-1-3	LDCF	2,416,666.00	5184916
CCA-1-2	LDCF	8,910,704.00	21181494

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Department of Parks and Wildlife Management	In-kind	Recurrent expenditures	500000
Recipient Country Government	National Disaster Management Agency (NDMA)	In-kind	Recurrent expenditures	333000
Recipient Country Government	The National Environment Agency (NEA)	In-kind	Recurrent expenditures	17300000
Recipient Country Government	Kanifing Municipal Council	Grant	Investment mobilized	2089552
Recipient Country Government	Kanifing Municipal Council	Public Investment	Investment mobilized	171642
Recipient Country Government	Banjul City Council	Grant	Investment mobilized	2000000
Recipient Country Government	Banjul City Council	In-kind	Recurrent expenditures	50000
GEF Agency	UNEP	Public Investment	Investment mobilized	3000000
Donor Agency	World Bank	Public Investment	Investment mobilized	10000000
Total Co-financing				35,444,194.00

Describe how any "Investment Mobilized" was identified

Investment mobilized was identified through stakeholder consultations and meetings held in country. Relevant partners filled in expressions of interest forms submitting relevant co-finance towards the project. For investment mobilized by UNEP - the projects fall under UNEPs regular programming.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

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GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Victoria Luque Panadero	3/20/2024	Atifa Kassam		atifa.kassam@un.org

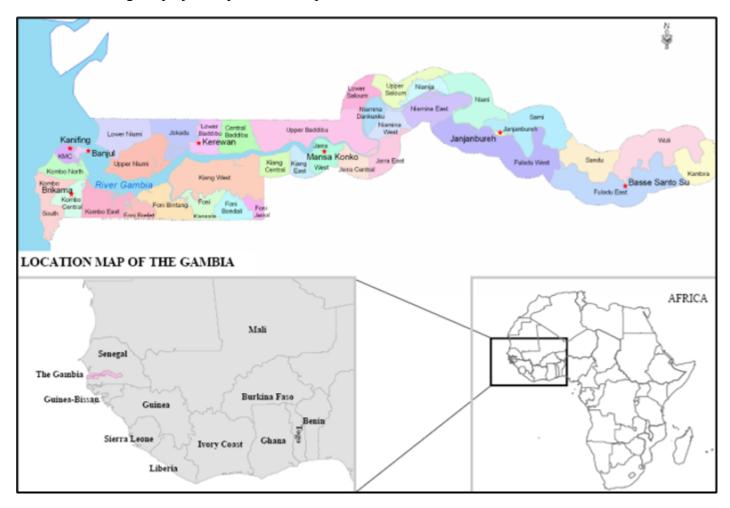
Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Dr Dawda Badgie	Executive Director	National Environment Agency – The Gambia	4/18/2024

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

All project interventions will be implemented within the Greater Banjul Area. The exact sites for project interventions implemented under Component 2 of the proposed project will be determined during PPG phase and refined during the project implementation phase.



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ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

The Gambia UNEP ESS document

ANNEX E: RIO MARKERS			
Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	Principal Objective 2	No Contribution 0	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

See attached PIF

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