



CEO Endorsement (CEO) entry ? Full Sized Project ? GEF - 6

Strengthening Adaptative Capacities to Climate Change through Capacity Building for Small Scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia

Part I: Project Information

GEF ID

9194

Project Type

FSP

Type of Trust Fund

LDCF

Project Title

Strengthening Adaptative Capacities to Climate Change through Capacity Building for Small Scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia

Countries

Gambia

Agency(ies)

UNIDO

Other Executing Partner(s)

Ministry of Fisheries and Water Resources/Department of Fisheries (MoFWR/DoF) National Environmental Agency (NEA); Ministry of Environment, Parks and Wildlife, Climate Change Office (MoEPW/CCO); Ministry of Trade, Industry and Employment (MoTIE); Gambia Bureau of Standards (GBS), and; Food Safety and Quality Authority of The Gambia (FQSA)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Climate Change, Focal Areas, Climate Change Adaptation, Innovation, Least Developed Countries, Community-based adaptation, Climate finance, Mainstreaming adaptation, Private sector, Livelihoods, Convene multi-stakeholder alliances, Influencing models, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Demonstrate innovative approaches, Private Sector, Stakeholders, Large corporations, SMEs, Individuals/Entrepreneurs, Communications, Public Campaigns, Behavior change, Awareness Raising, Education, Local Communities, Type of Engagement, Participation, Partnership, Information Dissemination, Civil Society, Academia, Community Based Organization, Beneficiaries, Gender Mainstreaming, Gender Equality, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Participation and leadership, Access and control over natural resources, Knowledge Generation and Exchange, Capacity Development, Access to benefits and services, Capacity, Knowledge and Research, Enabling Activities

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Duration

36In Months

Agency Fee(\$)

209,000.00

A. Focal Area Strategy Framework and Program

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	LDC F	950,000.00	4,214,062.00
CCA-3	Strengthened institutional and technical capacities; and Integrated climate change adaptation and resilience building measures into relevant policies, plans and associated processes	LDC F	1,250,000.00	5,407,000.00
Total Project Cost(\$)			2,200,000.00	9,621,062.00

B. Project description summary

Project Objective

To increase adaptive capacities for The Gambia coastal fish processing value chains and promote climate-resilient business models focusing on improved post-harvest fisheries food systems to vulnerable communities.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Gender-responsive Climate Change Adaptation (CCA) measures mainstreamed into relevant sector policies and national strategies	Technical Assistance	Outcome 1: Strengthened national capacities to mainstream CCA and gender equality in sectoral policies and development strategies, with relevant climate resilient regulatory and policy measures to promote adoption of quality and safety standards and systems, and environmental safeguards by the private sector	<p>1.1: Recommendations developed through private sector engagement for mainstreaming gender-responsive CCA into sectoral/coastal fisheries value chain-related policies and strategies.</p> <p>1.2: Climate resilient business model for fisheries waste management and processing developed and demonstrated for private/public uptake.</p> <p>1.3: Staff of the DoF, local government, environmental and business sector regulators, industries and cooperatives trained on gender-responsive climate-resilient adaptation measures, supporting the integration of CCA into fisheries value chain development.</p>	LDC F	200,000.00	2,275,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Resilience building for small scale fisheries-dependent enterprises and populated coastal communities	Investment	Outcome 2: Increased resilience and adaptive capacities of enterprises and communities along the coastal fisheries value chain	2.1: Innovative climate-proof post-harvest technologies implemented at three Community Fisheries Centers (CFCs), with capacity building.	LDC F	884,000.00	3,740,000.00
Component 2: Resilience building for small scale fisheries-dependent enterprises and populated coastal communities	Technical Assistance		2.2: Business service providers trained to train enterprises on business skills and innovative climate-resilient strategies for value added fish storage and processing. 2.3: Climate-resilient business plans developed by selected enterprises.	LDC F	485,000.00	2,056,062.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3: Community Empowerment and Awareness Raising on CCA in the fisheries value chain	Technical Assistance	Outcome 3. Strengthened institutional and community capacities to develop and utilize integrated fisheries data and information management systems based on Early Warning System (EWS) and community knowledge for awareness and dialogue on CC resilience building	3.1: Plan for public awareness campaigns implemented to enhance communication and dialogue on CC impacts on coastal fisheries livelihoods. 3.2: Training materials to introduce climate change adaptation solutions in the coastal fisheries sector developed and resilience capacity-building workshops held for selected CFCs and educational institutions. 3.3: Lessons learned documented and disseminated to relevant audiences, with support for regional uptake, replication and scaled up investments.	LDC F	340,000.00	960,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 4: Project monitoring and evaluation	Technical Assistance	Outcome 4. Project monitoring & evaluation system implemented	4.1: Project monitoring and mid-term review implemented 4.2: Project terminal evaluation	LDCF	110,000.00	290,000.00
Sub Total (\$)					2,019,000.00	9,321,062.00

Project Management Cost (PMC)

LDCF	181,000.00	300,000.00
Sub Total(\$)	181,000.00	300,000.00
Total Project Cost(\$)	2,200,000.00	9,621,062.00

Please provide justification

As stated in the PIF and approved by the GEF Secretariat the requested PMC amounts to USD 181,000 (9%). The project investment and demonstration activities will require closer coordination and monitoring, as well as greater involvement of the private sector in this case, and communities for ownership and sustainability. Considering the above justification and the fact that this project is USD 200,000 over the MSP ceiling due to a higher investment and demonstration contribution, a higher PMC cost was envisaged. The PPG phase consultations further confirmed the PIF design assumptions on the need for higher PMC and validated higher than average operational costs at USD 181,000 (9%).

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount(\$)
Recipient Country Government	Government of The Gambia	In-kind	250,000.00
GEF Agency	UNIDO	Grant	40,000.00
GEF Agency	UNIDO	In-kind	700,000.00
Civil Society Organization	African Women's Entrepreneurship Program (AWEP)	Grant	180,000.00
Civil Society Organization	African Women's Entrepreneurship Program (AWEP)	In-kind	20,000.00
Private Sector	National Partnership Enterprise (fish processing and export)	In-kind	1,090,000.00
Other	ECOWAS Centre for Renewable Energy and Energy Efficiency, ECREEE	In-kind	1,400,000.00
Other	ECOWAS Centre for Renewable Energy and Energy Efficiency, ECREEE	Loan	500,000.00
Other	ECOWAS Centre for Renewable Energy and Energy Efficiency, ECREEE	Grant	500,000.00
Private Sector	EMPASS	In-kind	334,062.00
Private Sector	Masannah Ceesay Fish & Vegetable Enterprise (fish smoking and export)	In-kind	550,000.00
Private Sector	The Atlantic Seafood Company (Gambia) Ltd	In-kind	197,000.00
Donor Agency	European Union Delegation, EUD The Gambia, est USD equiv. of EUR 3.5 M	In-kind	3,860,000.00
Total Co-Financing(\$)			9,621,062.00

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
UNIDO	LDC F	Gambia	Climate Change		No	2,200,000	209,000
Total Grant Resources(\$)						2,200,000.00	209,000.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
Total Project Costs(\$)						0.00	0.00

Core Indicators

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female				
Male				
Total	0	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

N/A

PART II: Project JUSTIFICATION

1. Project Description

A. Describe any changes in alignment with the Project design with the original PIF

The project objective, outputs and outcomes have not been changed since the original PIF and the interventions of the project remain validated. Considering the duration of the design phase, the proposed co-financing scenario was as well fully realized and the project adaptation rationale, baseline, interventions logic, especially relating to market mechanisms that generate multiple sustainability benefits, and risks analysis are updated accordingly. The hardships that have arisen following the COVID-19 pandemic have informed streamlined interventions towards resilience building of the project targeted sectors and livelihoods, and therefore be integral to systematically enhance the rebuilding of the hitherto disrupted supply chains, and response measures integrated. Finally, co-financing mobilized was increased with an additional USD 4,057,000.00 from two new partners, making a total co-financing commitment of USD 9,621,062.00. The planned co-financing at PIF design was USD 5,500,000.00. The project description also remains validated and not been changed since the original PIF and follows the theory of change and the proposed responses have been extensively strengthened to address the priority of climate change adaptation and resilience capacity building with a dedicated focus on highly climate sensitive segments of the post-harvest and processing segments of the coastal fisheries value chains.

Following the suggestion received from the GEFSEC via email communication on 23.12.2020, the project title is proposed to be changed as well. If acceptable the new project title would then read as follows ?Strengthening climate change resilience of coastal fish processing and post-harvest value chains in The Gambia?.

A.1. Project Description

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

1. The coastline of the Gambia, and the Atlantic West Africa in general, is highly climate-sensitive and the rate of change is predicted to be more rapid than previous natural changes. As the climate is changing, the coastal fisheries sector and mostly the artisanal fishing dependent communities and micro, small and medium scale enterprises along post-harvest value chains are becoming even more highly climate-sensitive. With limited productive land resources, a fast-growing population of about 2.2 million in 2018, which is projected to double to almost 4.5 million by 2050, and a largely undiversified economic base, coastal fisheries resources are expected to continue to play a key role as a source of livelihoods for the economy. The contribution of inland and marine fisheries sector production was ~3% of GDP in 2012^[1] and production output of nearly 40,000 tonnes, over 90% of which contributed from the artisanal fisheries^[2] ? especially in the coastal areas. The country has highly productive shores and upwelling zones of the Atlantic Ocean that are associated with the flow of nutrient rich waters from the Gambia River, and exploitation levels of fish stocks reported to be within sustainable yield for the artisanal fishing sector. In spite of the significance of coastal fisheries

value chains with a significant number of employment and livelihoods in the coastal areas contributed from fish processing and related post-harvest management systems such as ice supply for cold chains, current and projected future climate impacts on the sector are expected to worsen.

2. Temperatures have increased steadily over recent decades, with estimates indicating an increasing trend of between 0.21°C ^[4],^[5] and 0.5°C ^[6] per decade since ~1945. The rate of increase is most rapid in the October–December period, at 0.32°C per decade. As well as an overall increase in temperature, available data indicate that the average number of hot nights per year increased by 7.8% (28 nights) between 1960–2003^[7]. The coastal zone in the region is vulnerable to climate change impacts including sea-level rise, potential changes to precipitation patterns, and potential increases in wet season rainstorm intensity. Beyond Banjul, widespread ongoing coastal erosion is predicted to increase in the future. Fish landing sites, high value residential and diplomatic properties, cultural sites and tourism assets are all at risk from coastal erosion, as has been recognized for over twenty years with an understanding that development within 150 m of the shoreline should be avoided to allow for a buffer zone for erosion. The targeted sites include ten prefecture sites of Barra; greater Banjul; Bakau; Old and New Jeswang; Kololi; Brufut; Tanji; Tujereng - Batukunku; Sanyang; Gunjur, and Kartong, whereby at least three (3) of these sites and thereby support the dissemination and scaling up of the knowledge and innovations. The project addresses the current and anticipated climate scenarios with minimum or low impact scenarios and maximum or higher impact ranges of temperature increase included (1.1°C by the 2060s and 1.8°C by the 2090s). It is noted that limited literature is available on the local impacts of climate change on Gambian fisheries under different scenarios.

3. Specifically, mean annual temperatures are predicted to increase by 1.1°C by the 2060s and 1.8°C by the 2090s, with the rate of warming projected to be faster in the interior regions compared to the coast (Figure 2). Furthermore, significant increases in the frequency of hot days and nights are predicted (Figure 2). Hot days are projected to occur on 22–48% of days annually by the 2060s and on 25–69% of days annually by the 2090s. Similar ranges are projected for hot nights; 28–50% increase annually by the 2060s and 36–69% by the 2090s. Increases in the frequency of both hot days and nights will occur more rapidly in the east of the country compared with the west. Concurrent with the increase in hot days and nights, a decrease in the frequency of cold days and nights is also predicted. By the 2060s, it is predicted that cold days will occur on less than 3% of days annually, while no cold nights are predicted to occur by the 2090s^[3].

4. Long-term weather records from the capital and coastal fishing Banjul, have indicated a shift in the national rainfall pattern. From 1950 to 2000, annual rainfall decreased by ~30% with an average rate of decrease of 8.8 mm per month per decade recorded between 1960 and 2006^[1]. This observation is consistent with the average pattern of rainfall variation across the Sahel region, and resulted in the increasingly erratic spatial distribution of rainfall – particularly in the western half of the country^[2] – leading to devastating droughts during the last three decades of the 20th century alternating with periods of intense rainfall that resulted in severe flooding events. The decreases have furthermore been evident in the reduction in the length of the rainy season and the amount of rainfall recorded in the month of August – particularly during the period 1968–1985, and in 2002. However,

understanding of climate change relevant information has not been enshrined in policy and inappropriate construction continues ? particularly in the tourism development zones along the open coast and within the district of Banjul. For instance, a number of countries in the region including across The Gambia have in some cases adopted national, and sector-specific climate change adaptation strategies, which have included the consideration of the specific climatic and anthropogenic drivers such as a growing population and increasing migration[3] of rural populations in search of employment and income generation opportunities.

5. The current and anticipated risks and impacts on coastal fisheries deriving from climate hazards ranging from changes in rainfall patterns, temperature and sea-level rise, are compounded by natural and anthropogenic factors that reduce the resilience of coastal ecological and geomorphological systems. These factors include the country's low-lying topography, the high dependence of communities on subsistence, rain-fed agriculture, and inadequate drainage and storm water management systems in the context of rapid, unregulated urban expansion. Fishers and fish farmers will face the full force of climate change hazards and their impacts, resulting in less stable livelihoods, changes in the availability and quality of fish for food, and rising risks to their health and food insecurity. Many fisheries-dependent communities already live a precarious and vulnerable existence because of poverty, lack of social services and essential infrastructure. Changes in fish catch levels and processing value chain activities is taking place in the coastal sector, as well as on the estuarine and freshwater inland capture fishing resources.

6. A range of scenarios and projections indicate both increases and decreases in mean annual rainfall and patterns under future climate conditions (Figure 3). Total wet season rainfall (particularly over the July-September period) is predicted to decrease, though this is coupled with an increase in the occurrence of heavy rainfall events (Figure 3)[4]. Predictions for changes in annual precipitation range from -23% to +18% by the 2090s[5]. Irrespective of the projected net decrease in rainfall, all models predict a dramatic increase in evapotranspiration as a result of the combined effects of reduced humidity and increased temperature. Models predict that evapotranspiration will increase by ~9-29% by 2050, and ~15-45% by 2100, relative to historical averages[6]. Long-term meteorological records and observations of climate change in the localized contexts show: i) decreased average rainfall and duration of the rainy season; ii) increased frequency and length of droughts; iii) increased temperatures; and iv) increased frequency and severity of flash floods in the period since ~1945[7]. Changes in rainfall and temperatures will have the most direct effect on fisheries and the associated value chains relevant to the project, as detailed below. Primarily, climate-related and social hazards including the increasing entry of young people to coastal fisheries already widely evidenced in highly populated areas such as the Greater Banjul Area, where the beach has been retreating at a rate of 1-2 m per year as a result of coastal erosion.

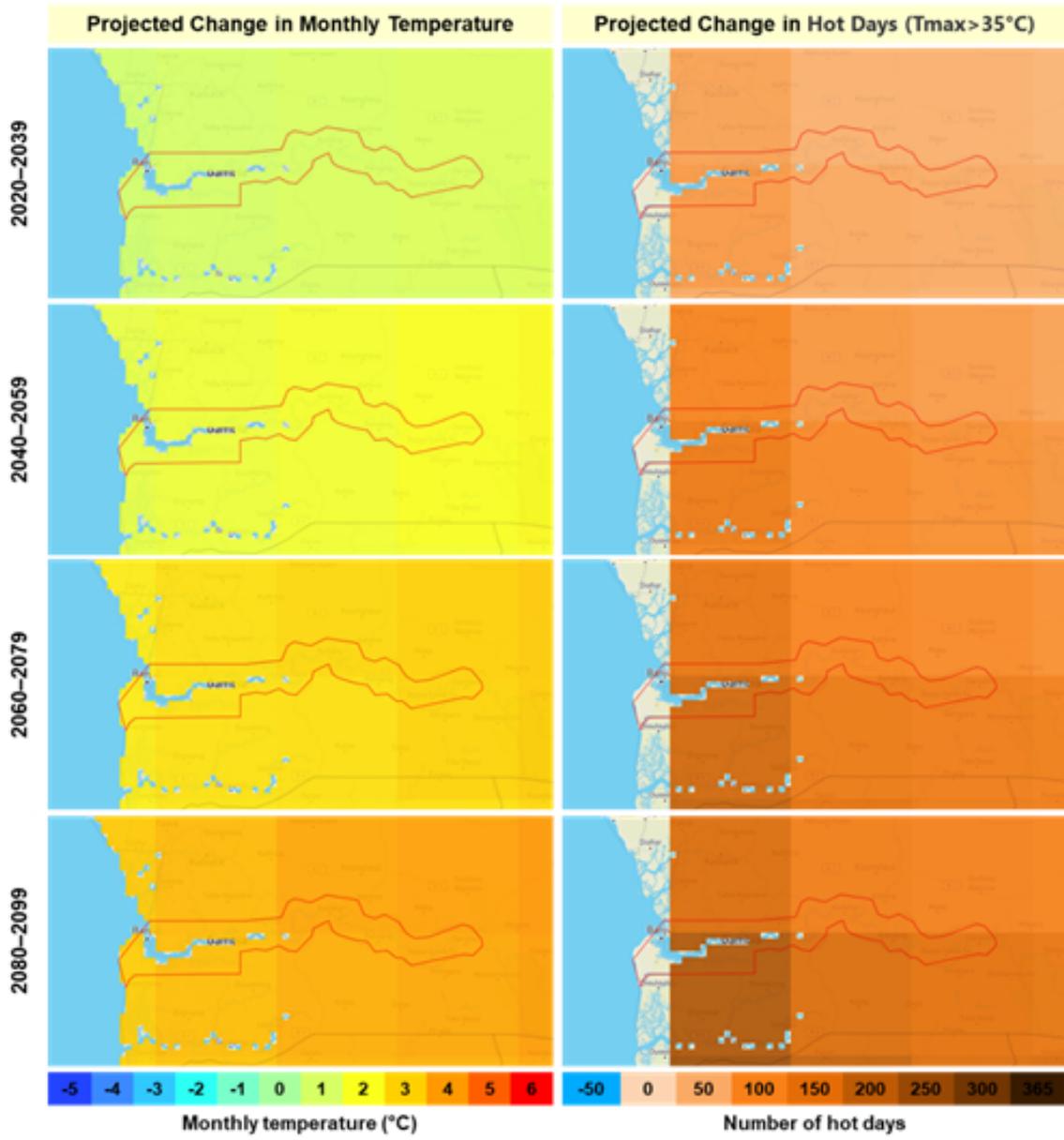


Figure 1. Projected changes in average monthly temperatures and the number of hot days (when maximum temperatures (Tmax) are over 35°C) between 2020 and 2100^[8].

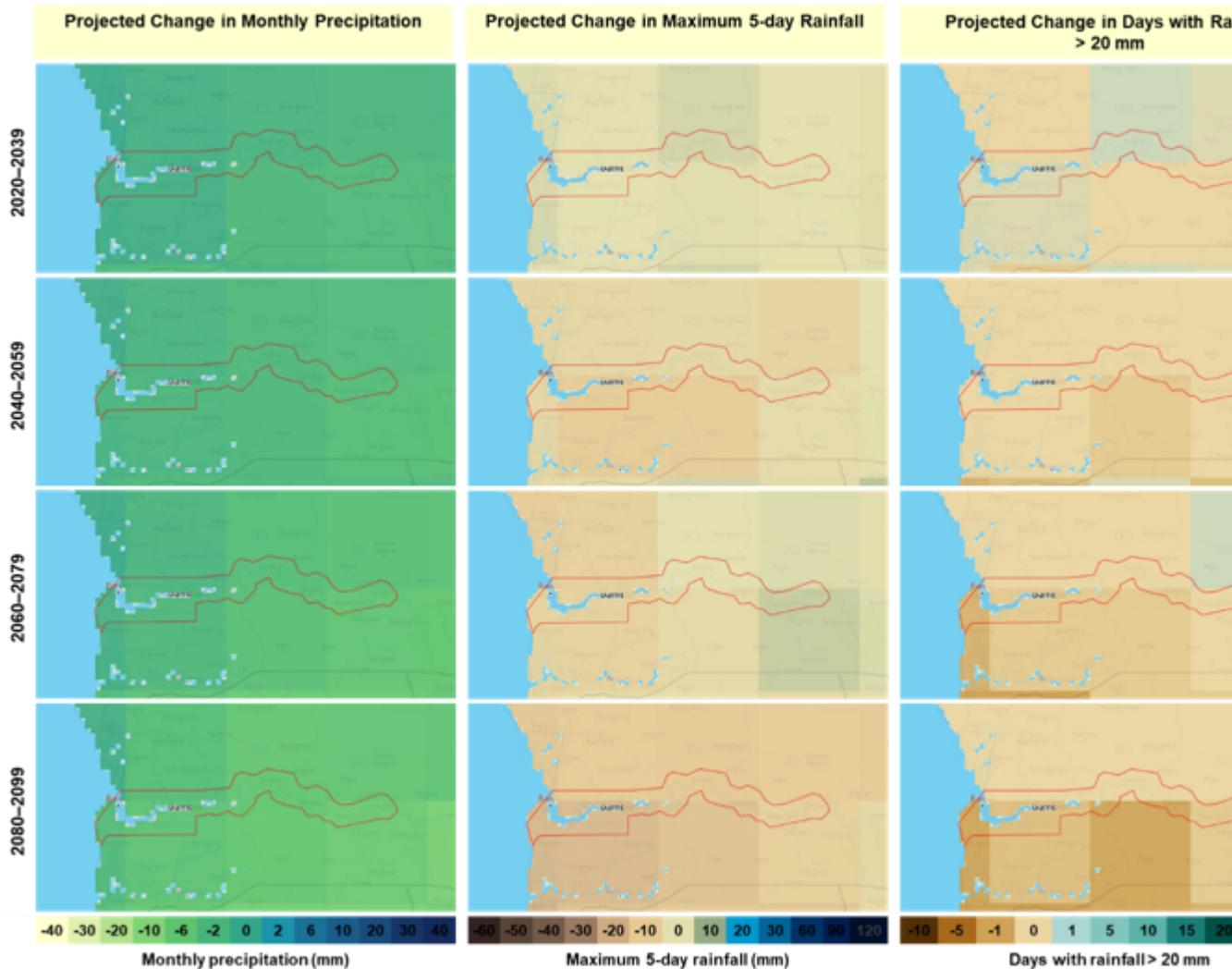


Figure 2. Projected changes in monthly precipitation (mm), maximum 5-day rainfall (mm) and the number of days with heavy rainfall (> 20 mm) between 2020 and 2100^[9].

7. The specific value chain vulnerabilities to the impacts of climate change on the fisheries are summarized below:

Food Security: As fish is a predominant source of protein in The Gambia and fish marketing and distribution in the country contributes significantly to food and nutrition security, distribution of fish from riparian and coastal areas to inland communities is very important. However, fresh fish supply to inland markets faces problems relating to lack of appropriate facilities for post-harvest landing and handling of the catch, processing, transport and refrigerated storage (cold chain) both at source and at distribution points inland. Fish spoilage is a major problem.

Value of catch from artisanal fisheries: Fish distribution and retail business enterprises are a main source of employment and livelihood for many people, especially women who normally operate small businesses enterprises. The fishery sector in The Gambia current contributes about 12% of GDP up from 3 percent (Gambia Bureau of Statistics, GBOS - 2012 Estimate).

Profitability: Analysis of profitability for selected artisanal fishing operations is considered in this project as a proxy measure of climate change adaptation capacity. They show that small-scale fishing, processing and marketing operations are indeed still profitable relative to the predominantly subsistence agriculture-based food systems.

Dependence: The fisheries value chain is a major source of food supplies and incomes, as well as foreign exchange earnings for the country. Government's support is in the form of credit, training, organizational support and infrastructure with significant donor assistance. The supply chain for fresh fish supply to inland markets is faced with problems relating to infrastructures and services for post-harvest landing and handling, processing, transport, and refrigerated storage both at source and at distribution points inland. Fish spoilage is a major problem, especially during peak fishing seasons and results in losses and undervaluation of products, thus reducing values of the catch at landing, during marketing and distribution along the supply chain and some times during processing.

Level of exposure to change: Some predictions indicate that the marine fisheries resource in The Gambia is acknowledged as an exceptionally adaptive natural resource, which is predicted for the most part to be in many respects resilient to the impacts of CC, a result of improvements in potential primary production from the fisheries. The value chains of shrimp species are dominated with food security and exports value in particular, would benefit from the temperature change, although catfish and herring productivity mostly for domestic food security may suffer as to as much as the predicted decline of 50% in fisheries off West Africa by 2040 due to climate change, the World Bank (2013) study. According to climate change assessment studies of the regional fisheries undertaken through the Ba-Nafaa project launched in 2009, warming between 3?50C could increase shrimp productivity by 13 to 21%. Although climate impacts on ocean fish stocks affect artisanal and industrial fishing operations alike, with impacts of increased storm surges worse for small vessels, influencing fishing practices per se is beyond the scope of this project, which focuses on the climate-proofing the portion of the fisheries value chain from post-catch handling to processing. The project does, involve work with private sector actors involved in industrial processing for export, and domestic and regional markets.

Industrial scale fishing in the marine waters of The Gambia: Over 90% of the fishing vessels legally operating in Gambian waters are foreign-owned and land their catch abroad. With lack of data on the value chain, volumes landed and landing sites and ports, it can be assumed that this proportion is reflected in the percentage of total catch as well (UNCTAD, 2014). The country's absence of a dedicated and deep-water fishing port or well-equipped fishing jetty is one of the factors highlighted in the National Development Plan for 2018 to 2021 as continuing to hamper the growth of a thriving and sustainable domestic fisheries sector. Further the National Development Plan highlights that private sector engagement is low in the local fishery sector (compared to other sectors such as local cash-crop agriculture). This is especially due to absence of adequate post-catch handling and processing processes. By stimulating investment in improved equipment and processes, the project is expected to create larger value from given domestic catch levels, hence making small-scale fishery value-chains more profitable and competitive. By improving post-catch handling to processing, the project seeks to reduce high vulnerability, as well as, improve profitability of the domestic predominately small-scale fisheries. This, among other project interventions, is expected to boost private sector participation in domestic fishery sector.

8. COVID-19 associated risks to project implementation and the set of specific strategies that will be undertaken to address these risks. The pandemic has driven major direct and long term obstacles to the health of persons and to the effective project implementation including delivering targeted response interventions. Businesses in the fisheries value chains, regardless of size and capacities, and product ranges, are facing serious challenges, with a real threat of significant declines in revenues, risk of insolvencies and job losses in many sectors including those in artisanal and industrial fisheries. Job losses lead to livelihoods disruption, greater exposure to impacts of climate hazards, and increase poverty at the community level.

How the project will contribute to addressing the root causes of the pandemic, and/or to economic recovery from the pandemic: The proposed immediate responses are to improve the capacities of existing and starts up small scale enterprises for the local production of protection items such as masks and sanitisers through partnerships with repurposed academic and research centres, potential virtual

incubation for financing linkages, and providing guidelines on technical specifications and sample validation.

The impacts of climate change on the value chain of coastal fisheries and fish processing based livelihoods, as well as proposed adaptation scenarios, are presented in Table 1 below and expanded on in the sub-sections above and the barriers analysis thereafter.

Table 1. Subdivisions of the fishery value chain that are affected by the impacts of climate change, with proposed adaptation measures.

Coastal fisheries value chain subdivision	Climate change hazards	Direct impacts of climate change hazards	Proposed adaptation and resilience measures
Fishing	Increasing temperatures and rainfall variability	Fish catches are limited as fishing becomes time-sensitive when temperatures are high. Additionally, fishing activities are inhibited by intensified storms at sea.	Mainstreaming climate change adaptation into institutional and regulatory frameworks will contribute to enhancing the resilience of the artisanal fishing activities, particularly by defining quality and safety measures to safeguard livelihoods and the environment.
Stowage and handling onboard	Increasing rainfall variability	Heavy rainfall events create unsafe conditions on artisanal fishing boats as these vessels are not built to operate under extreme weather conditions.	Improved accessibility and awareness to climate and weather information will enable preparedness among fishers and post-harvest handlers, and further enhance their adaptive capacity to climate change hazards and the associated impacts on fishing-related activities.
Landing and discharge	Increasing temperatures and rainfall variability	Heavy rainfall poses considerable challenges in landing catches because of rough waters and inundated shorelines. Landing and discharging becomes time-sensitive when temperatures are high.	Along with mainstreaming gender-responsive climate change adaptation under Output 1.1, Output 3.1 and 3.2 will contribute to further enhancing the adaptive capacity of fishers and post-harvest handlers to climate change hazards and the associated impacts on fishing-related activities.
Processing	Increasing temperatures and rainfall variability	Heavy rainfall and associated flood events make processing fish difficult, particularly fish preservation methods, leading to spoilage. Processing becomes increasingly time-sensitive when temperatures are high and low-tech cooling systems may fail with unprecedented peak temperatures.	By diversifying the resource base from fisheries products and providing improved post-harvest management innovations, small-scale processors' vulnerability to climate change hazards which inhibit processing activities will reduce. In addition, facilitating private sector investment and the adoption of best practices will contribute to improved post-harvest management. Output 2.1 and 2.2 will specifically contribute to the improved adaptive capacity of small-scale traders to the impacts of climate change hazards.

Storage	Increasing temperatures and rainfall variability	Small-scale storage equipment is often not resilient to high temperatures and extreme rainfall events, resulting in loss of product.	Through climate-proofing post-harvest storage technologies to high temperatures and flood events, the risk of fisheries spoilage and loss will be reduced considerably. Together with facilitating private sector investment, the vulnerability of fisheries products to climate change hazards is reduced. Output 2.1 will contribute to enhancing the resilience of fisheries products to climate change hazards.
Marketing actors (Retailers, rural markets, coastal markets and middlemen)	Increasing temperatures and rainfall variability	Heavy rainfall and flood events inhibit trading and transport of fisheries products.	Improved accessibility and awareness to and awareness of climate and weather information will enable preparedness among marketing actors, and further enhance their adaptive capacity to climate change hazards and the associated impacts of trade-related processes. Output 3.1 will contribute to enhancing the adaptive capacity of small-scale traders.
Transporters	Increasing rainfall variability	Transporting of fisheries products is a challenge during heavy rainfall and flood events, particularly with road infrastructure negatively affected by flood events.	Improved accessibility to and awareness of climate and weather information will enable preparedness among transporters of fisheries products, and further enhance their adaptive capacity to climate change hazards and the associated impacts on the fisheries supply chain. This will be achieved particularly under Output 3.1.
All above value chains and actors severely impacted by COVID-19 pandemic that worsen vulnerability to climate change	Changes to fisheries and food supply chain operations, inadequate response measures due to loss of assets and financing limitations due to the pandemic strained economy and services.	Fisheries operations and supply chains disrupted by the pandemic fail to rebuild and recover due to the extensive losses of capacity and lack of access to imported and essential inputs such as packaging materials.	Output 1.1, reinforcing coordinated incentives to investments in recovery of infrastructure, sanitary controls and good practices, and training and awareness raising actions. Component 2 targeted to existing or old, and innovative startup businesses for investments in resilience rebuilding and recovery of local capacity.

1.1.1 Precipitation-specific Impacts

9. The estuary of The Gambia River interfaces with the coastline and provides support, protection and nurseries for the early life cycle stages of almost all commercially and ecologically important marine fish species, particularly shrimp, which have mobility within the brackish zones of river as a result of the hydrological variability between the dry and the flood seasons. Unlike the salinity regime, the water temperature regime in the estuary remains fairly constant both vertically and horizontally. Therefore, salinity is the most important factor affecting the fish community structure.

Studies have shown that salinity along the river can vary throughout the year in response to seasonal variation in rainfall [10]¹⁰. These seasonal cycles will be altered and/or disrupted by the impacts of climate change, such as the decrease in freshwater runoff. As a result, fish species abundance, composition and distribution are likely to change. In addition, higher salinity at the mouth of the river estuary caused by reduction of freshwater sources and enhanced by climate change-induced reduction of rainfall and simultaneous sea level rise may impede the entry of larvae and juveniles of marine species into the estuary, particularly shrimp (*Penaeus notialis*), to complete their earlier lifecycle processes. Furthermore, it has been observed that in periods of very high discharge the salinity level was reduced and extended downstream influencing the distribution of some species, particularly, *Ethmalosa fimbriata* (Bonga Shad), *Ilisha africana* (West African ilisha), *Arius latiscutatus* (rough head sea catfish) and *Sardinella maderensis* (Madeiran sardinella). Water quality may be further negatively affected through surface run-off of agricultural chemicals, increasing the risk of eutrophication and negative health impacts from nitrates leaching into drinking water. The burden of ill health from increases in vector borne diseases is another risk, particularly in riverine locations further inland. In addition to the impacts of changes in precipitation on fish stocks, increasing rainfall variability negatively impacts fishing activities, stowage and handling on board, landing and discharge, processing, storage, trading and transport.

1.1.2 Temperature-specific impacts

10. The national climate is characterized by a variable Sahelian seasonality of temperature that generally spans a long dry season (November to May the following year) and a short wet season (June to October). Average temperatures are reported to range from 18.30°C during the dry season and 23.33°C during the wet season. The lowest mean temperature of 25.8°C was recorded in 1947, while the highest mean temperature of 28.2°C was recorded in 2000. Average relative humidity has decreased from an annual average of over 75% in 1945 dropping to ~55% in 2002 [11]¹¹. Located at the southern fringe of the Sahara Desert, the region is particularly exposed to extreme weather events, such as droughts and heat waves. Rainfall levels – as in the rest of the Sahel region – are highly variable from year to year. Approximately 50% of the total land area lies less than 20 m above sea level and ~33% only 10 m above sea level. Currently, 20% of the country's area experiences annual flooding. In context of the project's vulnerability assessment, three major climate changing scenarios aggravate the adverse effects of climate and weather variability on coastal and fisheries sector including aquaculture. The catch and effort trends for the artisanal coastal fisheries indicate exploitation level of artisanal value chains is within the maximum sustainable yield and the sector is increasingly supported by ecosystem based management programmes. Compounding the impacts of intensified flood and storm events at sea, increasingly time sensitive and the changing seasonality in availability of landed catch and species, overexploitation of oceanic and high sea zones in the region by foreign fleets is widespread and increasing pressure on the national sectors. Further to its impacts on fish stocks, rising temperatures adversely impact the following aspects of the fisheries value chain: i) fish catch; ii) landing and discharge; iii) processing; and iv) storage.

11. The adverse impacts of increasing surface temperature, related to reduced oxygen availability resulting from the higher water temperature, can cause the reduction in total catch potential per stock and the reduction of biomass per individual animal. Figure 4 illustrates the combined effect of ocean warming, hypoxia and acidification on marine food webs – resulting in reduction in body sizes, shifts

in biogeographies, changes in species composition and abundance, and the reconfiguration of trophic linkages and interaction dynamics.

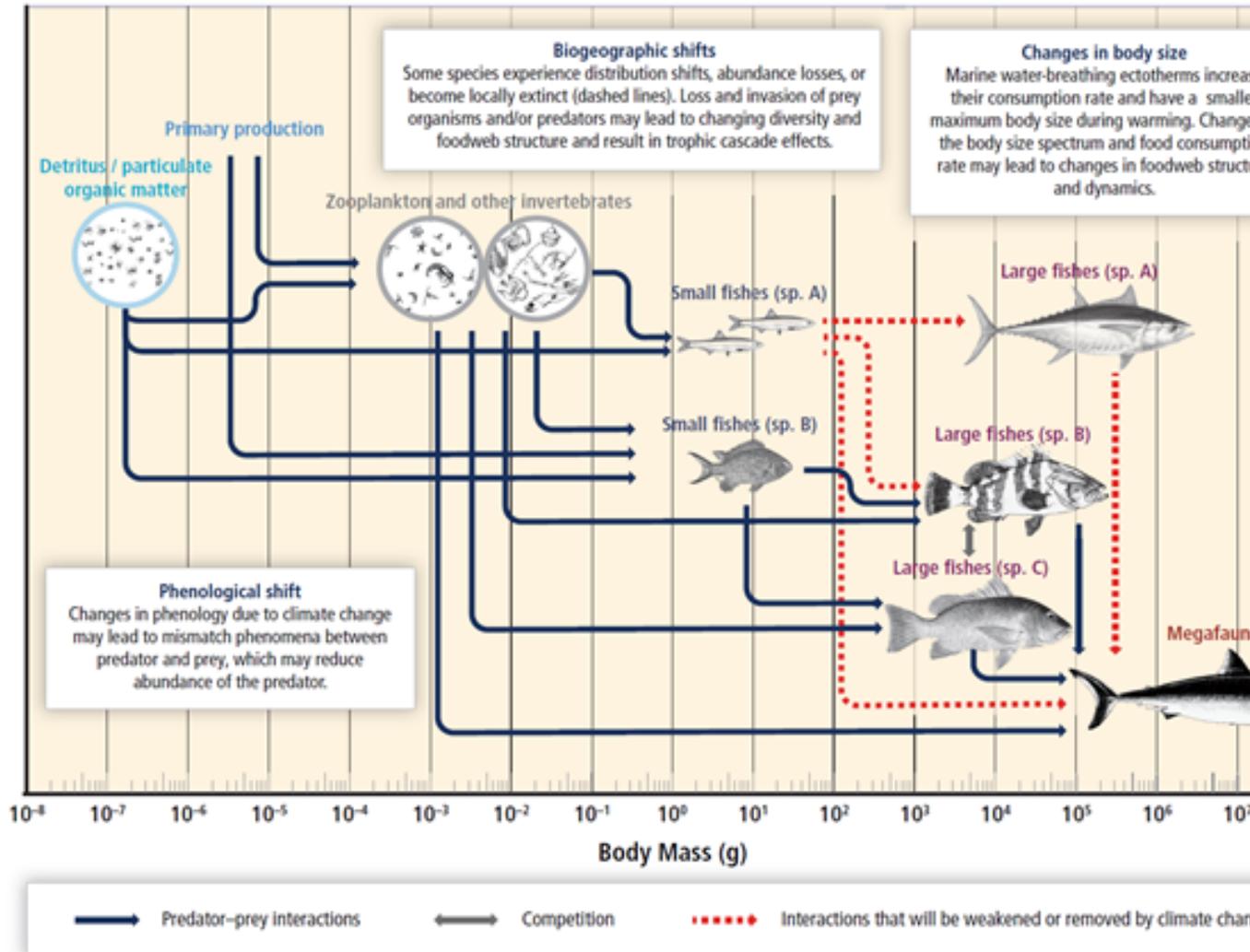


Figure 3. Diagram of expected responses to climate change in the marine food web^[12]¹². A coupled pelagic and benthic food web is structured by the body size spectrum of species. Combined warming, hypoxia, and ocean acidification reduce body size, shift biogeographies, change species composition and abundance, and reconfigure trophic linkages and interaction dynamics. Fishing generally removes large-bodied species and truncates the body-size spectrum of the community. This confounds the detection and attribution of food web responses to climate change. Arrows represent species interactions (e.g., between predator and prey or competitors for food or space). Broken lines reflect the potential loss of populations and trophic linkages due to climate change.

12. Sea surface temperatures (SST) have warmed significantly during the past 30 years along ~70 percent of the world's coastal zones, with an average warming by 0.18 ± 0.16 °C per decade in these areas^[13]¹³. Based on projected temperature increases, there is high correlation that positive coastal

SST warming trends will continue. Temperatures in the Canary Current to the west of Northern Africa have increased since the early 1980s, resulting in changes of fish species (for example, Mauritanian waters have become increasingly suitable for *Sardinella aurita*). Additionally, there is medium evidence and medium agreement that primary production in the Canary current has decreased over the past two decades[14]¹⁴. Increases in ambient air temperature will likely contribute to higher water temperatures in shallow coastal areas which ? in combination with factors outlined above ? is likely to impact marine and riverine ecosystems (such as mangroves) and dependent fisheries. Fishing generally removes large-bodied species and truncates the body-size spectrum of the community. This confounds the available information on detection and attribution of food web responses to climate change. Studies suggest that warming and ocean acidification will reduce the nutritional quality of some seafood by reducing their levels of protein, lipid and omega-3 fatty acids[15]¹⁵, [16]¹⁶, [17]¹⁷. Higher water temperatures in combination with increased pollutant loading of wetlands are likely to reduce harvested tonnage of shellfish and compromise food safety[18]¹⁸. In addition, rising aquatic temperatures are associated with the increasing risk of spreading pathogens affecting fish health and mortality rates, as well as potentially resulting in health implications for humans when consuming aquatic products.

1.1.3 Eastern Boundary Upwelling Ecosystems (EBUEs)

13. Upwelling systems bring nutrient rich waters from the deep ocean to the surface which contribute to complex food webs, determining the local abundance of small pelagic fish species (e.g. *Sardinella maderensis*, *S. aurita*, among others). Therefore, these systems are often associated with highly productive oceanic regions and offer great economic value in terms of fisheries. Upwelling systems are driven by ocean surface winds and are thus influenced by climatic events that cause shifts in these prevailing winds (such as El Niño, the Indian Ocean Dipole and Tropical Atlantic Variability). Consequently, climate change may impact upwelling processes, reducing upwelling and leading to reduced fish abundance and harvests. The Eastern Boundary Upwelling Ecosystems ? located in the eastern Atlantic Ocean to the west? constitute one such regional system. The IPCC notes that EBUEs are vulnerable to changes in sea surface temperature, oxygen concentration, wind strength and direction, stratification and carbonate chemistry, yet detection and attribution of changes within EBUEs to anthropogenic climate change is difficult owing to natural decadal variability[19]¹⁹. The expected impacts of climate change on upwelling in the eastern Atlantic Ocean will result in reduced fish stocks, and consequently a reduced catch. This will be exacerbated by the impacts of climate change on post-harvest processing and waste management, which is already sub-optimal, leading to increased spoiling and wastage of already reduced catches.

1.1.4 Sea level rise (SLR)

14. It is estimated that a one-metre[20]²⁰ rise in sea level would inundate 8.7% of the total national land area, including 60% of mangrove forests, 33% of swamp area and 20% of rice growing areas

(assuming no protective measures are taken). In addition, saline water would infiltrate ground water aquifers, which lie at depths of between 4?50 m below the ground surface[21]²¹. The coastal impacts of SLR ? as compounded by intense rainfall events ? include: i) tidal flooding of low-lying areas along the open coast and up the river leading to loss of port infrastructure and fish landing sites; and ii) shoreline erosion of the open coast with loss or damage to fish landing sites in particular. The impacts of SLR, coastal erosion and reduced freshwater availability on the artisanal fisheries sector is unquantified, but likely significant. Climate change-induced impacts on fish spawning habitats include saline intrusion into river ecosystems as a result of SLR and the degradation of mangrove (*Rhizophora* spp., *Avicennia* spp.) forests ? which have already been subject to widespread logging and salinisation. One estimate indicates that the area of mangrove forests decreased by 11% between 1968 and 2000 (Figure 5)[22]²². A recent study suggested a decrease in mangrove cover of ~650 ha per year between 1980 and 1993 as a result of over-utilization and increased salinity[23]²³. This is expected to have had and will continue to have considerable negative impacts on local fish stocks.

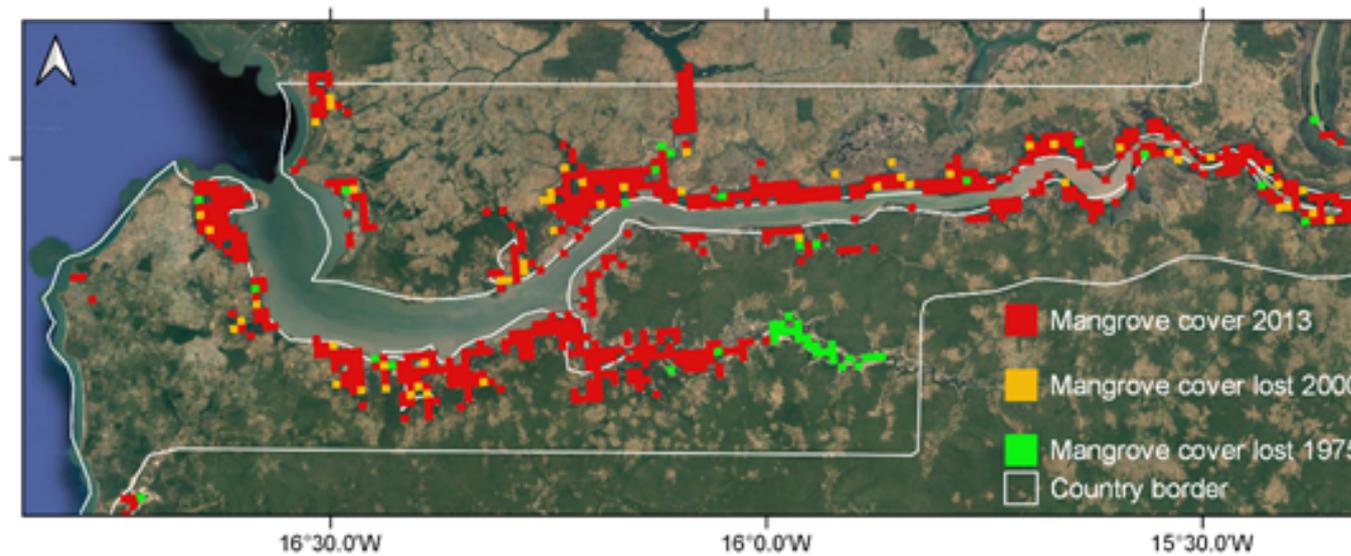


Figure 4. Change in mangrove forest cover between 1975 and 2013 (1-km resolution)[24]²⁴. Map created using QGIS 3.10.7 with imagery from Google Maps using the XYZ Tiles service.

15. Related to the local and adopted sectoral specific climate scenarios, it is estimated that 51%[25]²⁵ of the fish caught in the artisanal fisheries benefit from the food chain related to mangroves as these ecosystems serve as spawning grounds and nurseries for many fish species, in particular shrimp. Mangrove roots also serve as the basis for well-managed oyster fisheries, operated by women collectors. Sea level rise resulting from climate change is likely to increase salinity to levels exceeding species-specific physiological tolerance thresholds[26]²⁶, [27]²⁷, [28]²⁸. Hyper-salinity in

mangroves and other wetland ecosystems could result in systematic spawning and recruitment failures and reduced population of economically important fisheries species[29]²⁹. In addition to hypersalinity, sea level rise increases flooding durations, which can lead to plant death at the seaward mangrove margins³⁰³⁰, as well as shifts in species composition³¹³¹, ultimately leading to a reduction in ecosystem productivity³²³² and ecosystem services. As a result of increased sea level rise, mangroves can respond by retreating shoreward. As mangroves retreat, less habitat is available for fish spawning sites and nurseries, negatively impacting local fish stocks, which are already under pressure as a result of poor post-harvest and waste management processes. As spoilage and waste of fish at the post-harvest level are expected to be further aggravated by the impacts of climate change, the demand on dwindling fish stocks will continue to rise. The summary information on the above impacts are presented in Table 1 and will be evaluated in detail and the project baseline updated as part of the project inception. Subsequent sections below elaborate on the barriers that are addressed by the project are focusing on post-harvest portions of the coastal fisheries value chains.

16. Although climate impacts on ocean fish stocks affect artisanal and industrial fishing operations alike, with impacts of increased storm surges worse for small vessels, influencing fishing practices *per se* is beyond the scope of this project, which instead focuses on climate-proofing the portion of the fisheries value chain from post-catch handling to processing (including waste management). The national oceanic exclusive economic zone of 19,500 km² is estimated to be potentially yielding an estimated 75,000 tonnes of fish catch per year and less than 32,000 tonnes landed in the country is dominated by the artisanal value chains and accounting for almost 90 percent source of the catch. The documented climate-related hazards in the country are vast and ranging from frequent and severe flood events, storms, droughts, cold spells, intra-seasonal drought, heat waves and increasingly fluctuating and unseasonal rains. Coastal fisheries resources are vulnerable to current and projected potential adverse effects of climate change because of: i) prevalent low productivity; ii) challenges to upgrading value addition practices; and iii) limited productive and climate resilience capacities of producers and value chain-adopted services. The barriers to be addressed are presented in further detail below:

Policy responses and evidence-based actions inadequately targeting climate resilience building; and especially the value chains for artisanal fish processing.

17. The governmental institutional mandate on the national coastal and inland fisheries management policy is fairly developed having the dedicated national Department of Fisheries, DoF and a close network of sector stakeholders including private sector and community based co-management structures, however the department is weak in ensuring cross sector coordination mechanisms, has limited sectoral allocated resources and lacks expertise, knowledge and plans to systematically address climate change actions. The main national policy framework for the coastal fisheries sector primarily focuses on managing the artisanal fishing activities that take place within the 18 nautical miles and monitoring and surveillance of the national maritime territory, which includes an exclusive economic zone (EEZ) of 200 nautical miles ? along with a large continental shelf (of about 4,000 km²), and The Gambia River and its two banks, which cover 1,120 km (700 mi). The nearshore coastal and inland waters and associated aquatic resources collectively, being a significant contributor to national food security and livelihoods from capture fisheries. The overlap in the sector policy and

support programmes that encompass the sector under agriculture and with limited resources allocated to fisheries remains. Fish farming activities that are emerging along the brackish waters, rivers where land based practices^[33] are core components of the food nutrition and economic development programmes, are also faced with conditions of weak regulatory and sector coordination.

18. The post-harvest and processing value chains of the coastal fisheries sector are, particularly, characterized by limited investments and operational capacity in post-harvest processing and value addition as factors that additionally impact on the inadequate resilience of the domestic market value chain actors, and preserve as much of the catch in the face of post-harvest losses. Fish processing and the related post-harvest segments of the value chains have in turn faced gaps in having relevant policy enabling and coordination of the sector in place, and the institutions such as DoF have limited capacity to respond with systematic policies that promote rebuilding of the hitherto disrupted supply chains is evident in the responses the covid-19 pandemic. The focus on small scale solutions for fish processing with efficient practices such as the use of renewable energy for processing, efficient supply chains to markets, cold chains for storage, and energy efficient smoking and drying would ensure the landed artisanal fish catch is maintained will also be supported by targeted policy and business support measures, such as through tech and process demonstrations and financing services. Investment regulations and market opportunities for the industrial fishing value chains are not understood even by the fish processing enterprises and the requirements for large scale investments, skilled work force and financing require close coordination of government and partners. Policy deficits to these effects will be evaluated to inform the recommended climate resilience building and livelihoods proofing models including diversification options. In addition, opportunities that are anticipated from the planned fish landing port of Banjul, would require the government and partners developing and adopting enabling policy and regulatory direction.

Climate change exacerbated stresses on coastal fisheries production and post-harvest management systems, and compounded by weaknesses of local infrastructure proofing and related business financing models in addressing climate resilience and gender mainstreaming actions, amidst population influxes and dependence of coastal communities

19. The observed past and current, and projected future impact scenarios of climate change hazards on fish processing activities and the sector are accolated with the climate change hazards, and include direct and indirect impacts such as high levels of post-harvest losses along the value chains of capture coastal and riverine fishing actors, and controlled aquaculture and agriculture based food systems, which are expected to intensify. Additionally, simulation models have suggested that the West African EEZ regions will have an average reduction in maximum catch landing potential by 26% by the 2050s when compared to 2000 levels, with some countries undergoing a reduction in landings of up to 50%. This model is based on the conservative Special Report on Emissions Scenario (SRES) A1B, indicating that the economic impacts of climate change on West African fisheries are likely to be considerable. To ensure the most adequate assessment of baseline and respective proposed measures, the variables on fisheries dependence, these scenarios including the gross indicator of mean projected surface temperature increase, will be considered and evaluated to update the vulnerability analysis for the sector.

20. The projected and already evident declines in the landed catch tend to continue in current and future scenarios, mostly impacting productivity of the popularly domestic market-consumed species of catfish and herring. The result is supply chains that have even more time sensitive processing requirements responding to fluctuating temperatures that require the balance of high and low-tech

cooling systems that tend to fail with unprecedented peak temperatures. Despite the key role that women and youth play in the country as agents of change in the key productive activities including fisheries, these groups were reported to face even more challenges over the past decades of political volatility. On the adaptation of the baseline scenario, an example relates to a potential climate change resilience building ? additional scenario where the National Energy Policy (2014-2018) initiative promotes nationwide adaptation of improved cooking stoves could be extended to include improved fish-smoking ovens, which requires unlocking the business start-up and entry barriers.

21. The regional and localized climate change scenarios and weather variability events are associated with increasing storm surges, rainfall variability, dust storms and temperatures changes including cold spells and heatwaves, and extended drought seasons. Increasing reported evidence suggests the resilience of small-scale fisheries value chains are affected, especially directly by temperature increases and drought events. The mostly documented anthropogenic factors affecting coastal fisheries in the country include increasing human population pressure, expansion of tourism infrastructures, and limited appropriate waste management ? all of which contribute to the pollution of coastal waters. The anthropogenic factors and impacts along these productive zones are compounding climate change risks, thereby threatening the resilience of coastal ecosystems and resources as well as the livelihoods of communities and supply chains that rely on them. Addressing adaptation in the primary capture fisheries alone cannot be disaggregated from addressing the impacts of climate change on other land based productive sectors of the economy including agriculture. Although the government introduced ?The National Action Programmes (NAPs) addressing the physical, biological and socio-economic aspects of climate change adaptation and resilience building have largely been a piecemeal approach through individual sector plans and without macro-level policy and strategic perspective. Similarly, the uptake in enterprise business plans require well targeted policy and regulatory action plans and operational guidelines of post-harvest processing and end-consumer interfacing sale points; in addition to accounting for and addressing internal enterprise inefficiencies in coastal and inland fishing and aquaculture value chains production. It is noted that climate adaptation policies and strategies focusing on coastal areas and particularly in the fisheries sector are unsustainable in the long run, in as far as addressing sustainable fisheries and livelihood security in the context of increasing fishing pressure, and related social, environmental and ecological disturbances. The project thus intervention underscores the need to deliver cross sector guidelines to this effect that are lacking in totality or not ensuring the due attention on mainstreaming climate resilience building models. The current project baseline assessment noted structural considerations that should be addressed towards the integration of fisheries concerns into other sectoral approaches and policies, as well as gender mainstreaming actions. Likewise, examples in the area of solar energy, that relate to policy mainstreaming and business investment actions could include the promotion of solar equipment in the fisheries sector for the production of ice and for the drying of fish. The COVID-19 pandemic is creating and continues to impose unprecedented and more extreme hardships on livelihoods, including supply chains within domestic country conditions and globally. Latest data on disruptions of supply chains that will also have to be integrated in development initiatives, including projects and programmes that are addressing environmental sustainability. These options will be further profiled during the project inception phase. To this effect, solutions towards improved fish-smoking technologies and cleaner fuels, such as groundnut shell briquettes and pellets, have been explored and promoted at national and region level and in other coastal artisanal fisheries settings.

Inadequate capacity and awareness on climate change adaptation issues, and lack of targeted and relevant information and knowledge for coastal fisheries extension agents, and enterprises and communities

22. Climate-change induced changes, such as seasonality of access to distant fish stocks from coastlines and declining catches results in a significant impact on the livelihoods of fisheries-dependent communities, yet knowledge of the relevant scenarios is highly underdeveloped. Growing dependence on coastal and inland fishing affected by drought and flood events, limited information systems on occurrence and resilient capacities, such as livelihoods diversification and infrastructures. Business processes and financing services for infrastructures and post-harvest supply chain facilities undertaking processing and related storage and input suppliers, like wholesalers, face multiple challenges, as exposure to climate risks is generally increased by the type of work they undertake. The barrier analysis points to the need for building knowledge of climate resilience building models that can be adopted to local institutions, communities and enterprises that are engaged in filleting, smoking, open-sun drying; and marketing actors, including retailers, rural inland and coastal market infrastructures, operators and consumers. Fish processing and exporting enterprises and locally registered commercial fishing companies are challenged by external factors including inadequately sited business and technology propositions and viability, stringent food safety regimes, financial and regulatory environment, among others. Road transport connectivity to production locations faces deficits as infrastructure designs in general are inadequate and affected especially by flood related events. Small-scale coastal fishing, marketing and retail value chain actors challenged by weather as part of their day-to-day activities. Similarly, wholesalers, storage suppliers and transporters segments of the value chains and operators encountered challenges to access retail traders, for instance events affecting electricity supply and reliability of cold chains^[34] are integrated in proposed responses. The project baseline initiatives and scenario underscores limited capacity and knowledge at national and local level on climate change adaptation strategies, absence of innovative enabling policies and strategies to address the potential impact of climate change and weather variability on coastal fisheries. The impact on specialised value chains levels is largely uncertain, and day-to-day challenges in the context of building climate resilience will be evaluated, and awareness raising actions implemented.

23. Localized community awareness and capacities of communities, ministries, private sector and support service providers was also found to be limited in adequately addressing CCA needs, and so was the integration of considerations to promote gender equality and women empowerment. The underlying socioeconomic and climate influenced challenges include the undiversified sources of food, export earnings and incomes, enhancing productivity and sustainable use of the fisheries and aquaculture sectors that constitute an important resource for building resilience to social economic stresses, at the same time potentially contributing to climatic resilience building of the economy and the communities.

24. Awareness on adaptation actions that are accounting for inclusion of registered coastal industrial scale fishing companies? and intermediaries i.e middlemen, typically men as few women that are involved in the value chain; are to be integrated in relevant dialogue processes. To ensure sustained results and impact, the specific interventions will focus on strengthening of organizational management capacity and specific enterprise level interventions to promote equitable participation of women and men in project activities and decision-making relating to income-generating activities.

2) The baseline scenario and the associated baseline projects

25. The Government of Gambia (GoG) launched the renewed National Development Plan (NDP 2018-2022), which has the aim to strengthen democratic systems and good governance, and to promote socially inclusive and environmentally sustainable development. The strategy has consistently prioritized fisheries sector as an important contributor to food security and employment generation, despite the limited allocation of resources, which affects most sectors of government. However, the low levels of awareness imply most of the export food rejections from developing countries by importing countries can be attributed to a lack of basic food hygiene, and limited capacity and awareness on quality including packaging and labelling requirements.

26. National Adaptation Programme Action (NAPA, 2007) remains the main adaptation document to guide government action. It critically re-examines the role of climate on societal and natural systems and proposes the actions that need to be taken to facilitate update and scaling of financing for adaptation actions. Among the ten-priority project identified by NAPA are two that are of direct relevance to coastal fisheries, i.e. (i) restoration/protection of coastal environments; and (ii) increasing fish production through aquaculture and conservation of post-harvest fishery products.

27. In recognition of the projected scenarios resulting from climate change, the PAGE provided a framework for the development of a National Climate Change Strategy, NCCS with the aim to facilitate the mainstreaming of climate change in national and sectoral policies, programmes, and plans as part of the national development agenda?. Consequently, sectoral policies, strategic plans and ecosystem based on coastal development initiatives were prepared, prioritizing sustainable development of the fisheries sector with policy objectives on: long-term utilization of the fisheries resources; increasing sector employment opportunities; scaling up the contribution to foreign exchange earnings; and improving the institutional capacity and legal framework for management of the fisheries sector.

28. Low Emissions Climate Resilient Development Strategy (LECRDS) was adopted to continue and deepen the process of integration and mainstreaming of climate change in all national development frameworks and sectoral policy frameworks (ANR Policy, Forest Policy, and Fisheries Strategy) and to engage the private sector. The fisheries sector policy frameworks which are in place have not been updated to and require dedicated sectoral approaches to climate adaptation and resilience building, which is the focus of this project. In particular, the current baseline scenario is characterized by limited capacity and knowledge at national and local levels on CC dynamics, absence of policies and strategies to address the potential impact of CC and weather variability on coastal fisheries. Research as well as policy analysis capacity are limited, and as a result designing measures to develop the resilience of coastal fisheries, enhancing the production capacities in terms of quality and quantity remain limited.

29. The established climate change portfolio and coordination office within the Ministry of Environment, Climate Change and Natural Resources (MECCNAR) in 2012 aim is to facilitate policy coordination and implementation of climate change activities at the national and regional levels.

In 2016 the National Climate Change Policy was developed, which provides for enhanced institutional arrangements for coordination and mainstreaming of climate change in sectoral policies and programmes. This is particularly important as it will help create greater awareness of climate change and enhance data collection particularly in the coastal area. MECCNAR coordinated initiatives that are aimed at strengthening hydro-meteorological information and Early Warning Systems (EWS) constitute the overall national policy framework for CCA.

The sectoral Agriculture climate resilience building policy initiatives and projects constitute baselines that will be built on to develop and implement sector specific and local climate change information

and data management capacities. In this case, the incremental intervention will address coastal fisheries sector information and data management based on the EWS, and integration of community knowledge.

30. Baseline projects addressing baseline and climate targeted objectives to increase the resilience of agricultural productivity from crop farming and livestock sub sectors and diversification of off-farm livelihoods, include the: "Livestock and Horticulture Development Project" (IFAD LHDP, 2010-2015); "Establishment of a National Disaster Management Programme" (UNDP); "Adapting Agriculture to Climate Change" (FAO); Adapting Agriculture to Climate Change (AACC, World Bank/IFAD); Adapting Agriculture to Climate Change (AACC, IFAD); and Adapting Irrigation to Climate Change in West and Central Africa Project introducing climate-smart irrigation to smallholder farmers.

31. FAO/UNDP project "Integrating Agriculture in National Adaptation Plans (NAP-Ag)" especially addresses actions to accelerate the mainstreaming of climate change adaptation into development planning and budgeting processes for the agricultural sectors, including for the NDP. It encompasses technical and institutional capacity building on national adaptation plans, developing integrated road maps and improving evidence-based results for national adaptation plans and for an impact monitoring framework for the agricultural sectors.

32. Large-scale Ecosystem-based Adaptation approached with a focus on developing a climate-resilient, natural resource-based economy are addressed by the UNEP/Green Climate Fund that launched in January 2018 for a period of 6 years; and targeting is to reach about 11,550 households directly and rehabilitate about 10,000 ha of degraded forest and wildlife parks through reforestation, enrichment planting, conservation of rare or endangered species as well as the restoration of 3,000 hectares of abandoned and marginal agricultural lands. The project constitutes activities that address sectoral capacity gaps and initiatives to build adaptation capacities through value chains upgrading, and youth employment among others. The relevant baseline actions and results will be included in adopted lessons learned, including methodologies and assessments and data applied to regional policies and programmes, such as the EU and ECOWAS partnership with UNIDO, to make the implementation more effective.

33. NEA/UNDP/GEF Coastal Resilience project "Enhancing Resilience of Vulnerable Coastal Areas and Communities to Climate Change" (i.e. rising sea levels) project has a component on alternative livelihoods with the aim to reduce the impacts of climatic stresses on the farmlands and rice fields of affected coastal communities. Productive resources such as horticultural gardens with over-head tanks are used as an alternative to the rice fields and farms in the wetlands affected by salt intrusion and present significant potential for improving the fisheries value chains. As this baseline project is targeting the West Coast region, synergies with interventions to support livelihoods diversification and climate change resilience building will be evaluated.

34. USAID BaNafaa project (2009-2014) ? Gambia-Senegal Sustainable Fisheries Project ? aimed at ?Artisanal fisheries and coastal ecosystems and selected stocks shared with Senegal are being managed more sustainably, incorporating significant participation of fisher folks in decision-making, and attaining improved economic benefits for both men and women involved in the market value chain.? The upcoming GCCA+ Climate Resilient Coastal and Marine Zone Project, financed by the EU seeks to benefit coastal communities and to help them adapt to impacts of climate change through institutional strengthening, knowledge management, and demonstrated implementation of the Integrated Coastal Zone Management (ICZM) approach, at national and local levels. Other relevant projects and initiatives to be considered include the Oyster Women's Association (TRY) shellfish

management and development plan, West Africa Marine Ecoregion (WAMER) Management Results relating to ecosystem awareness, gender empowerment and institutional strengthening. These initiatives are aiming at livelihoods diversification and integration of relevant CCA and resilience building measures to address a range of biophysical and socioeconomic vulnerabilities to climate change and weather variability.

35. Under The Artisanal Fisheries Development (GAMFIDA) project supported by the Government, fisheries communities and industries, the African Development Bank (AfDB) and the Arab Bank for Economic Development in Africa (BADEA), a fisheries jetty in Banjul was built and commissioned in 2013. The project supported infrastructure-upgrading investments aimed to promote the adoption of climate resilient and adequate national fishing trawlers in the national fishing fleet to enhance fishing and catch handling capacities. The incremental interventions for this project will evaluate operational capacity building needs from a climate resilience building perspective, and including plans for developing the nexus of climate, quality, sanitary, and food safety compliance systems for trade, and value-added processing techniques and skills targeting youth, women fish smokers and other vulnerable groups.

36. Complementary fisheries sector capacity building initiatives supported by UN agencies, notably FAO and UNDP, and the World Bank Regional Fisheries Programme (WARFP) constitute key baselines for this project. As part of the project scaling up plans, the FAO Technical Cooperation Programme (TCP) projects on post-harvest fisheries and aquaculture development and on climate change adaptation in marine artisanal fisheries, as well as the WARFP regional and national actions, and included a number of partner countries in the region including at its second phase of implementation effective 2019, will be considered for synergies. These projects are addressing the update strategies on the management and development of climate resilient fisheries value chains and update of relevant knowledge and good practices in the sub-region. Building on the evaluated baseline scenarios and projects, the needs for improvement in generation, management and dissemination of sectoral specific information needs and data management capacity for the artisanal fisheries sector will be integrated with the weather variability.

37. The baseline EWS plans and local knowledge of communities, experts and value chain business actors, capacity will be drawn on to compliment linkage to weather stations and generation of relevant data to the project objective. As a baseline scenario relating to the COVID-19 pandemic, The Gambia, the government approved a GMD 500 million COVID-19 Emergency Fund and a Response Plan with an indicative budget of US \$8.8 million to address the situation in the country. (UNDP 2020) The UN agencies in the country are also providing support in all areas of the response including coordination, case management, logistics and safety, epidemiological and laboratory surveillance, risk communication and social mobilization and psychosocial care and support. The baseline scenarios and project workplans will be adapted on a monthly schedule to re-evaluate the extent to which certain planned activities (i.e. trainings, seminars, workshops, study tours etc.) can take place and/or how to adapt the workplan to alternative solutions while complying with the global and national regulations. The project might also need to conduct a comprehensive socio-economic impact of covid-19 assessment in case of notable gaps in information as part of the inception phase, looking at mitigation measures short and long term and how to safeguard livelihoods and sustainable development progress., which will need to be closely coordinated with the incremental scenarios of this project.

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

38. The project objective is to increase adaptive capacities for The Gambia coastal fish processing value chains and promote climate resilient business models focusing on improved post-harvest fisheries food systems (including processing and waste mitigation) to vulnerable communities. The alternative scenario addresses the barriers identified with various segments of the fisheries value chain, which if not adequately supported hamper the identification of relevant policy responses and climate-technology solutions. Through building the technical and managerial capacity of the Department of Fisheries (MoFWR/DoF) and working with fisheries communities to improve resource management, innovative business models and technologies will be promoted, with private sector investments mobilized to address the challenges of post-harvest losses and waste, food security outcomes and livelihoods diversification. Access to weather information will also be addressed as well as increasing awareness among the various actors about climate change and climate variability and their impact on coastal fisheries. Additionally, as highlighted on the main barriers, strategies that are gender specific in relevance to adaptation planning within the fisheries sector will also be addressed as part of the project-supported actions. The objective is to be delivered through the profiling and promotion of climate-resilient business models, developing enabling policy guidelines, innovative knowledge for instance on infrastructure proofing, and capacity strengthening for livelihood diversification, particularly targeting tech and financing for start-ups with vulnerable youth and women for enhanced community empowerment.

39. The project comprises of four components, namely: Component 1 addresses the barriers at the policy and sectoral strategy level and aims at mainstreaming CCA and Gender Equality for Adaptation measures into the relevant sector policies and national strategies. Component 2 aim is to support the strengthening of business linkages, and established business models, with investments targeting adoption of improved technology, process and equipment specifications, as well as skills training on their applications for fish smoking, drying, cold storage as well as fish waste drying, milling/meal. Component 3 aims at strengthening institutional and community capacities through trainings and awareness campaigns targeting various audiences. Community empowerment for resilience building and awareness raising on CCA will integrate the use of local community in climate change and weather variability early warning knowledge and EWS adopted to sectoral and value chain productive systems; and finally, Component 4 aims at implementing the project monitoring and evaluation plans in support of the three substantive components of the project and for managing the generated knowledge, good practices and lessons learned.

40. The project is proposed to support a cumulative number of at least 10,000 people (60% male, and 40% female by numbers) and it will aim to have at least fifty percent that is 5,000 people directly involved in the fish processing and post-harvest value chains activities and outputs. Targeted direct project beneficiaries will primarily be located along the coastal areas, including staff of extension agencies and regulatory institutions, operators of enterprises and community organization representatives. The project target relating to restoration of marine habitats will be an additional impact of the project targeting at least 10,000 hectares. The business targeted interventions will involve at three Community Fisheries Centres (CFCs) to ensure inclusive impact as the centres involve a significantly large number and source of livelihoods for women and youth, and as agents of plans for restoration of coastal habitats. In accordance with the theory of change the results will be sequential starting with 45 fish processing enterprises profiled ([Gambia Fisheries & Seafood Companies | Contact details \(accessgambia.com\)](#)) and of which fifteen targeted for the project direct support through output 1.2, output 1.3 and output 2.1. The project investment component of output 2.1 involving at least the fifteen enterprises profiled and innovative start-ups will be the main resource for trainings on the introduced tech and financing solutions, and the target for training is at least 5,000

people through this output and promotion for scaling up of good practices to the profiled enterprises of the artisanal sector, aquaculture and potential industrial fishing vessels to land catch in the country. At least 10,000 people will be reached through the project activities sensitization, awareness raising campaigns and outreach through multimedia, and potentially more in related sectors and food systems in the country and the region.

41. Through creating an enabling environment to enhance the resilience of small-scale fish-dependent enterprises, the proposed project will contribute considerably to a green recovery for from the COVID-19 pandemic. Numerous aspects of the proposed project will adopt a build-back-better model to ensure the resilience of the small-scale fisheries value chain both to the impacts of climate change and future global crises. These include, *inter alia*: i) improving value and supply chain resilience and circularity ? through implementing and developing appropriate business models and facilitating private sector investments to enable livelihood diversification and security; ii) strengthening climate resilience ? by enabling the mainstreaming of climate change and gender in institutional and regulatory frameworks, as well as developing climate-resilient business models; iii) promoting innovations to support a transition away from the business-as-usual ? by introducing post-harvest technologies to ensure efficiency and sustainability of the value chain, and accompanying those with appropriate health and safety measures to safeguard the coastal communities and ecosystems. The project will develop a baseline for the private sector engagement-approach. This approach will be used as a starting point for conceptualizing the project targeted interventions that in turn, will be further discussed with and developed in close consultation and engagement with project partners. The project will furthermore evaluate means to conduct a more updated socio-economic impact assessment COVID-19 pandemic at the inception phase; and identify risk mitigation measures to safeguard livelihoods and sustainable development progress for the short and long term. Figure 6 below presents the project theory of change.

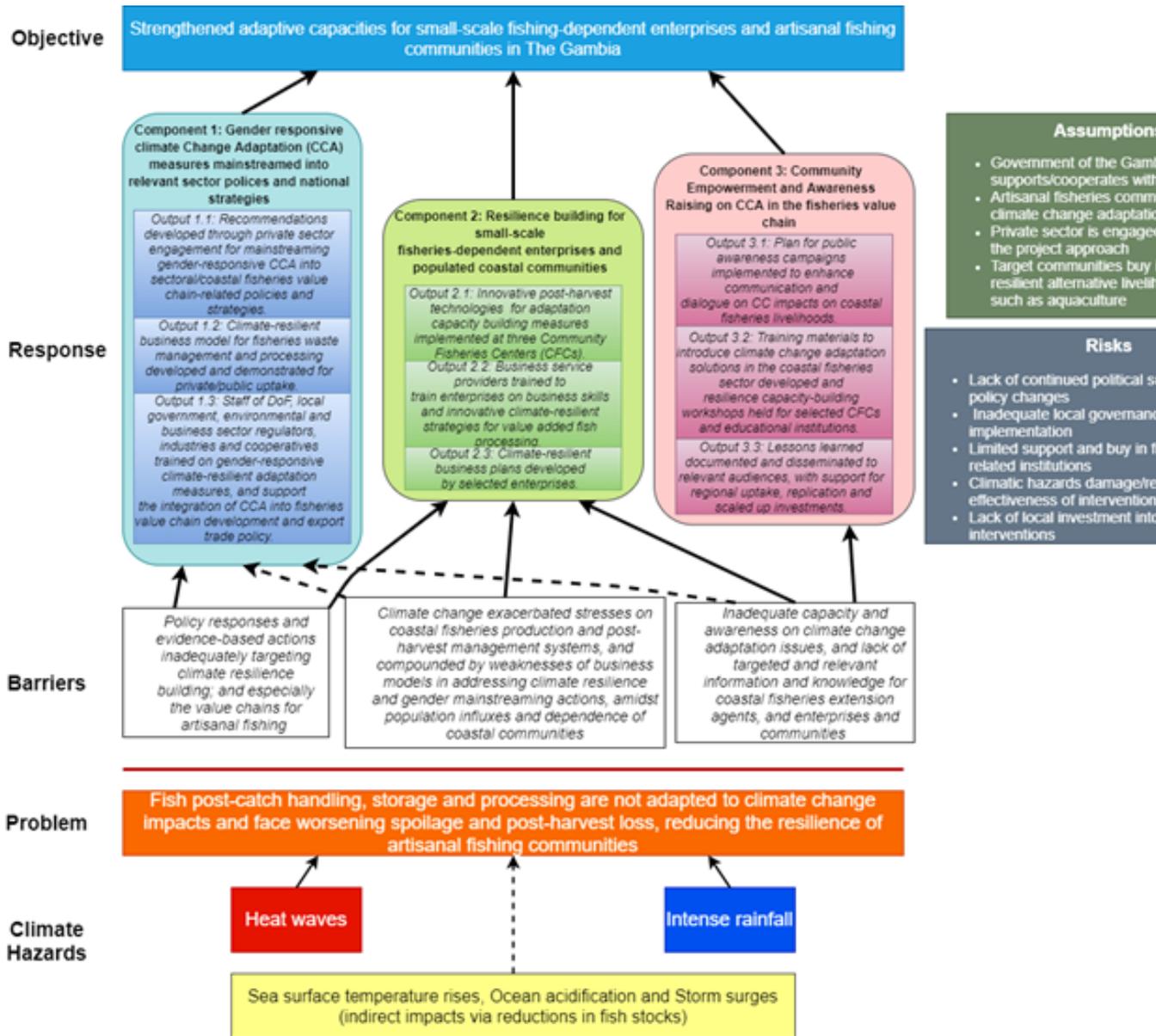


Figure 5. Project Theory of Change

Description of components and outputs of the project

Component 1: Gender-responsive Climate Change Adaptation (CCA) measures mainstreamed into relevant sector policies and national strategies:

42. Component 1 addresses institutional and policy capacity building for the key sectoral institutions, and will especially engage the project execution partners, and sub-sector actors to adopt gender and adaptation enabling practices. The component will support the rostering and mobilizing the relevant sectoral institution(s) and experts during the project inception phase, and initiating plans to conduct the planned analysis. The component will be carried out in close collaboration with the respective sectoral institution(s) starting with an assessment and defined models that are aimed at informing the detailed policy support activities. A comprehensive review of the relevant sectoral policies and strategies will identify the gaps and also the potential synergies between the sector strategies that can contribute to increasing greater awareness in the coastal zone being adopted and widely applied to enhance the project and overall national CCA objectives. The result of disseminating good practices, and introducing adopted regulatory frameworks will involve the provision of advice and guidance to ensure that best practices as proposed to the various actors, including Staff of DoF and FQSA, local governments, environmental and business sector regulators, and industries including small enterprises and cooperatives.

Output 1.1: Recommendations developed through private sector engagement for mainstreaming gender-responsive CCA into sectoral/ coastal fisheries value chain-related policies and strategies.

43. This output will support the sector institutions to review existing the climate resilient regulatory and policy measures on fish processing, including value chain tech and financing, quality and safety guidelines, standard setting and official control procedures and environmental management guidelines. This output will produce adaptation action plans and guidelines to demonstrate how investments into fisheries and new resource uses, such as waste management for food and feed fillers, can address the barriers to climate adaptation capacity and resilience of livelihoods. By introducing climate-resilient waste management technologies to the fisheries sector to reduce the amount of fish wastage through unintentional spoilage, the efficiency of processing will be improved. Relevant technologies will include climate-resilient (i.e. those that will enhance efficiency despite the impacts of climatic hazards, including heat waves and intense rainfall events) fish processing, drying, smoking, and cold chain applications, as well as fish waste drying, milling/meal formulation for food and feed fillers. The introduction of such climate-resilient technologies will ensure that a greater percentage of the catch (compared to current percentages) is used, which will indirectly reduce the pressure on current fish stocks (through a decrease in the amount of fish that need to be caught to produce a final product), which are expected to decline under future climate scenarios. Activities under this output will feature stakeholder policy consultations and dialogue to identify the policy and regulatory measures needed to promote enabling regulatory practices and the identified sectoral, cross-sectoral and cross cutting policy recommendations. Relevant assessments and stakeholder consultation will be planned in accordance to specific thematic scenarios, particularly on post-harvest loss management and diversification approaches to adaptation. A sectoral analysis on industrial fishing practices and small-scale fisheries against criteria including sustainability, ability to adapt to expected climate change impacts, and domestic value creation will be developed, in order to ensure the formulation of holistic policy measures. Ultimately, policy plans shall highlight opportunities of mainstreaming climate change adaptation beyond small-scale fisheries into industrial fishing practices likewise. Furthermore, the output will produce and recommend an adequate gender mainstreaming strategy. To ensure the most adequate assessment of baseline and respective proposed measures, the variables on fisheries dependence (Allison et al. 2009), including the gross indicator of mean

projected surface temperature increase, will be evaluated for an updated analysis. Composite indexes of employment and economic dependence on the fisheries sector, i.e. number of fisheries, export value as proportion of total exports, proportion of active population in the sector, total landings, per capita demand ? can be updated by applying the value chain diagnostic tools. The studies will inform project structures that will be established to support implementation of the subsequent activities of the project; and the lessons-learned and good practices will be documented for wider dissemination as learning guides, and for scaling up and replication.

Output 1.2: Climate-resilient business model for fisheries waste management and processing, and associated infrastructure developed and demonstrated for private/public uptake.

44. This output is focusing on promotion of good development practice for addressing climate change challenges through mechanisms that expand livelihoods options. Activities will address improved understanding on mechanisms that promote institutional approaches to adaptation policy responses, and especially relying on public-private partnerships and cross sectoral coordination to climate smart business models and training services and ensuring the engagement of communities. The value chains of waste management and aquaculture good practices will be utilised as entry points to expanding livelihood options considering the relevance to different climate and resource interactions. On one hand, the interventions will develop systems that demonstrate how waste management can become resilient; and on the other hand, expanding mechanisms for livelihoods options. Aquaculture and the linkages to established feed dependent value chain production and governance mechanisms will also be evaluated and lessons incorporated in delivered business models for potential uptake by the public and private sector. Moreover, this output will develop and promote a capacity building programme that demonstrates market mechanisms and good practices for building supply chains resilience and generating climate adaptation benefits and expansion of livelihoods options. The Department of Fisheries, DoF; the MECCNR, Climate Change Secretariat, and the Women's Bureau will be involved and act as the executing entities for activities. With a focus on improving the status and management of the fisheries, as well as generating sector adaptation and livelihoods outcomes; the entities will initially be assessed during the inception phase to identify the knowledge and gaps and in designing approaches, modules and materials that relevant to the various target groups. An in-depth needs assessment of the impacts of sustainable seafood and fishers supply chain and market certification schemes will be undertaken to inform the capacity building plans of the respective competent authorities; as well as to identify relevant business models and practices that are viable for application of market mechanisms; and to develop guidelines for designing of new business processes and post-harvest activities. As part of the institutionalised adaptation rationale and context for the assessments that will be undertaken under this output; it is to be noted that, whereas governments and public competent entities have the obligation to ensure efficient control systems; food supply chain certification schemes have evolved over the years as governmental regulatory mechanisms and industry and markets mechanisms; which also integrate environmental outcomes, such as eco and sustainability market labels that secure competitive market access. Concrete and on the ground promotion of proved market mechanisms will also be demonstrated according to each specialised competent authorities and sector partners' mandate. Market certification schemes and waste reduction and valorisation with linkages to demonstration projects in the 3 selected Community Fisheries Centers (CFCs) will be introduced to serve as business models for replication and scaling up of the approaches and trainings provided. This will include the setting up of one of the CFCs to demonstrate alternative uses of fish waste, such as animal feed, biodiesel/biogas and soil fertiliser. As part of the assessments, at least two value chains that are evaluated on criteria of NAPA, 2007 listed drivers of resilience of coastal fisheries value chains will be identified for demonstration of feasible market

mechanisms that can enhance the knowledge on certification schemes that promote the application of good manufacturing; and reinforce compliance with sanitary and hygienic, and environmental management practices. The demonstration projects and knowledge generated will be documented, thereby providing localised tools for raising awareness of governmental and regional actors, enterprises and service providers and fisheries communities. Finally, concrete and on the ground promotion of proved marketing guidelines mechanisms in response to the impacts of covid-19 on supply chains will be supported according to each specialized competent authorities and sector partners? mandate and protocols adopted for the value chains.

Output 1.3: Staff of DoF, local government, environmental and business sector regulators, industries and cooperatives trained on gender-responsive climate-resilient adaptation measures, supporting the integration of CCA into fisheries value chain development.

45. This output is focusing on promotion of good practice for addressing climate change challenges in the fisheries sector (artisanal and industrial) through mechanisms that expand supply chains resilience and livelihoods options. It will deliver trainings plans that build on the outputs 1.1 and 1.2, with at least fifty staff of extension agencies, regulatory institutional service providers, and management operators of fish processing establishments at national and sub national levels. Training materials and plans will, in addition to the integration of aspects of entrepreneurial development, technical skills training, quality assurance, may, complement the investment components of the project and take into considerations the COVID-19 disruptions and recovery options. The relevant tech, financing and specialized competent authorities, namely: Department of Fisheries, DoF; Gambia Bureau of Standards (GBS) and the Food Safety and Quality Authority (FQSA) will be capacitated to provide training and capacity building activities, including in collaboration with co-financing partner programme institutions and specialized institutions. The executing entities will be engaged in knowledge dissemination to enterprises and service providers to promote the option of fisheries certification and post-harvest losses reduction, and waste valorization mechanisms to improve fisheries adaptation and resilience outcomes. The activities will also include design of relevant training materials that integrate climate resilience building and gender equality and enable monitoring of the economic, social and environmental outcomes. A selected number of good practice models and mechanisms will be documented and promoted for uptake in capacity building initiatives with the aim to develop and provide support services for the coastal fish processing and related post-harvest management systems.

Component 2: Resilience building for small-scale fisheries-dependent enterprises and populated coastal communities

46. Component 2 focuses on support to strengthening of business linkages and establishing climate-resilient models for clean tech processing and bodiless models, and skills training such as towards the scaled improvement of fish smoking, drying and cold storage processes, as well as fish waste drying, milling/meal. These climate resilience building interventions for the fish processing value chains, including technologies and business models that will be promoted as part of technical assistance and investment activities with the expected focus involving at least three model Community Fisheries Centers (CFCs) enterprises. Improves start up processes and site designs to implement the resilient business model projects will be implemented with at least three CFCs locations that are exposed to high levels of post-harvest losses and wastage of catch. The aim will be to support the implementation of technologies that promote sustainability and safeguards compliance guidelines for site designs. The category and profiles of beneficiary group(s) and people that will be supported promotion and scaling up of the climate change adaptation technology will be ensured based on the good practice approaches

of agribusiness value chains and small business capacity building and criteria. (at least three) for demonstration technologies to be installed at the Communities Fisheries Centres include: i) fuel-efficient fish smoking kilns (e.g. FTT-Thiaroye); ii) solar-powered fish drying cabinets (e.g. SEED); iii) solar powered walk-in coldroom (e.g. ColdHubs); and iv) solar-powered ice-makers (e.g. ISAAC) will also include opportunities for mobilised investment financing to the investments made by the project and beneficiaries to achieve scalable impact. The most adopted and adequate technologies and best practices will be widely disseminated through engagement of target beneficiaries in global fora, networks, private sector linkages and in support of related outputs of the project.

2.1: Innovative climate-proof post-harvest technologies implemented at three Community Fisheries Centers (CFCs), with capacity building

47. The output will deliver good practice climate-resilient business models that promote proactive climate resilience building and management strategies, with the aim of designing out non-climatic stressors from natural resource uses and food systems. The output will deliver guidelines for undertaking feasibility assessments that integrate mitigation of climate sensitive post-harvest management and waste utilization systems to optimize value added fish food systems. A rapid assessment to map out the relevance of current installed technologies and capacities of industries including small businesses operating in the country about adaptation and resilience benefits, such as the fish smoking and drying systems currently in operation at Gunjur, will be undertaken. Specific activities of the output will adopt the value chain approach to undertake an in-depth needs assessment of selected fish processing enterprises including CFCs to determine their potential, the challenges and the extent to which these needs/ challenges are common to other CFCs and private sector players. The value chain assessment will update the vulnerability assessment of the sector and inform the feasibility and business model designs of potentially needed improvements based on good practices in areas such as solar dryers to adopt the business models and capacity building processes focusing on climate-proofing post-harvest activities. In compliment to climate-resilient business models approach that will be delivered under Output 1.2. The guidelines delivered will inform policy and regulatory level incentives, which will be promoted at relevant dialogue mechanisms.

2.2: Business service providers trained to train enterprises on business skills and innovative climate-resilient strategies for value added fish storage and processing.

48. The output will involve identifying the relevant business service providers and establish selection criteria for engagement. Such criteria may include the capacity of the firm in terms of personnel, the number of years of experience in the field and material resources to carry out such programmes. The establishment of the criteria will be followed by invitation through tender for the interested business service providers, according to UNIDO and executing partner procurement guidelines and procedures. With the aim to identify capacity and knowledge gaps of enterprises, assessments will be undertaken to identify the capacity and knowledge gaps of selected enterprises in the sector in terms of the type of business, current performance as the basis for planning and training activities. The project will support relevant institutions in updating and preparing of knowledge transfer plans and relevant training materials, often integrating the training topic and cross-cutting themes of business development technical skills and innovative techniques, products, and, market access strategies including standards for value-added fish processing and export trade. The selected business provider(s) may be mobilized through open source procurement and direct partner sub contracts? and based on the capacity building needs of the beneficiary institutions and enterprises. The activities will especially be aligned with the project institutional capacity assessments and training activities. Training will be conducted in collaboration with the DoF and specialized institutions notably The Technical Training Institute (GTTI) as the output national executing entities

for developing the knowledge transfer plans and training materials. The activities will promote consideration to the diverse and generally low literacy levels and in particular ensuring the inclusion of popular version materials such as pictorials and use of local languages in instruction for community-level.

Output 2.3: Climate-resilient business plans developed by selected enterprises.

49. This output will support the relevant institutions to design criteria and profiles for identifying and profiling of small-scale businesses in the targeted geographical locations, with coastal areas as entry points and extending to hinterlands, especially for aquaculture-related interventions. The profiled small businesses will be organized as producers and linkages to selected support service providers along the targeted product ranges and value chains established. Selection criteria for enterprises would provide the primary basis on which the relevant value chain actors are mobilized and applied to prepare adopted scales of climate resilient business models and plans. The modality will involve a range of value chain actors from primary producers, processing and marketing enterprises, institutional service providers, and stakeholders such as cooperatives or other forms of organized small business clusters. The interventions will help to establish and design a scaled level of interventions that can generate transformation change, e.g. by working with sector associations, including cooperatives and via pilot demonstration activities, which to enhance enterprise performance and mobilized resources to implement the business plans. Technical assistance and advice will be provided in regard to integrating climate resilience in business plans and updating feasibility assessments to selected enterprises. At least fifteen enterprises and cooperatives/associations with climate-resilient business plans will be supported to establish or grow tech solutions for aquaculture, drying, smoking, or processing operations that will be supported to access affordable micro-finance. The project will explore how to build on the successful experience of women's revolving loan funds in the country for this purpose, and the potential scope to partner with the increasing number of equity funds investing in adaptation-oriented SMEs (including GEF projects - ASAP, CRAFT, and Landscape Resilience Fund).

Component 3: Community Empowerment and Awareness Raising on CCA in the fisheries value chain

50. The interventions of this component are aimed to promote the dissemination of good practices and lessons-learned from existing and past initiatives and projects in promoting resilience and their impact. Capacity building actions targeting community empowerment and awareness-raising on CCA will be executed with local government and community organizations or NGOs and CSOs in the target locations. The support of the Climate Change Office, and other coastal sectoral ministries and agencies including the private sector, will be essential. Early warning systems or EWS on weather variability and the resulting past observations and knowledge will be adapted to the needs of EWS services along sectoral and value chain productive systems. Key messages delivered at public awareness campaigns will be tailored to the audiences and promoted through project coordination activities. Innovative and viable climate-resilient business models and demonstration projects will also be showcased, and key messages on climate change adaptation for improved livelihoods in the fisheries sector and coastal communities will be transmitted to the broader public. Through short messaging, radio, TV and social media, a broader audience from fisheries sector players to suppliers and consumers will be targeted. For instance, strategic partnerships with local telecom operators and other media will be explored under this activity, and the project will undertake to develop win-win mechanisms for knowledge transfer and to raise awareness on CCA on coastal fisheries livelihoods in particular and on CCA issues in local, region contexts and globally.

Output 3.1: Plan for public awareness campaigns implemented to enhance communication and dialogue on CC impacts on coastal fisheries livelihoods.

51. The outputs will deliver guidelines for the design of public awareness and knowledge management plans based on the existing EWS, local knowledge and project activities. Past and ongoing initiatives and projects on CCA in the country will be carefully identified and analysed, and synergies highlighted in the public awareness-raising campaigns on CC impact on coastal fisheries livelihoods. The developed messaging/content and media determined, a plan for the roll-out of public awareness campaigns will be developed, and implementation is undertaken. The plan may already be part of the project visibility and communication strategy (to be tentatively developed at the inception phase), and the activity may include the relevant media, the time frame, the messages, and the potential impact. Study tours and site visits will also be undertaken to promote wider adoption and scaling-up of the demo pilot climate-resilient business models including technology and processes, and promotional and awareness-raising events will be organized regularly as planned in the project relevant activities for sectoral and geographical scale-up and attraction of investment flow to climate resilient sector growth.

Output 3.2: Training materials to introduce climate change adaptation solutions in the coastal fisheries sector developed and resilience capacity-building workshops held for selected CFCs and educational institutions.

52. Awareness raising materials on climate adaptation solutions will be established and introduced in the targeted coastal and potentially scaled up in the medium term for instance to linked inland fisheries communities; primary and secondary schools, technical and higher learning institutions as well as research agency experts in the fisheries value chains domains that will be targeted to ensure engagement of the young population as potentially efficient vehicles for messages and agents of changes. The activities will involve working with direct national executing agencies within the ecosystem of educational and training institutions that will be coordinated through The Technical Training Institute (GTTI) and the West African Rural Development Department (WARD) organizational structures; this activity will design and introduce relevant and adapted training materials. In line with the training themes, trainers or facilitators and institutional custodians will be identified. The engagement of youth will be the project promoted means for ensuring sustainability due to early learning and awareness at a younger age. Training and workshop activities are expected to include adopted theoretical and hands-on didactic materials and training approaches. The activity will support the adoption of curricula processes of the selected partner training service providers that are identified and according to the material developed under Activity 3.1.2. On the job training demonstrations and workshops will be undertaken with the involvement of GTTI in collaboration with selected sectoral education and vocational training centres and communities.

Output 3.3: Lessons learned documented and disseminated to relevant audiences, with support for regional uptake, replication and scaled up investments.

53. Knowledge built as a result of the project implementation will be catalogued (lessons learned and best-practices) to enable efficient scaling-up regionally and on relevant global platforms such as the IWLEARN. Plan for Awareness raising activities will include project visibility and communication involving the media, and documentation of good practices for wider dissemination. Success stories, challenges, and solutions will be extracted from the regular monitoring and catalogued and presented to contribute to community empowerment, awareness raising and contribute to concrete actions on CCA from targeted populations. For instance, the sites of the pilot projects will be included in the GIS interactive map of the ECOWAS Observatory, and relevant information about the project can be shared through ECREEE's partner networks. Community empowerment for resilience building and

awareness rising on CCA will also integrate the use of local community knowledge on climate change and localized adaptation scenarios.

54. Regional, national, sub- and international as well as specialized expert network events will be used to share lessons learned and good practices with the relevant partners and value chain actors, with the aim of replication of project results and scaled attracted investment to adaptation and resilience building in the identified sector, by especially taking advantage of arising global dialogue on Blue Economy and SDGs agenda, including the fisheries and climate change nexus. Monitoring and evaluation activities under component 4 will support the development and structuring of knowledge around the project. Additionally, newsletters will be designed and shared with stakeholders and made available through a content-management-system, i.e. website, the appropriate hosting partner for which will be identified among the project stakeholders. Relevant social media, but also established regional fora and knowledge management mechanisms, such as the ECOWAS Observatory, USAID COMFISH, EU, among others ? will also be utilized for dissemination of lessons learned as relevant.

Component 4: Project Monitoring & Evaluation

Output 4.1: Project monitoring and mid-term reviews implemented

55. Project monitoring and evaluation will be conducted in accordance with UNIDO and GEF requirements and procedures. The Project Steering Committee (PSC) will be the main mechanism to track the overall progress of the project, solve the issues faced during project implementation, and approve the formal reports as a reference source for midterm and final evaluation. The Project Management Office (PMO) will be in charge for monitoring the project progress and preparing the reports submitted to PSC, GEF and UNIDO Project Manager. The Project Results Framework in Annex A, which provides the indicators and targets at project and activity level as well as the means of verification, will be a guideline for the PMO to track the progress and achievements. The project reports as a formal document to record the work-plan, project activities and progress against targets, problems/constraints, and lessons learned will consist of Inception report, Project Implementation Report (PIR), Annual reports, Technical reports, if required, and mid-term review (MTR).

Output 4.2: Project terminal evaluation (TE)

56. The project TE will be implemented approximately six months before operational project termination. Independent international and national consultants contracted by UNIDO will carry out the TE. The terminal evaluation (TE) will cover the whole duration of the project from its starting date up to the date of the evaluation. The TE aims at collecting lessons learned and developing recommendations for UNIDO, the Government, Donors, project stakeholders and partners that may help improving the selection, enhancing the design and implementation of similar future projects and activities in the country and on a global scale upon project completion. More details on the monitoring, reporting and evaluation are in Section C: Describe the budgeted M&E Plan.

1.7. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing;

57. The project is expected to contribute to the GEF focal area of climate change adaptation objectives of enhancing climate adaptation and resilience building. Value chain development measures that are the approach of this project are expected to support in diversification of the economy and integrating the predominantly subsistence and informally organized producers in more climate resilient and competitive value chains and businesses, and thereby addressing the widespread environmental and socioeconomic challenges including poverty, lack of off-farm employment

opportunities and sustaining nutritional food security. The project contributions from the baseline, GEF financed contribution to the project and co-financing scenarios will primarily improve the value addition capacities, and also enhance the services to ensure sustainable utilization and management of fisheries resources.

58. The GEF financing will be used for incremental costs in this project for climate resilience capacity building by addressing barriers along the coastal fisheries value chain and environmental deficits that hamper value-addition capacities of enterprises and communities along the value chain. The incremental project will also address national regulatory capacity building working with experts to support producers in meeting the requirements for environmentally compliant aquaculture systems, and product development for access to diversified domestic and export markets. The private sector along the fisheries value chain is faced with challenges of limited capacities for adoption of innovative measures to bridge and potentially reverse the associated nexus of in-country and outbound regional migration, through the creation of diversified off-farm jobs and sources of livelihoods. The incremental project reasoning covers adaptation enabling actions in terms of policy and institutional capacity building, as well as addressing the challenges of off-farm employment, livelihoods and productivity. Project technical assistance activities will promote adopted enterprise level skills training and pilot demonstrations of technology to support cross-sectorial diversified businesses. Replication and upscaling of climate-resilient business models to investment projects, and good practices such as on fish quality and hygiene assurance will enable competitive access to markets. The detailed plans of interventions and implementing arrangements will be defined during the project inception phase.

59. The current project additionally is even more relevant as post-emergency responses. Integrate market mechanisms will become more viable means for rebuilding supply chains and securing the resilience of livelihoods and resources. Messages that reinforce regulations to protect fisheries resources and stocks over the long-term can be promoted learning from the government and regulatory sector led response measures in context of impacts of the COVID-19 pandemic in supply chains, livelihoods and productivity, while at the same time building greater awareness on the sustainability benefits of the measures such as supply chain certifications. In particular, the baseline scenario includes current and future impacts of the widely imposed social distancing measures on production and livelihoods systems, such as market operations, which are reported to have resulted in greater economic pressures on coastal communities and fisheries value chain actors. The project workplans will have to be adapted on a monthly schedule to monitor and report on the extent to which certain planned activities (i.e. trainings, seminars, workshops, study tours etc.) can take place and/or how to adapt the workplan to alternative solutions while complying with the global and national regulations.

60. Moreover and as prior indicated in Table 1, the updated project barrier analysis takes due consideration of the COVID-19 pandemic and impacts to timely implementation of the project activities and on planned project outcomes and the respective sustainability of results. Therefore, the project will be updated through socio-economic impact assessments on impacts of the pandemic and the scale of deepened vulnerability of fisheries actors at the inception phase; and validate the proposed mitigation measures to recovery of livelihoods and sustainable development progress for the short and long term. Responses that are proposed on the basis of feasibility studies and plans to implement cost effectiveness measures within the scope of this project are informed by the projection that the restrictions on personal interactions are expected to continue in the near future globally, and the situation has continued to create socioeconomic pressures on communities and producers including fishers, fish processors and exporters, that are beyond the scope and clear understanding of

the project implementation mechanisms thus in country consultations following the project approval are foreseen. The proposed project measures in response to recovery and rebuilding better include project support on developed guidelines and strategies applied by the project partners to promote economic recovery and livelihoods diversification of existing and start up business operations, and to improve access to services that are essential for safety and health in times of the pandemic, as well as to raising awareness on related behavioural practices, and enhancing the culture of compliance to quality and safety guidelines of fish processing and products

61. The expected component ? specific contributions of the project investments is elaborated in the sections below:

Component 1: Gender-responsive Climate Change Adaptation (CCA) measures mainstreamed into relevant sector policies and national strategies

62. This component will be executed by the lead national counterpart of the project and executing partner agency (PEE), the MoFWR, which will mobilise the inputs of the relevant institutions and agencies to implement the relevant actions of the project. As the specialized department of the ministry, MoFWR/DoF will also play a direct role in the project implementation, including by assuming part or full responsibility for the Output 1.1 and Output 1.2. It is expected that the MoFWR will coordinate with National Environmental Agency (NEA), and Ministry of Trade, Industry and Employment (MoTIE), the efforts towards mobilizing co-financing commitments from private sector agencies and in facilitating the relevant policy consultations, and ensuring compliance with regulatory requirements including environmental requirements. Under Output 1.2, the project will take into account the growing demand for fish food supplies, and increasing improper waste disposal, such as is evidenced at the recently installed fishmeal factory at the Gunjur prefecture. Additionally, a private sector co-financing investment partner has been secured and will support in the delivery of this output through transfer of appropriate skills training and demonstrated good practices to the sectoral associations and value chain actors. The activities will ensure synergies of the policy level interventions and subsequent regulatory enabling guidelines business models to be promoted through the investment component of the project.

Component 2: Resilience building for small-scale fisheries dependent enterprises and populated coastal communities

63. Component 2 will evaluate operational models of the target sectoral investments to determine and propose climate resilience building actions including localized CCA enabling roles and opportunities for the private sector at selected locations. To ensure relevance of the adopted climate-resilient business models, profiles of relevant current and future climate resilient technologies, business practices and processes to improve post-harvest capacity will be introduced. Good practices on institutional strengthening focusing on climate targeted actions and resilience building of facilities, processed technology applications will be included under this component. The activities will draw on the network of investment promotion initiatives and support services provided by Ministry of Trade, Industry and Employment (MoTIE), Private Sector and Community - Fisheries Sector Associations, as well as Investment and Export Promotion Agency (GIEPA). GEF-LDCF financed activities will include the designing of business models that are aimed to promote and support the scaled-up investment in strengthening of institutional and technical capacity building for service providers; as well as to promote the introduction and adoption of resilient climate measures and business models.

64. Under Output 2.1, the project will introduce simple standard operating procedures, or SOPs, at selected enterprises and sites reaching the direct beneficiaries and training at least 5,000 direct beneficiaries. Locations and beneficiaries identified for the project interventions will ensure

consideration of gender and youth empowerment, and potential direct environmental impact for instance by targeting facilities of major fish landing sites where fish drying is widely practiced under unhygienic conditions.

Outputs 2.2 and 2.3 will contribute directly to capacity building, through providing training on improved fish processing, drying, smoking, and cold chain applications as well as fish waste drying, milling/meal formulation for food and feed fillers.

65. In addition to the CFC centres that will be targeted by the project investments, the following private sector players and co-financiers have been identified during the PPG phase to act as potential demonstration projects/sites: Aquaculture: EMPASS, a leading poultry producer, which has already started investing in aquaculture (incl. ponds) in its premises to be able to produce its animal feed for its own business as well as for others. National Partnership Enterprise, a fish processing, and, export company, which is investing in refurbishing its premises and equipment including for processing, cold chain and storage. The enterprise will be a partner promoted of renewable energy business models and business plans for applications of improved processing and & storage cold chains, as well as in developing training on quality management guidelines, as well as introducing post-harvest mitigating systems and diversified waste and by-product based value chains. Processing, Waste & Market Access: Masaneh Ceesay Fish & Vegetable Enterprise, a fish smoking and exporting company, mainly led by women, the sole holder of a EU authorization to export smoked fish, aiming to improve its processing, quality, and, waste management efforts.

Component 3: Community Empowerment and Awareness Raising on CCA in the fisheries value chain

66. By addressing institutional capacity building, sector associations and CFCs may also assume project implementation of actions that are supportive to policy and regulatory capacity building. The contribution of private sector associations and non-governmental community organizations including The Association of Fishing Companies (TAGFC); community based sole committee (LACOMs), Artisanal Fisheries Development Association (GAMFIDA), National Association of Artisanal Fisheries Operators (NAAFO), national sole co-management committee (NASCOM), and try women oyster association, and CFCs is expected to be largely in-kind staff time to stakeholder dialogue and community awareness on CC strategies on gender mainstreaming and targeted community. In developing specific business model, the project will, on one hand, engage private sector and small-scale producers in value chain analyses to evaluate the fish catch handling systems. The aim will be to introduce resilient measures to optimize use of landed catch introduced. And on the other hand, project will introduce new climate-proof value chains aimed to address climate driven and non-climatic pressures on the fragile coastal infrastructures, habitats and the environment. The following examples of business models can be noted from the project investment interventions and targeted outcomes and outputs: Linkages to scaled business models that integrate the quota based fish catch landings of nationally flagged industrial vessels at a quarterly interval will be ensured; Building climate resilient mainstream, and predominantly small scale and informal fisheries and waste generators to participate and gain awareness on business models for waste valorization; and Integrated capture and aquaculture production systems for public and private uptake to achieve scale, and thereby reducing post-harvest losses and coastal fisheries capture pressure.

1.8. Global environmental benefits (GEF-TF) and/or adaptation benefits (LDCF/SCCF);

67. The project components address strengthening sector dialogue through undertaking of participatory value chain analysis, and integrating climate resilient policy-oriented action plans and

sustainable practices that are adopted in the use of the resources, and reinforce or even institutionalize measures to address the long-term effect of CC.

68. The project will contribute to the following global climate change adaptation and environmental benefits: (i) building the resilience of coastal communities; (ii) improvement of the coastal communities and enterprises dependent on fisheries as well as ensuring sustainable use of the resources; and (iii) CCA Policy Mainstreaming actions and community-based improvements in fisheries value chain governance. This will ensure sustained livelihoods and nutritional food security outcomes. The project components will support a cumulative number of at least 10,000 people that will be engaged in the various outputs and most reached through the knowledge dissemination, training and awareness rising activities and outputs (60% male, and 40% female by numbers) and 5,000 people as direct in the fish processing and post-harvest value chains. The people that will be targeted as the direct project beneficiaries to be supported by the project will primarily be located along the coastal areas, including staff of extension agencies and regulatory institutions, operators of enterprises and community organization representatives. The target relating to restoration of marine habitats will be an additional impact of the project targeting at least 10,000 hectares. The expected project global benefits would also include the plan for mainstreaming gender sensitive climate adaptation and responses covid-19, and the empowerment youth and women that are engaged in fish processing value chains.

69. The project locations will be at the interface of catch landing and fish processing sites that are operating in proximity to the urban and highly populated prefectures of greater Banjul, Jeshwang, Bakau and Kololi. These locations have in place relatively small landing site infrastructures and informal services such as ice supply and cold chain activities for fishing and landing activities. Second category includes zones spanning between Kotu Point to Kololi Point; as well as the Brufut informal landing sites at Ghana Point, and Tanji where active market infrastructures are utilized for landing of catch, small scale fish processing and marketing of fresh fish, and wherefrom the bulk of fresh landed catch is transported onwards from this site to inland or hinterland markets that are served by and dependent on catch from coastal value chain enterprises. Another criteria covers Tubergen, where the scale of fisheries activities has greatly reduced with artisanal fishers' landed quality and scale of catch, and increasing pressure at alternative sites; as well as the stratum of coastal Barra, wherefrom most of the fish landed and marketing of fresh catch undertaken with integration of simple and minimal levels of processed, smoked or dried; and the final relates to resource uses that interact with the landing sites at Sanyang and Gunjur where fisheries activities are operated in proximity to the strip where mining for sand and associated heavy minerals is taking place. At the prefecture of Gunjur, there is a fishmeal plant operation that uses fresh pelagic fish and considering collection of waste for the production of industrial fishmeal from the artisanal and small scale locations such as the Kartong sale points of fresh, dried, smoked and salted fish selling points located along the beach and dunes between Kartong Point and the Allahein River.

5) Innovation, sustainability and potential for scaling up.

Innovativeness

The project is innovative in scaling up attention to climate adaptation and resilience building at localized sector, community and enterprise levels.

70. *Enabling Policy Environment to promote scaled up investments:* Policy actions including capacity building through training and exposures such as study tours are expected to help in delivering the requisite transformational changes including those that are market driven and supportive to partnerships involving private and public sector and civil society or organized community entities. By linking climate resilient post-harvest and aquaculture systems to the existing

or expanded/ revamped water bodies, the intervention is designed to constitute a means of generating diversified and potentially climate resilient livelihood opportunities. In particular, trials will promote production models that engage the underutilized resources, like for instance the potential growth of brackish via aquaculture; but also possibly some inland water bodies and land-based systems. Similar to the scenario, alternative sources of energy such as fuelwood will be evaluated, by constituting waste inputs for fuel to reduce potential impacts of the project support on the environment, and enhance competitiveness and value addition.

71. *Policy mainstreaming actions generate a catalytic effect on resilience building:* With the improvement of livelihoods, awareness rising for communities and service providers on climate change and realization of the need for building climate resilience is expected to be made more realistic and therefore favorable to sustainability and scaling up. The catalytic impact of climate resilient business models, for instance, the introduction of improved processing techniques and impacts on reduction in the demand on high cost energy applications, including ice and wood and biomass based fuel, has been proved to help in the preservation of the forests and mangroves, particularly along the coastal areas of West Africa. The associated benefits might deliver tangible global environmental benefits for instance in terms of improved mangrove cover and scaled impact on efficiency improvements in value chain business activities and livelihoods.

72. *Focus on scaled and innovative climate resilient technologies and business models:* The project is expected to promote business models and practices that address the causes of post-harvest losses and wastage along the targeted value chains, and therefore the benefits of income generation and associated livelihoods improvement, value addition and good practices that lessen climatic and non-climatic pressure on coastal and fisheries resources are expected. Producers will benefit from climate-resilient technologies and practices, which are expected to help in coping with extreme climate and weather variability events. Policy actions and adopted business plans and models will consider quality and safety improvements for instance in the application of appropriate and environmentally sustainable packaging. The benefits associated with quality and safety assurance of processes and products, and in particular, associated food value chain is expected to facilitate market access and thereby enhance economic competitiveness and nutritional food security outcomes.

73. *Potential leveraged multi-focal-area impacts, in the long run, generate sustainability and replicability benefits:* The expected project results contribution and result link of the component intervention on raising awareness, and involving the key stakeholder groups in the promotion of business models and good practices relating to resilience-building and diversifying opportunities for income generation and economic livelihoods along the fisheries value chain for coastal communities will be evaluated through monitoring and impact assessments. The framework to document good practices and especially potential positive impacts than can contribute to reversing internal and international population migration drivers will be part of the knowledge management actions. Scaled up investments and good practices are expected to be generated by the project, and in turn, contribute to improving the resilience of community livelihoods in the face of CC and weather variability.

Sustainability

74. The project will build the capacity at various levels on leadership, organizational, managerial, financial service provision, and technical capacities by following a holistic and systematic capacity building approach. At the institutional level, the project will be integrated in the policy and strategic plans, working under the coordination of the MoFWR and relevant sector partners to support the implementation of CCA policy and gender mainstreaming, including concrete enterprise and community adopted measures at scale. Actions targeting institutionalized capacity building at policy,

political, legal, regulatory, and budgetary planning actions that reinforce the adoption of resilience measures would be developed by the project and implemented at the national or sub-national level. The project will furthermore promote a cross-sectoral approach to policy, institutional and community level ? and focusing on replication of the capacity building on climate resilience and gender equality for adaptation measures and strengthening institutional support services in the country and beyond. This will be achieved through the adoption and integration of its implementation plans with national and local government planning and budgeting, including oversight of the executing agencies to the project management office (PMO), and linking the relevant dialogue mechanisms of the project stakeholders in the relevant government policies, regulatory enabling frameworks and strategic action planning. Establishing capacities to deliver concrete on-the-ground actions involving local communities in regard to climate adaptation and resilience building activities, will also be ensured as a means for ensuring the cost-effective return on the project investment as well as sustainability of results after project implementation completion. Awareness raising within the scope of the project and ensuring the mediums used are widely accessible and in languages the potential beneficiaries can understand, and engagement of private sector actors will play an equally central role in the project scaling up and sustainability plans, initially also supporting replication through awareness raising activities that will target communities along with selected coastal and inland areas. Private sector in the information and communication technology, ICT services have been engaged at project design and would develop adopted content messages are delivered through voice and traditional print, and other forms of messaging in accordance with literacy levels of the addressed audience and objective, in addition to linking innovative online service platforms to new financing services in view of the covid-19 pandemic. The project partners are to be institutionalised for continuity and use within existing central, sub-national and decentralized structures across the country, particularly the ward development committees and village development committees. Governmental sub-national level stakeholders that are critical to the project sustainability include administrative governmental and non-state structures at the ward level including the sector extension workers that are key agents in the project awareness raising and sustainability of the results and ultimately the impact beyond the project.

Potential for scaling-up

75. Engagement with the private sector, while ensuring their contributions to scaling up, is one of the strengths of the technical assistance and investment approach of the project. The approach of leveraging financing services and solutions will promote the adoption and integration of its implementation plan, including operations of the executing agencies and management office in the routine operations of the sector, including providing guidance to align the planning of government policies, regulatory enabling frameworks, and strategic sector action plans. The project will ensure the roll-out of resilience-building approaches in the service area of innovative and scaled financing to fish processing and post-harvest value chains throughout the country, and within the regional context and beyond by implementing cross learning and awareness-raising. The project is in addition, expected to promote cross-sectoral food systems resilience-building approaches at the policy, institutional and community level, by focusing on capacity building measures that can be widely adopted and tailored towards mainstreaming of climate resilience and gender equality for adaptation. Scaling up potential is envisaged to be explored and promoted throughout the project, starting from inception, through implementation and final evaluation phases. The roll-out of interventions and results from targeted areas to the national level will be undertaken in the context of actions targeting institutionalized capacity building at policy, political, legal, regulatory levels. The national project executing entities and partners will ensure national planning and budgets gradually integrate more allocations to the

priorities of resilience-building measures, including the approaches that will be developed by the project to ensure implementation at the national or sub-national level. The project interventions are building on existing capacities, experiences, and additionally uptake is further expected to enhance the sustainability and ownership of results. The interventions to promote coordinated sector dialogue and introducing knowledge on measures to promote and support adopting resilience measures at a large-scale, are also expected to provide a means for the project to optimize synergies and to mobilize common action through multi-stakeholder dialogue. Scaling up will also be enabled by the institutionalized promotion of good practices for the improvement of business support services for fisheries value chain development. The existence of underutilized private sector capacities and local assets were proposed for innovative uses, as these can be great anchors for youth employment and revenue generation. Industry actors were mobilized to participate by including the existing baselines of factories which can employ significant numbers of youth and women. Finally, gender considerations will be integrated in the project sustainability strategy through awareness-raising and visibility activities to ensure sustained positive impact and replication of the scope of the project results and impacts on the direct and indirect beneficiaries. The private sector actors will play a central role in the project scaling up and sustainability plans, initially supporting replication through awareness-raising activities that will target communities along with selected coastal and inland areas.

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A.2. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

A.3. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Documents

Title	Submitted
REV Jan 2021_ANNEX to 9194_CCA Core Indicators and Metadata	
2020-06-02_9194 Secretariat Review Sheet Gambia fisheries	
2020-06-02_Annex H Budget_9194 CEO Endorsement Document Gambia fisheries	
2020-06-02_9196 CEO Endorsement Document w/ANNEXES Gambia fisheries	
2020-06-02 ESMPlan GEF 9194 Gambia	
UNIDO response note to GEFSEC review of FSP	
REVISED CEO Document in PDF with ANNEXES	
European Union Delegation to Gambian co-fin	
CEO document in PDF with annexes	

Title	Submitted
Annexes G-H to CEO Endorsement	
All co-fin letters	
ANNEX to 9194_CCA Core Indicators and Metadata	
GEF-6 Request for Project Endorsement FSP CEO GAMBIA	

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

76. Stakeholder consultation was undertaken with the aim to develop a preliminary stakeholder engagement with coordinated implementation to be led by the MoFWR/ Department of Fisheries and the project management office staff. The plan foresees establishing an effective partnership and engagement with stakeholders. The national execution partner (leading PEE), in addition to the MoFWR/DoF and the PMO, will take the lead in this process, by ensuring the requisite coordination, including established contractual and cooperation modalities as relevant Stakeholder consultations will be ensured by engaging the main national project executing in the project inception and design of annual work plans; private sector and co-financing development partners will be engaged in designing specific investment actions as relevant and communities will be addressed by planning awareness-raising, training and training of trainer activities. Among the stakeholders foreseen to be engaged in the project are the Ministry of Fisheries and Water Resources, MoFWR; Ministry of Trade, Industry, Employment, and Regional Integration, MoTIE; National Environmental Agency (NEA); Women's Bureau; Food Safety and Quality Authority, FSQA. Thus to support capacity building for project implementation through national execution modalities, promotion of institutional private-sector partner partnerships will be part of the cooperation to mitigate the capture fisheries pressures, mostly relating to growing pressure on the marine and inland water production. Additionally, local government authorities, as well as the private sector and non-governmental community associations have been identified during project formulation and will be involved in the respective steps. The most established and institutionalized private sector and community producer stakeholders include The Association of Fishing Companies (TAGFC); community based sole committee (LACOMs), Artisanal Fisheries Development Association (GAMFIDA), National Association of Artisanal Fisheries Operators (NAAFO), national sole co-management Committee (NASCOM), and try women oyster association. Representatives of TAGFC, NAAFO and NASCOM have particularly cited the challenge of limited sectoral attention and capacity to ensure coordination of climate adaptation enabling actions, as well as the needed capacity building to ensure the adequate engagement of communities and businesses. The feedback and design of project interventions have addressed these needs and the project includes actions relating to mobilizing expert advice of aquaculture regulations as an innovative and resilience-building strategy, and continued engagement will therefore be ensured.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor; Yes

Other (Please explain)

77. The engagement of stakeholders is expected throughout the project. Cross-sectoral learning and policy dialogue activities will be engaging relevant stakeholders including members of the project steering committees, which will be held biannually. Through the national execution modality, concrete cooperation mechanisms will be promoted during project implementation. The engagement with stakeholders during project design already included a rapid mapping and capacity assessments of the main community and sector associations. Consultations involving specialized agencies such as DoF and FSQA will be maintained and coordination strengthened on food safety controls and regulatory frameworks. At community level, less capacitated organizations, for instance, Community Fisheries Centre, or CFC management committees, operate at decentralized levels; the main community partners include organized women and youth producers and enterprises. The close involvement of these diverse and weakly organized stakeholders and community actors will be ensured to support the wider dissemination of lessons learned and the project results. There will also be coordination modalities that will be ensured by involving sectoral associations, and central and local government agencies in project planning, inception, and official launch, and implementation and monitoring activities. For the project to effectively raise awareness on climate change adaptation, capacity building for policy and regulatory agencies will be required, and the activities at this level will ensure effective stakeholder engagement.

78. The proposed participatory approach to engagement of project stakeholders including national, local governmental and community authorities, representatives of private sector entities and Native and indigenous communities as most relevant and applicable to the project, and staff of the project management office shall be maintained through close and periodic consultation. Maintaining an efficient stakeholder consultation mechanism in project execution, and clarifying the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement is even more relevant due to the impacts of the COVID-19 pandemic that may delay in the project implementation, co-financing disbursement, and reduced possibilities to have face-to-face interaction with stakeholders. During implementation of project, the local in country and project site specific protocols and measures established by the national, regional governments and community will be taken into account and respected against of the pandemic. The project will set up remote communication mechanisms using virtual platforms and shared e-mails and messaging networks, video and telephone conferences to adjust to the new context, and also apply adaptive management, and coordination mechanisms that allow for recruitment and staffing, allow for project work plans and stakeholder engagement plans to be

adjusted accordingly. In the event that travel restrictions remain in force and prolonged, local facilitators and officials shall receive information remotely and ensure adequate involvement of local. On site progress reviews may be held with small targeted groups, taking into account the relevant sanitary measures.

79. The summary table below presented the stakeholders that were engaged and identified during project design, and their respective roles and means of engagement in implementation. The key stakeholders are presented in the Table 2 below.

Table 2: Key project stakeholders

	<i>Stakeholders</i>	<i>Roles and responsibilities in the project preparation implementation, and their respective roles and means of engagement</i>
PUBLIC SECTOR	<i>Ministry of Fisheries and Water Resources, MoFWR</i>	MoFWR will be the lead project execution agency, with the responsibility to ensure the overall efficient execution of project activities and coordination of the project stakeholders and that the co-financing commitments are fulfilled in the project, in particular assuming part or full responsibility for activities that will be developed in further detail. The ministry's Department of Fisheries, MoFWR/DoF acts as the lead counterpart of the project since PIF formulation and PPG phases. MoFWR/DoF supported project formulation activities requiring mobilized co-financing, coordination of project stakeholders including Government institutions, as well as facilitating the arrangements for consultations and workshops such as project validation, project launch and approval of workplans, and steering committee meetings. Implementation phase roles include ensuring the efficient and coordinated day-to-day project administration.
	<i>Ministry of Trade, Industry, Employment, and Regional Integration, MoTIE</i>	MoTIE would coordinate efforts towards mobilizing co-financing commitments from partner government agencies and in preparing the project stakeholder consultations and validation workshop, working with the Ministry of Fisheries and Water Resources (MoFWR). The latter counterpart is the lead national project execution partner and cross-sectoral stakeholder coordination entity.
	<i>National Environmental Agency (NEA)</i>	For this project, NEA as the environmental regulatory agency; and as the host institution of the GEF Operational Focal Point has designated Ministry of Fisheries and Water Resources, Department of Fisheries (MoFWR/DoF) to be the lead execution agency. The project will be implemented through national execution modality, and action for execution activities will be elaborated and validated in the action plans development during the project inception phase.
	<i>Women's Bureau</i>	The Bureau is mandated with gender policy oversight including the promotion of interventions focusing on Gender and Women Empowerment actions of the project. Contributions of in-kind expertise and engagement in stakeholder dialogue and community awareness on CC strategies on gender mainstreaming is proposed.

	<p><i>Food Safety and Quality Authority, FSQA</i></p>	<p>FSQA became operational in 2014 following the introduction of the Food Safety Act, 2011 and assumed the mandate of the Competent Authority for fisheries. The restructuring of food safety and quality compliance services under the FSDA and quality inspection services has introduced a more quality-driven value chain and industries, and in turn, compliance with food safety requirements has improved.</p> <p>The agency is expected to support specific implementation and co-financing to the project specifically by acting as a service provider on industry and small business training.</p>
<p>PRIVATE SECTOR ASSOCIATIONS AND ENTERPRISES</p>	<p><i>The Association of Fishing Companies, TAGFC</i></p>	<p>TAGFC is an organization of fish processors and fishers, and other business organizations and associations. Members of TAGFC include fish processors, exporters and vessel owners operating in or flagged to fish in the sub-region, of whom eight (8) member enterprises are listed on EU approved exporters of fish and fisheries products. The association implementing roles and co-financing to the project specifically would include mobilizing members to support and delegate resources and staff to trainings. Innovatively the incremental services would include participating in feasibility assessments and investment promotion on fish processing and exports, aquaculture and waste valorization and diversification models, for which a contracting modality may be established through the project.</p>

<p><i>Fisheries Sector Associations</i></p>	<p>The project design phase identified a number of Fisheries Sector Associations including National Sole Fish Management Committee (NASCOM), National Association of Fisheries Operators (NAFO) and Artisanal Fisheries Development Agency (GAMFIDA). About 45% of NASCOM members are women, mostly engaged in drying, smoking and selling fish. These stakeholders generally have different levels of capacities and membership; for instance GAMFIDA as the organization of artisanal fishers folks has a presence that is limited to major primary production sites of Banjul and the fishing communities and the fishing villages of Brufut, Tanji, Sanyang, Kartong, Gunjur and Bakau. Through the project interventions, particularly under components 2 and 3, it is expected that these associations will be engaged in planning and implementing of demonstrational project interventions to promote climate resilient post-harvest fisheries practices, technologies, and business operations. The activities involving community level stakeholders are particularly envisaged to involve women and youth (according to the national youth policy, the latter group are classified to include populations within the ages 15-30 years). The member enterprises of these organisations will be mobilised to make in-kind and incremental investment co-financing to the project. Community Fisheries Centres will also be mobilised under this group of stakeholder. The contribution of CFCs is estimated as in-kind staff time to stakeholder dialogues and community awareness on CC strategies on gender mainstreaming. The CFCs may also assume project execution roles under the gender mainstreaming actions of the project. At the time of CEO formulation, mobilized CFC partners to include among others: Tanji Community Fisheries Centre and Bakau Community Fisheries Centre.</p>
<p><i>Private communication operators</i></p>	<p>ICT service providers already have a strong engagement with the project partners who use the existing text messaging, voice clips and other messages that are exchanged in popular versions and languages. Costs, value added and sustainability of services such as on market information will be evaluated to define possibilities for adoption to the project partners and beneficiaries. Communication and awareness raising activities of the stakeholders will be linked to such systems such as <i>Closed User Group (CUG)</i> to enable members, for instance, fishers to access relevant and timely information. The modality and level of co-financing will be the subject of further discussions during the project inception phase, when relevant information to the sector actors will also be evaluated.</p>

	<p>Private Sector Fisheries and Diversified Value Chain Enterprises</p>	<p><i>EMPASS and BSC FEED</i> is a pioneer industrial producer of feed meal and fish waste valorization. The investment project is undertaken in the value chain of poultry for both eggs and poultry meat production. EMPASS Holding invests on the high tech and high-cost components of the value chain and the out growers focus on the farming and labor-intensive components and as at 2018 had already extended financing to some 20 out-growers for broilers farms. Additional to the equity investment by EMPASS out-growers? inputs would be mobilized during the project inception and considered as in-kind/ beneficiary co-financing. The project would cover getting more poultry communities and villages to be involved in the integrated fish-poultry- high-quality chicken processing scheme. The co-financing major investments of the private entity are: energy at the hatchery (100 kW) processing (120 kW) company broiler farms (80 kW) units; energy at the broiler farm level 5 kW for minimum 50 farms and 10 kW for 20 farms; capital investment to build layer and broiler house including equipment; and working capital for farmers in the form of a revolving fund.</p> <p><i>African Women's Entrepreneurship Program (AWEP); National Partnership Enterprise (fish processing and export), as well as Masannah Ceesay Fish & Vegetable Enterprise (fish smoking and export), and the partner Community Fisheries Centres or CFCs</i> are expected to be the private sector co-implementers of demonstrational trials of new and diversified value chains. <i>The Atlantic Seafood Company</i>, which is also one of the major fish processing and export enterprises proposes co-financing to project interventions that encourage good practices on waste collection, handling and valorization, for instance the investment in trial demonstration of bone separation techniques that is proposed by the Atlantic Seafood Company as co-financing partner to the project. The Atlantic co-financing particularly proposes to co-invest in integrating climate resilient considerations in technical aspects of post-harvest and waste reduction measures at factory floor.</p>
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DEVELOPMENT PARTNERS	<i>European Union</i>	The European Union has worked on CCA in addition to other key topics including youth and gender, employment, improved livelihoods, etc. The EU's co-financing aims at leveraging on the successful implementation of a first EU project titled "Global Climate Change Alliance (GCCA) support for integrated coastal zone management and the mainstreaming of climate change" from September 2013 to July 2016 for a total budget of EUR 3.5 Million (equivalent USD 3.86M). The project is laying the groundwork for sustainable Integrated Coastal Zone Management (ICZM) and the integration of climate change adaptation into relevant national policies. Offering co-financing to generate synergies with the UNIDO/GEF6 Project (components 1, 2 and 3) and the EU's Project Phase 2 entitled "GCCA+ Climate Resilient Coastal and Marine Zones Project" launched in 2019 for five years. Common activities, sharing information, data, studies and relevant materials & tools (awareness raising, training, etc.) will be fostered in the collaboration.
REGIONAL PARTNERS	The ECOWAS, and its Regional Center for Renewable Energy and Energy Efficiency (ECREEE)	ECREEE a specialized technical agency mandated by the Authority of Heads of States to remove barriers impeding the development of a viable regional market for renewable energy and energy efficiency. ECREEE's main objectives are to contribute to the sustainable economic, social and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of energy-related externalizes (GHG, local pollution). Specifically, the centre focuses on improving renewable energy policies, strategies and investment policy frameworks, as well as creating favorable market conditions for instance by addressing existing barriers related to technology, finance, business, legal, policy, institutional, knowledge and gender focused capacity building.

A.4. Gender Equality and Women's Empowerment

Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

80. A preliminary gender analysis and social economic assessment is the basis of the information that informed the project design and will be updated at the project inception. The national population is estimated to be about 2 million people, and constitutes of about 51 percent are female, and over 60 percent are under the age of 25 years (GBOS, 2013), which is the rationale for the overall target of the project identified as fifty percent male and female. Thus, for instance, ENDA, (2012)'s report on the coastal vulnerability to climate change of the North Banjul describes a situation whereby adaptation efforts have been hampered by poor waste management practices^[1]. Also as prior indicated on the amount of fish landed in the country (DoF and FAO Sector Profiles, 2013), the fishery sector involves a significant number of artisanal fishers (between 25.000-30.000 providing 90% of the total national fish consumption. The fish

processing value chains are dominated by women and the respective data on baselines and targets for the project will also be updated at project inception. The Key national policy and legal frameworks include the National Policy for the Advancement of Gambian Women 1999-2009; the Gender and Women Empowerment (GWE) Policy, 2010-2020; and The Gender policy and Women Act 2010; are collectively coordinated by Gambia's Women Bureau, one of the key stakeholders identified in this project. The national GWE policy, in particular is most relevant to this project, and aims at improving the socioeconomic conditions and status of men and women through equitable social, political and economic participation and engagement, and promotion of women economic empowerment. Similarly, for sectors such as agriculture there are policies and strategies for ensuring sustained commitment and oversight on national gender policies and constitute the project baseline scenario. The preliminary gender analysis for the project reported limited understanding of the links between adaptation and gender being, with progress on this front still being in its infancy. To date, studies including action planning work^[2] undertaken as part of the NAP planning process in the country have not focused on coastal communities ? these include USAID (2014)'s On-Line Sourcebook: Integrating Gender in Climate Change Adaptation Proposals^[3] and other key online tools. According to stakeholder consultations and meetings held with representatives of the sector organizations, gender-sensitive capacity building actions have been identified from the perspective of the fisheries value chains along the West Africa coastal areas, women mostly face the challenges of inappropriate technology, markets, finance, access to land in the case of aquaculture and coastal or inland water zones for capture fishing, inappropriate working conditions and limited services that target adaptive capacity building. The design project takes consideration of gender-responsive measures, including a gender action plan that will be implemented throughout the duration of the project. Considering the climate scenarios and focus of the project, the project activities include mapping out the locations, sources, and the scale and potential uses of fish processing and waste resources such as trimmings and deteriorates catch, and delivering regulatory and capacity building training plans tools on resource efficiency based ? good practices for value addition that are mainstreamed in the project gender action plan. As part of dedicated capacity building, gender experts will be consulted and engaged during the project implementation to broaden the pool of expertise, and to ensure gender equality of the project contribution to climate adaptation.

81. The significance of ensuring sectoral policies and strategies such as the National Fisheries Sector Development Policy, 2007 and Fisheries Act, 2008; the National Policy for MSMEs, 2014 and National Industrial Policy, NIP 1995; and the Food Safety and Quality Act, FSQA 2011; as well as the National Climate Change Policy, NCCP 2016 are climate sensitive and promote women's engagement and participation are therefore key considerations to this project. Specifically, the relevance of ensuring sectoral policies and strategies such as the National Fisheries Sector Development Policy, 2007 and Fisheries Act, 2008; the National Policy for MSMEs, 2014 and National Industrial Policy, NIP 1995; and the Food Safety and Quality Act, FSQA 2011; as well as the National Climate Change Policy, NCCP 2016 are climate sensitive and promote women's engagement and participation are therefore key considerations to this project. It is expected that as part of dedicated capacity building, gender experts will be consulted and engaged during the project implementation to broaden the pool of expertise, and to ensure gender responsive contribution of the project to climate adaptation. For an adequate coordination of the project gender action plan, the Women's Bureau (public) and the National Federation of Women (NGWF - private) will be the key partners will be the lead executing agency for activities that are relevant to the national gender policy frameworks in general and will support DoF and other

stakeholders on implementing the fisheries value chain specific activities of gender equality, mainstreaming and women's empowerment.

82. Concrete actions of the plan as elaborated in the subsequent section table will build on the existing national policy measures and actions, such as the special emphasis of recruiting women in many of the sectoral extension programmes. Engaging women along these controlled value chains (from production farming, processing, to marketing) ensures greater integration and equality of results than that they reach in capture fisheries. Private sector fisheries enterprises including community-level Fisheries Centers (CFCs), also inherently address the specificities of gender considerations in fisheries. As an example, even for organizations such as the National Association of Fisheries Operators (NAFO), which has a membership representation of women making up to 45% of the members of fisheries enterprise operators, the average representation and engagement of women in leadership is below at 30%, the, therefore this project has the target of at least 40% average women engagement. Many young people in coastal communities are unskilled and mainly engaged as laborers to fishing and offloading of fish from boats and informal traders operating in make shift structure that they establish along coastal areas and these would benefit significantly from expanded industrial fisheries landing catch in the country. Women will continue to play a key role in the value chains of farming finfish, shrimp, mussels, seaweeds, crab fattening. For the highly capital-intensive fishing vessels and fish processing enterprises, many profiles maintain the number of about twenty (20) officially registered and operational fish processing enterprises that are estimated to be employing about 2,000 people directly, and these are mainly focused on export markets and frozen products. The Gender Action plan is presented below.

^[1] ENDA, 2012. Climate Change Vulnerability Assessment and Adaptation in Greater Banjul (Page 23) <https://www.weadapt.org/sites/weadapt.org/files/legacy-new/placemarks/files/52556856a6e7bbanjul-case-study-report.pdf>

^[2] NAP Global Network, 2020. Building Local Capacities to Integrate Gender and Adaptation in Planning in The Gambia <http://napglobalnetwork.org/2020/01/building-local-capacities-to-integrate-gender-and-adaptation-in-planning-in-the-gambia/>

^[3] USAID, 2014. On-Line Sourcebook: Integrating Gender in Climate Change Adaptation Proposals, <http://asiapacificadapt.net/gender-sourcebook/wp-content/themes/iges/pdf/integrating-gender-sourcebook.pdf>

Documents

Title	Submitted
140379_CoFinancing Partners for Gambia GEF6	
Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?	
Yes	
If yes, please upload document or equivalent here	

Table 3: Gender Action Plan

Intervention Level	GWE proposed activity	Responsible Party
<p>Institutional level mainstreaming action plan developed</p>	<p>Gender analysis information updated and informs the mainstreaming strategies and update of sex-disaggregated baseline data and target indicators;</p> <p>Mapping of partners, counterparts and stakeholders, in relevance to the gender policies and strategies;</p> <p>Recommend an implementation plan according to the identified key project areas gender roles within the coastal fish processing value chains;</p> <p>Gender mainstreaming plan implemented, and relevant sex-disaggregated data monitored and reported on.</p>	<p>Ministries, Departments and Agencies coordinated by Department of Fisheries, NEA and Climate Change Office, and Women Bureau, QSFA and GBS</p> <p>USAID Ba Nafaa project</p> <p>Meteorology Office, with UNDP and partners EWS initiatives</p>

Intervention Level	GWE proposed activity	Responsible Party
<p>Products/income generating activities</p>	<p>Prepare gender-sensitive knowledge packages incl. on supply chains, including the anticipated industrial catch landing, markets and standards on quality, packaging, cold chains products.</p> <p>Promote innovative by-product value chain business models, and related incentives such as trainings that contribute to women start-ups in post-harvest management and waste reduction systems; Fish processing is already mostly undertaken by women could be accessible for new uses involving women and youth;</p> <p>Identify partnerships for financing climate resilience building services to communities, households and MSMEs,</p> <p>Tech start-ups organised and integrating solar powered cold chains, energy efficient canoes and outboard engines</p>	<p>Producers and service providers within existing innovative Initiatives such as USAID Ba Nafaa; UNDP value chain and CCA programmes</p> <p>Diversified Tourism sector business supply chains, and Poultry sector producers and investors at scales, that can integrate fisheries value added product</p> <p>Potential and existing regional and domestic value added product - buyers/market</p> <p>Local micro credit and tech service agencies</p>

Intervention Level	GWE proposed activity	Responsible Party
Infrastructure & equipment	<p>Mobilize and support the participation of women and youth in the project activities for strengthening linkages to larger-scale export-oriented fish processing and industrial fishing enterprises</p> <p>Identify and support the establishment of co-financing partnerships for the upgrade of existing and future supply chains,</p> <p>Support enterprises on adopting gender technical layout and practices to fish processing facilities</p> <p>Engage the industry stakeholders and partners such as the Association Fishing Companies, TAGFC), and financing commercial and micro credit agencies in awareness raising and to actively support job-creation and skills development</p> <p>With the impacts on the covid-19 pandemic, promote targeted production of sea foods & fish supplies to the domestic market to support nutritional food security (large part of diet) and reduce poverty are envisaged.</p>	<p>Relevant Ministries, Departments and Agency CCA with action plans coordinated and implementation supported by Department of Fisheries, NEA, and Climate Change Office</p> <p>USAID Ba Nafaa project</p> <p>Meteorology Office, with UNDP and partners EWS initiatives</p> <p>FAO on fisheries</p> <p>UNIDO GEF 6 partially on clean cook stoves with FAO</p>
Capacity building incl. Leveraged investment and small business access to financial and business services	<p>Gender-sensitive trainings incl. literacy and numeracy, simple bookkeeping, basic management skills, credit and savings, fish-handling, preservation, processing and marketing, fishing skills ensures</p> <p>Leverage existing successful financing schemes such as revolving loan funds which works well among women but also in some male involved in fish-smoking associations.</p> <p>Develop financing schemes for measures taken towards adapting to climate change</p> <p>Develop and apply gender-sensitive criteria and indicators for progress monitoring and evaluation of results</p>	<p>Fish processing enterprises</p> <p>Training centers</p> <p>Fish processing enterprises incl. CFCs</p> <p>FIs & MFIs</p>

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources; No

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

A.5. Risks

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.

Table 4: Risk mitigation strategy

Risk	Rating	Mitigation strategy
Policy and Institutional risks: Limited capacity to mainstream CC in fisheries and other policy sectoral strategies	Medium	The risk related to the limited capacity to mainstream CC in fisheries and other policy sectoral strategies, and it is ranked medium. Already, there is a general understanding of CC vulnerability scenarios and impacts at localized levels. However, sectoral interventions including the extent to which the relevant sectoral and institutional actors are mainstreaming CCA are limited. The project activities will include training, awareness raising and capacity building and building the adaptive capacity of these partners and also building on business and community knowledge.
Climate change risks: Reduced fisheries resources for the markets, particularly local markets	Low	Sensitivity to climate risks will be taken into account when selecting private enterprises and community locations of the project interventions. However, the risk to reduction of fisheries resources will also be mitigated by reduction on post-harvest losses and associated reduction on fishing pressure, aquaculture interventions that generate new resources and diversify product development and markets. Another risk is the actual impact on climate-related events on delivery of the project (especially flood). We will address this by keeping a flexible project management style whilst also utilizing seasonal forecasts in undertaking activities.

<p>Environmental and social risks: Negative impact of project activities on local communities increase influx of people seeking employment which can lead to social and environmental problems; loss of revenue for actors such as vendors of fuelwood and ice</p>	<p>Medium</p>	<p>The risk assessment identified potentially negative impacts of project activities on local communities that are associated with the increased influx of people seeking employment which can lead to social and environmental problems; loss of revenue for actors such as vendors of fuelwood and ice. Increased waste generation and pollution are also identified as risks, both ranked as Medium. The Project is building in measures to comply with the UNIDO and GEF environmental and social safeguards as well as Gender Policies; as a result, the project ESS screening has been undertaken and relevant safeguards identified during the project design and a detailed ESMP will be prepared during the inception phase. Concretely, baseline investments and infrastructures at community centres and private enterprises already have organized structures that will be actively engaged in addressing social and environmental problems and potential risks that may affect the project results. Community organisations or CSOs acting as service providers, and private sector will also benefit from capacity building activities of the project.</p>
<p>Financial risk: Climate change financing models are not understood as addressing the urgent financing needs for rebuilding public, private and community actor capacities to deliver more effective and sustainable solutions to the challenges arising in the prepare, respond and recover phases of COVID-19. Business models developed are not appropriate to the market needs/ those developed cannot be easily financed</p>	<p>Medium</p>	<p>The risk that the business models developed are not appropriate to the market needs/ those developed cannot be easily financed is ranked low. During the PPG phase, business models that the project is addressing, including market and the technology needs of relevant stakeholders were discussed through public and one-on-one consultations/meetings. The private sector was consulted on the new processing and packaging techniques which should facilitate easier access to the international markets. At the artisanal level the proposed business models are especially targeting youth, and therefore their implementation will be complimented by linkages to potential financing and long term skills training opportunities to facilitate viable business take-off and sustainability.</p>

<p>Gender Risk: Social resistance against the involvement of women especially in accessing credit and training to expand their business; lack of interest in the project activities from stakeholders, especially men with regard to the active promotion of gender equality</p>	<p>Medium</p>	<p>The potential of social resistance rising, for instance against the involvement of women especially in investment and training; which can in turn limit the interest or women in project activities from stakeholders, especially men with regard to the active promotion of gender equality. The reason is while the project has identified detailed gender gaps that need to be addressed during project implementation; this risk is likely but also ranked low. At institutional level, DoF has the experience of affirmatively addressing gender issues along the value chains, and working with partners from policy up to community levels. Therefore, building on existing capacity to promote and coordinate gender actions, the action plan for mitigating gender risks is reflected at all levels of the project, while also ensuring that the project benefit address gender and women empowerment.</p>
<p>Institutional Risk: Limited institutional Capacity for national project execution</p>	<p>Medium</p>	<p>Similar to the earlier evaluated risks at the level of overall policy and institutional coordination, this risk is ranked medium. To mitigate the risk, project activities include training, awareness raising and capacity building and building the adaptive capacity of the institutional partners. The detailed modalities are elaborated under the Institutional Arrangements section below.</p>
<p>Health and Supply Side Risk: Global and localized restrictions to movements of goods and persons; disrupted means of travels and inaccessibility to expertise, uncertainty of enabling conditions for planning of missions, as well as public or private meetings.</p>	<p>Medium</p>	<p>Conference calls and online meetings with partners and stakeholders will be organized; collaborative programs, such as online platforms and incubators, will be used for entrepreneurship and business development activities; and online trainings/course and online seminars will be provided to beneficiaries. The project will also deploy flexible mechanisms for planning and funds disbursements.</p>

83. The project risk analysis has taken into consideration risks and expected long term impacts of the global pandemic COVID-19 introduced direct threat to the timely implementation of the project activities and the planned project outcomes and the respective sustainability of results. It is noted that the restrictions on personal interactions are expected to continue in the near future globally and the situation has created economic pressures on communities and fishers, aggravating the baseline scenario beyond the conducted assessments.

A.6. Institutional Arrangement and Coordination

Describe the Institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Institutional arrangements:

GEF Project Implementing agency:

84. The project implementing entity will be UNIDO Department of Agribusiness Development, and having the responsibility to support the overall project implementation, and capacity building for the relevant national counterparts and service providers to achieve the effective project implementation results. Figure 7 below depicts the full institutional coordination, execution and governance structure of this project's: which includes the funding partner, the implementing entity, the project management office, the lead national counterparts and executing entities of the project, and composition of the steering committee.



Figure 7. Project coordination structure.

National Project Executing Entities:

85. The Ministry of Fisheries and Water Resource (MoFWR), in particular the Ministry's line sectoral Department of Fisheries (DoF), is proposed to be the main national project executing partner/entity (PEE). The designated national executing agency for the project will at the same time host the Project Management Office (PMO) and assume the responsibility for the day-to-day management of the project execution, while ensuring monitoring and reporting activities are undertaken by the PMO. The project will also work with other specialized executing partners, including the National Environmental Agency (NEA), The Climate Change Office under the Ministry of Environment, Parks and Wildlife (MoEPW/CCO), as well as the Ministry of Trade, Industry and Employment (MoTIE), Bureau of Standards (GBS), and the Food Safety and Quality Authority (FSQA). The project execution roles and mandates are elaborated in detail under the stakeholder analysis section, and considerations define the PSC terms of references are provided in the following section. To ensure an inbuilt sustainable approach, the pre-selected PEE(s) will be evaluated via the modality of a risk-based management tool, such as a HACT-assessment and validated during the inception phase of the project. The assessment will be based on criteria for institutional needs and a value chain development assessment. In addition to supporting national project execution this approach is aiming to ensure sustainability and institutional ownership of the project investments and results. The institutional self-assessment of executing entities will inform capacity building plans as relevant.

Project Steering Committee (PSC):

86. The lead PEE, the MoFWR, will establish a Project Steering Committee (PSC) with representation from the partner ministries, and their relevant sectoral departments and agencies, and with representatives of the private sector, community entities and fisheries centres. Figure 7 above lists identified potential PSC members. The PSC will provide oversight on project execution as well as the overall directions of policy guidance as relevant, including facilitating collaboration on the

project execution and oversight roles. The PSC will provide guidance on the monitoring and evaluation reports on project results through the review and feedback on semi-annual progress reports on project implementation and co-financing realization and utilization. The terms of references of the PSC will be elaborated during the project inception phase by taking into considerations the following aspects: a) Objective: The Project Steering Committee (PSC) will be established with the overall objective and mandate to ensure the project plans are effectively implemented and partners' coordination modalities ensured to achieve the desired results. b) Governance and Membership: MoFWR/DoF will host and coordinate activities of the PSC. The members of the PSC will include MoEPW/CCO, MoTIE, GTTI, Women Bureau, GSB and FQSA, and Secretariat support for the PSC will be jointly provided by the National Project Coordinator at the PMO and DoF project management focal point. The NEA as the environmental regulatory agency and host institution of the GEF Operational Focal Point will guide as relevant the PSC activities. c) Schedule and Secretariat: The PSC will hold meetings on a six monthly schedule; whereby the BiAnnual project progress reports and workplans for the subsequent year will be presented for review, and endorsement. The NEA will chair the PSC meetings of this project. The PSC will provide periodic guidance on key decision points such as regulatory aspects that require government oversight and guidance in accordance with UNIDO and GEF policies and procedures. d) Roles and responsibilities: PSC meetings will consider lessons arising from periodic project reports and provide guidance on opportunities for scaling up and good practices for dissemination to relevant audiences, and recommendations will be taken on for implementation under component 3 of the project. The PSC final meeting will be held three months prior to completion of the project implementation phase or in view of the schedule for presenting the final independent project evaluation, to allow stakeholders to review and provide feedback on the evaluation findings, recommendations and provide guided management responses of the project management and executing entities. The final composition of the PSC and its ToR will be determined at the inception phase of the project. e) Extended Membership: The PSC will be constituted by the designated representatives of partner ministries, institutions and agencies as prior indicated, which are directly involved in the project implementation or have a legal or regulatory stake in project outcomes and execution, as well as representatives of private sector and NGO stakeholder groups involved in the project. UNIDO and the lead project executing partner - MoFWR may invite *ad-hoc* participants to a PSC such as expert presenters, and such invitations may also be considered on recommendation of other PSC members and executing partners.

Project Management Office (PMO):

87. MoFRW acting as the lead and mandated national project execution entity will establish guidelines for project implementation, monitoring and reporting, as well as ensuring the PMO staff complies with the project M&E requirements of UNIDO, GEF and the partner government of the project. The Project Management Office (PMO) will be hosted by the MoFRW/DoF at the premises of the ministry located in the capital city of Banjul. The main project counterparts as identified at project design, namely MoFWR/DoF, NEA, MoEPW/CCO, MoTIE, GSB, and FQSA will designate official Focal Point (FP) staff to act as technical advisors on the project in accordance with their respective responsibilities and mandates to take over and oversee the project execution as early as possible.

Contractual services:

88. The full or partial transfer of title and ownership of equipment purchased will be undertaken in accordance with UNIDO procurement procedures. Transfers to national counterparts and project

beneficiaries can be undertaken during the project implementation as deemed appropriate by the UNIDO Project Manager in consultation with the relevant stakeholders.

89. The leading PPE per project component will closely coordinate with other line stakeholders and partner institutes via sub-contracting modalities, and will provide audit reports to UNIDO as per standard audit operations of respective executing partner under the executive arrangements. The tentative list of the main project executing and collaborating partners per Component is as follows:

Component	Executing a partner
Component 1	MoFWR/DoF lead with Climate Change Office & MoE, NEA (environment and coastal management policies)
Component 2	GTTI, MoTIE, MoFWR/DoF lead with REAGAM & Alliance of Clean Cooking Stoves
Component 3	MoFWR/DoF lead with GFQSA, and CFCs, NASCOM, Media, Education and training institutions

Coordination with relevant GEF projects and partners

90. Building on the experiences, lessons and partnerships developed under the current GEF project and partners, the project will ensure close coordination mechanisms are established. In particular, the PPG already established synergies with UNIDO implemented climate mitigation project under the GEF 4 and GEF 5 - CCM, and Montreal Protocol focal areas in the country, for instance utilizing the respective project administrative structures. The cross-sectoral Project Steering Committee will play a key role in ensuring that synergies are leveraged with the ongoing GEF projects implemented by UNIDO and others GEF agencies:

? UNIDO GEF 5: ?Operationalization of the SE4All Action Agenda: Promoting Inclusive, Environmentally-sound and Low-carbon Development? ? where one pilot project is related to supporting energy efficient cook stoves for fish smoking in collaboration with FAO.

? UNIDO GEF 5: ?Greening the Productive Sectors: Promoting the Use and Integration of Small to Medium Scale Renewable Energy Systems in the Productive Uses? ? while the project is closed, some lessons learnt and potential synergies of implemented demonstration projects for productive uses will be identified and possibly integrated into some demonstration projects of this GEF project.

? UNIDO GEF 5: ?Reducing Greenhouse Gases and ODS Emissions through Technology Transfer in the Industrial Refrigeration and Air Conditioning Sector?- also a closed project, since February 2017, useful for the cold chain aspects of identified demonstration projects.

? UNEP GEF 5: ?Strengthening Climate Services and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change ? 2nd Phase of the GOTG/GEF/UNEP LDCF NAPA Early Warning Project? ? a closed project which strengthened the EWS and related capacity building and awareness raising will be carefully studied at inception phase to adapt the public awareness campaigns under Component 3 and avoid double work while enhancing impacts.

? UNDP GEF 5: ?Enhancing Resilience of Vulnerable Coastal Areas and Communities to Climate Change? project focused on downstream segments of fisheries value chains, and supported its increased resilience, will be key to support uptake and scaling up of the artisanal value chains targeted by this project.

? FAO GEF 5: ?Adapting Agriculture to Climate Change? aimed to combine and complement capacity building efforts in mainstreaming climate change adaptation in the agriculture sector to inform actions of related food systems such as the fisheries sector; as well as offering climate change adaptation for other incoming generating activities around agriculture especially horticulture for coastal communities targeted by this project. Leveraging efforts made to establish a National Framework for Climate Services (NFCS), an inter-agency and multi-sector tool to forecast weather and climate which could also be useful to coastal communities. Pilot demonstration projects on increased resilience in agriculture and related capacity building undertaken by the FAO project could benefit also some of UNIDO?s project beneficiaries.

Additional Information not well elaborated at PIF Stage:

A.7. Benefits

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

91. The project is designed to contribute to more inclusive measures and benefits by showcasing viable private sector models to pilot businesses, regulatory practices to line government agencies and technical institutions, lessons-learned in mainstreaming climate resilient technologies and business practices to direct beneficiaries, and raising awareness among the targeted communities to address CCA and climate resilience building. Through value addition and reduction of post-harvest losses and waste, the benefits will produce direct impacts on sustained means for income generation among population during extreme climate and weather variability, at the same time regulating pressure on fisheries resources. Thus, capacitated fisheries organizations and enterprises in coastal and inland communities will be engaged as change agents in empowering young people and vulnerable communities, who are otherwise attracted to continue migrating routes from agriculture dependent rural areas.

92. Benefits at national and localized project sites will be delivered through introduction and wider adoption of improved processing techniques, and energy efficient systems. For instance, the improvement of smoking activities will contribute to preservation of forests and mangrove resources, particularly along the coast, and enhance gender impacts as the activities involve majority of women operating in infrastructure deficient conditions. Improved business plans, packaging, quality and safety controls will also contribute to competitiveness of enterprises, and delivering products with the quality to access high value domestic, regional and international export markets. The project results will contribute to improving CC adaptation capacity and resilience of coastal fisheries resources and actors along the productive value chains, and thereby reduce the vulnerability of rural, coastal and urban communities in the country.

93. By contributing to improved livelihoods and resilience of communities and production systems at national and local levels, enabling to face current and projected future CC and weather variability impacts, particularly for the coastal resources and populations, the socioeconomic benefits that will be delivered through this project are multi-dimensional. Socioeconomic benefits resulting from value addition and sustainable utilization and management of fisheries resources are presented at three levels: a) enhanced resilience of coastal communities; b) improvement and climate-proofing of livelihoods including incomes and nutritional food security contribution of fisheries and related value chains, and c) competitiveness of enterprises dependent on fisheries while ensuring sustainable use of the climate fragile and vulnerable resources.

94. CCA Policy Mainstreaming actions and community-based actions will be ensured to become means for sustaining the improvements in the fisheries value chain governance. Governmental as well as technical partners and the private sector will be mobilized to appreciate their roles and contributions to ensuring better livelihoods and nutritional food security outcomes. By creating opportunities for employment within coastal fisheries and aquaculture sectors, it is expected that the project will contribute to reversing the pressures and drivers associated with rural to urban and sea route migration of youth. By supporting resilience-building and diversifying opportunities for income generation and economic livelihoods along the fisheries value chain pressures on coastal resources will be alleviated.

A.8. Knowledge Management

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

95. The project knowledge management approach will involve the compilation of project generated knowledge and experiences, which will be documented by the PMO. Knowledge management will require a systematic and regular data collection plan and its implementation at the respective project intervention sites. The project will prepare periodic briefs on lessons learned, and also provide content for relevant partner and programme websites, as well as prepare relevant knowledge management guidebooks to showcase the experiences. The generated information and knowledge including technical reports and training materials will be archived by the PMO, and transferred to the relevant project counterparts and custodians. Thus, project implementation includes activities and plans aiming to assess and document in a user-friendly form the relevant knowledge and information generated by the project for wider dissemination and up-scaling use.

96. Coordination with regional and global partners will be supported with the aim of learning from other relevant initiatives and projects, and to disseminate the project lesson to partners. The project will showcase experiences of working with youth to promote gainful employment as well as supporting their adoption of improved technologies and skills training. In particular, the project will provide opportunities for the government agencies, community organizations, and private sector and development partners to adopt and upscale such practices. The PMO and execution partners will participate in training, conferences, stakeholder exchanges, virtual knowledge networks. Collaboration with established knowledge management networks will ensure the project learned lessons are widely disseminated to relevant audiences and support national, regional and global uptake. Knowledge management is also aiming to promote the roll out of project models and results for replication and scale up investment to the sector. Collaboration with regional coast West Africa fisheries organisation, notably the Association of Artisanal Producers, REPOA, the regional economic commission ECOWAS, and the Confederation Africaine des organisations professionnelles de pêche artisanales (CAOPA) has been established during project design. The project and its partners are also registered on the Regional GEF LME: INTERNATIONAL WATERS LEARNING EXCHANGE & RESOURCE NETWORK- ILEARN Network and community of practices, where partners are regularly invited to organize seminars, training and conferences with relevant stakeholders. Besides, within the UNIDO and GEF knowledge management systems, the relevant project information, data including visibility materials will be uploaded to the Open Text and Data Management Platform of UNIDO, which is an open portal that is freely accessible and available to the public. The project will also ensure a learning process through collection of baseline and implementation data, and the integration of relevant information in routine government planning and budgeting cycles. The PMO will make sure that the interactions and networks establish to promote knowledge management and experience sharing, will be maintained and enhanced during implementation. Similarly, the engagement of community and private sector associations and private fishing companies will be closely ensured through trainings, events and workshops as partners in the knowledge management activities.

B. Description of the consistency of the project with:

B.1. Consistency with National Priorities

Describe the consistency of the project with nation strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

97. The project is consistent with the national development priorities and strategic framework on poverty reduction, diversification of economic growth sectors and livelihoods, and nutritional food security. Specifically, while the project interventions are primarily addressing the inherent climate vulnerability impacts on the fisheries sector by targeting increased fish production through aquaculture and improved post-harvest fishery technologies and practices, impacts across the sectors and their strategic plans will be achieved and promoted. These strategic priorities are presented in the national Vision 2020 and the National Development Plan 2018-2022. As such, the expected project results will be part of the national development agenda to ensure coordination of sectoral and cross cutting policies including pathways that would leverage potential environmental global benefits. the project formulation identified areas for supporting implementation of the 'National Climate Change Strategy?', in particular activities o facilitate the coordination and alignment with global commitments, as well as regional and national and sectoral policies and plans, for activities relating to mainstreaming of climate change in national and sectoral policies, programmes, and plans. The National Adaptation Programme Action (NAPA, 2007) implementation plans and priority projects provide an overarching framework as the main national adaptation document to guide government action. The project proposed actions have thus focused on the fish processing value chains are proposed as priority adaptation measures that can directly impact on coastal fisheries and supporting restoration/protection of the fishing environment.

C. Describe The Budgeted M & E Plan:

98. UNIDO as the Implementing Agency will involve the GEF Operational Focal Point and project stakeholders at all stages of the project monitoring and evaluation activities in order to ensure the use of the evaluation results for further planning and implementation. Project monitoring and evaluation will be conducted in accordance with the established UNIDO and GEF procedures, and the activities will be undertaken by the PMO and UNIDO delegated project management staff and supported by the executing partner and relevant project stakeholders. According to the Monitoring and Evaluation policy of the GEF and UNIDO, follow-up studies like country portfolio evaluations and thematic evaluations can be initiated and conducted. All project partners and contractors are obliged to (i) make available studies, provide reports or other documentation related to the project and (ii) facilitate interviews with staff involved in the project activities. The project M&E framework will include tracking contribution towards the attainment of the relevant Sustainable Development agenda, including SDG 9, SDG 1, SDG 2, SDG 5, and the oceans SDG 13.

99. Project monitoring plans and activities will be undertaken and reporting ensured based on indicators defined in the log frame and the annual work plans, and the GEF-LDCF Metadata and Core Indicators. UNIDO Project Manager and PMO will be responsible for narrative reporting to the GEF (including preparation of Annual Project Implementation Reviews (PIR) and support in planning the independent terminal evaluation as established in the M&E plan. Whereas project follow-up studies including country portfolio evaluations and thematic evaluations are not anticipated in this project, if the information is required for these purposes, the project will ensure due contributions. A description

of the project Monitoring and evaluation (M & E) activities and an indicative M & E work plan and budget are described in Sections below.

Project Inception Activities

100. The inception activities will include undertaking consultations with the relevant stakeholders and site visits to selected project sites, with the aim of validating the project targeted results and annual workplans, as well as the selection of partners and stakeholders, and their mission and roles in the context of the project interventions and objective. Membership to the Project Steering Committee will also be validated, and the first PSC meeting held at the end of the mission to review the draft Inception report. The inception activities will include an inception workshop where the project will be presented for validation of the implementation plans, as well as the Terms of reference for the project steering Committee. The inception workshop will include the official launch and presentations on the project objectives (key expected results, implementation modality, M&E framework, risk management strategy, work plan and budget) to stakeholders. As such, the inception workshop will also be considered as the first awareness raising activity, thereby ensuring the project establishes and formalizes the relevant partnerships with actors at national and local government levels. Planning of the abovementioned inception activities, particularly meetings, will take place under the considerations of the restrictions related to covid-19 pandemic measures, ensuring full compliance with governmental and UN regulations in place to curb the spread of the disease, particularly in most vulnerable communities. Timeline of project activities, starting with inception, will be fine-tuned monthly to refocus on providing assistance to the target communities in line with the national and global approach of preventive and supporting measures.

Annual Work Plans and Budget

101. Annual workplans and budgets will be prepared by the PMO with guidance of the national project executing counterparts and UNIDO assigned PM. The project Annual Workplans and detailed breakdown of the first year budget will be presented in detailed in the inception phase, in accordance with the activities and timeline as presented in Annex G of this proposal document. Inception mission team members are expected to be composed of a short term M&E expert, NPC if already recruited and staff of the project national executing agency.

Regular Progress Reporting

102. Progress reporting through PIRs will be undertaken on the activities of the previous reporting period. Regular PIR activities will include, and not limited to following: Review of periodic progress made towards project objective and project outcomes; Documenting of lesson learned/good practices; and Risk analysis review and status report on mitigation measures

PSC Project Progress Reviews

103. Project objectives, outputs and emerging issues in regard to project implementation will be evaluated annually by the PSC. The inception mission and workshop planning, and workplan and budget and inception report presentations to the PSC will be guided by the UNDO Project Manager. The PSC will also serve as a forum for discussion of the Mid-Term Evaluation and the Terminal Evaluation, and meta data will be kept by the PMO.

Guidance to Technical Reporting.

104. Draft technical reports, including Technical Experts that are to be disseminated to project partners should be cleared by the responsible project implementing and executing partners, and presented to the PSC for endorsement. Technical reports that are to be published will be submitted to

UNIDO for review and clearance in accordance with established procedures and guidelines for approval of official publications.

M & E WORK PLAN AND BUDGET

105. The table below presents the tentative budget for the Gender disaggregated monitoring and reporting in accordance with the project logframe, the ESMP sustainability monitoring, as well as the GEF Adaptation Core Indicators, targets including the IPR progress, mid-term and final evaluation:

Type of M&E Activity	Responsible Partner	Budget (USD)	Co-financing (USD)	Remarks	Timeframe
Inception Inception Technical expert inputs and missions incl. PM and PMO Inception Workshop Reporting PMO & National Execution Partner establish AWP's and meta data system	UNIDO Project Manager (PM); Project Management Office (PMO), and M&E and gender specialists as required	35,000	45,000	UNIDO PM, PMO, Executing Agency	Inception activities start within first two months of project start up Regularly and findings/feedback/lessons incorporated into project management and Annual Project Reviews
Measurement of progress against GEF Core Indicators		30,000	60,000		Core Indicators validated, and monitored, reviewed and reported on Annually
Regular Monitoring and evaluation of indicators in project results framework, e.g. co-financing, gender, stakeholder engagement, environmental and social risks and corresponding management plans as relevant	National Execution Agency PMO UNIDO PM Project Steering Committee	5,000	105,000	Project Monitoring, PIR, MTR as part of project execution roles and PMO coordinate d AWP activities	Annually prior to the finalization of APR/PIR and to the definition of annual work plans
Mid-term Review (MTR)	UNIDO PM, PMO, external evaluation consultants	5,000	55,000		24 Months after start of project

Independent Terminal Evaluation (TE)	UNIDO Independent Evaluation Division (EVQ/IEV), PMO, PM UNIDO HQ and PSC, independent external evaluators	35,000	25,000		Evaluation at least six months before the end of the project; report at the end of project implementation
TOTAL indicative cost		110,000	290,000		

106. Legal Context

The present project is governed by the provisions of the Standard Basic Cooperation Agreement between the Government of the Republic of The Gambia and UNIDO, signed and entered into force on 27 January 1994.

PART III: Certification by GEF partner agency(ies)

A. GEF Agency(ies) certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
Mr. Philippe R.Scholtz, Special Advisor to Director General, Office of the Director General	10/3/2019	Juliet Kabege	+431260260	j.kabege@unido.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

ANNEX A: PROJECT RESULTS FRAMEWORK

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Objective	To increase adaptive capacities for The Gambia coastal fish processing value chains and promote climate resilient business models focusing on improved post-harvest fisheries food systems to vulnerable communities	Communities awareness on CCA measures Regulatory and sector strategies/plans mainstream climate resilience actions.	Limited awareness and capacity at community level, no enabling policy measures National capacities incl. staff skills not adequate to plan for adaptive capacity building are not targeted at the resilience of coastal fisheries and dependent populations & businesses	Investment level incl. evidence of climate resilience enabling policy engagement. National capacities incl. staff skills adequate to plan for climate adaptive capacity building, resources targeted at building resilience of coastal fisheries and dependent populations & businesses	National, regional and global statistics and data Project Progress and monitoring reports Reports on GEF Indicator tracking tool updates	The Government of The Gambia remains committed to implementing its national adaptation plan and measures Political & social situation in the country remains stable
Component 1: Gender-responsive Climate Change Adaptation (CCA) measures mainstreamed into relevant sector policies and national strategies						

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Outcome 1	Strengthened national capacities to mainstream CCA and gender equality in sectoral policies and development strategies, with relevant climate resilient regulatory and policy measures to promote adoption of quality and safety standards and systems, and environmental safeguards by the private sector	Number of proposals of business models and capacity building plans Adaptation and gender targeted mainstreaming adopted and implemented with DoF coordination focusing on fish processing segments and actors	Low CCA capacity and low-quality fisheries products Limited knowledge of enterprises, service providers and communities on baseline /good practices and regulatory requirements for compliance with quality management systems	Evidence of adapted good institutional practices adapted to regional and national enterprise, and community level actions that enhance coastal fisheries value chain based CCA and gender mainstreaming results (including GPs on hygiene, sanitary standards, codes of practice on fish quality and safety)	Updated policies and strategies Quality standards developed and adopted Project monitoring	The relevant institutions and partners adopt and introduce recommended policy and strategy actions. Government and not state partner agencies remain committed to promote the recommended adaptation enabling policies and cross-sectoral actions

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 1.1	Recommendations developed through private sector engagement for mainstreaming gender-responsive CCA into sectoral/coastal fisheries value chain-related policies and strategies	At least 3 climate resilient regulatory and policy measures piloted to promote adoption of quality and safety standards and systems, and environmental safeguards by the private sector	Existing regulatory frameworks, policies and strategies do not include coastal fisheries value chain based CCA and gender mainstreaming strategies	<p>Relevant institutions and enterprises engaged in the dialogue on climate resilience building ? and validate the recommended enabling practices and business models.</p> <p>Recommendations on policies to guide investment and financing project development in linking artisanal and exporting coastal fish processing enterprises developed and adopted by relevant stakeholders particularly DoF.</p> <p>Guidelines for fisheries sector related containment and recovery responses to the pandemic.</p>	<p>Proposal of amendments of policies</p> <p>Official journal publications</p> <p>Project reports</p>	The willingness of the relevant government agencies & commitment to reduce timespan between proposal and application Willingness of the private sector to abide by the new policy guidelines

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 1.2	Climate resilient business model for fisheries waste management and processing developed and demonstrated for private/public uptake	Enterprises - guidelines and training on financing solutions adopted for fish processing supply chains- integrate Covid-19 recovery guidelines. No. of existing and enterprises adopted the developed fish processing business models No. of practices that informed the recommended policy measures	Fisheries sector information systems operational incl. Knowledge <u>Management activities</u> No existing ? targeted models for the value chain segments of fisheries processing, and integrated waste management	At least 45 fish processing enterprises profiled 15 enterprises with the climate resilient business models trained on enterprise financing and investment partnerships Evidence of enterprise level actions and protocols to integrate covid-19 recovery and rebuilding guidelines, adopted and rolled out, and a learning and knowledge management system in place.	Training evaluation reports Project monitoring reports Assessment of the physical environment of the project sites reporting uptake improved climate resilient fish processing and post-harvest value chain business models. Financing training reports	Resistance to change of target actors from the public/private sector Concurrent uses for waste from fisheries.

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 1.3	The staff of DoF, local government, environmental and business sector regulators, industries and cooperatives trained on gender-responsive climate-resilient adaptation measures, supporting the integration of CCA into fisheries value chain development	At least 50 staff from target group institutions and agencies trained on climate resilient and gender equality good practices, and relevant enabling policy measures identified with the engagement of the trainees *disaggregated by at least 40 % women, and 40% youth trainees	Limited support services for integrated CCA policy mainstreaming, fisheries value chain development and export trade	Trainees / Staff of DoF and partners develop and adopt policy enabling measures, with validated institutional roles and responsibilities Evidence of policy actions introduced with at least 4 models including for the fishing port validated.	Training Evaluation Reports Training manuals developed Number of training sessions and participants Project monitoring reports	Members attend the training programmes regularly Members accept the attitudinal changes with respect to gender.
Component 2: Resilience building models for small scale fisheries-dependent enterprises and populated coastal communities						
Outcome 2	Increased resilience and adaptive capacities of enterprises and communities along the coastal fisheries value chain	No. of enterprises and organized producers in the target communities trained in climate resilient business models Financial, technical and operational capacities are built	No resilient capacity building along the fisheries value chain	15 enterprises and organized producers supported building on Output 1.2 to adopt improved and new models incl. diversified startups on fish processing tech solutions and aquaculture and feasibility plans developed with extension and financing agencies.	Reports of the training incl. training evaluations and post-training periodic surveys Project monitoring reports	The commitment of the enterprises and communities to adopt the new knowledge and techniques Operational policy and strategy frameworks that adequately mainstreamed CCA and gender.

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 2.1	Innovative climate-proof post-harvest technologies implemented at three Community Fisheries Centers (CFCs), with capacity building	No. of diversified supported enterprises adopt improved and climate resilient technology solutions	No resilient capacity building along the fisheries ? post-harvest landing, handling and fish processing value chains	<p>No. of people trained Stakeholders reporting capacities on climate resilience building incl. on financial, technical and operational planning acquired</p> <p>At least 40% of women and 40% of youth reporting relevance of adopted improved processing and post-harvest fisheries technologies, practices and business operations</p> <p>Training packages incorporating good practices for containment and recovery responses to the pandemic</p>	<p>Training Evaluation Reports by trainees and managers of the 15 fish processing enterprises supported directly by the project</p> <p>Reports on Project progress and monitoring reports</p>	Adopted technology solutions take sufficient account of the low level of skills in the industry. Credit access to adopt the new technologies especially for the youth and women.

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 2.2	Business service providers trained to train enterprises on business skills and innovative climate-resilient strategies for value added fish storage and processing.	No. of businesses impacted by the business skills training plan	Tbc, based on launch of this particular project	45 profiled value chain enterprises and organized producers supported building on Output 1.2 and Output 2.1 (5,000 people trained and benefitted from the enterprises supported are aware of climate adaptation solutions in the coastal fisheries sectors 40% of women and 40% of youth / participants from business service provider agencies) trained through a replication strategy At least 2/3 of the trained enterprise, directly supported with promoting the solutions report adopted new innovative strategies introduced by the project to financing and tech service agencies At least 50% of the fish processing enterprises with trained staff adopt improved post-harvest management systems and practices adopted to comply with covid-19 protocols and guidelines	Training reports Project monitoring reports	The commitment of enterprises to adopt business skills and innovative strategies. Availability of Government support where models require innovation incl. restructuring

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 2.3.	Climate-resilient business plans developed by selected enterprises.	No. of enterprises adopt climate resilient business plans At least 30% of the selected enterprises have women in a leadership position	Tbc, based on launch of this particular project	15 enterprises building on Output 1.2 and Output 2.1 and 2.2 adopt climate resilient business plans and are supported through training and advisory services on access to micro finance. At least 40% of the selected enterprises have maintained or upgraded women participation the enterprise management. At least 2 repurposed for COVID-19 targeted services and recovery measures, and are supported through training and advisory services on access to micro finance.	Training report Project monitoring reports	Operational policy and strategy frameworks changes are in place. Enterprises accept to promote gender mainstreaming
Component 3: Community empowerment and awareness raising on CCA in fisheries value chains						

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Outcome 3	Strengthened institutional and community capacities to develop and utilize integrated fisheries data and information management systems based on Early Warning System (EWS) and community knowledge for awareness and dialogue on CC resilience building	Relevant capacity building tools adopted to raise wider awareness of CC resilience developed and implemented	EWS developed and implemented with the support of the GEF by UNEP (2 phases projects)	Evidence of strengthened capacity for institutions involved in the coastal fisheries sector to develop and utilize climate data and information systems. Number of people reached through capacity building and awareness raising efforts. At least 20 coastal communities targeted to sensitization through various media.	Project monitoring Public awareness campaign reports, media outreach testimonials compiled and disseminated Training satisfaction questionnaire & report	Developed tools comply with the targeted fish processing value chains strategies for CCA Institutions have relevant baseline capacities
Output 3.1	Plan for public awareness campaigns implemented to enhance communication and dialogue on CC impacts on coastal fisheries livelihoods	At least 1 public awareness campaign rolled out per year	Limited Baseline capacity building and awareness raising on CCA at fisheries level (downstream of the value chain) by UNDP with GEF funding, as well as in agriculture by FAO and GEF	100% of public awareness campaigns are gender-sensitive. At least 70% of coastal communities? inhabitants are sensitized.	Project monitoring Public awareness campaign reports (incl. from partners, e.g. telecom operators, etc.)	The project knowledge and conveyed awareness raising messages are appropriate, understood and adapted by the targeted segments

Results		Indicator	Baseline	Target	Means of Verification	Risks and Assumptions
Output 3.2.	Training materials to introduce climate adaptation solutions in the coastal fisheries sector developed and resilience capacity building workshops held for selected CFCs and educational institutions	No. of participants trained on climate adaptation solutions in the coastal fisheries sectors (women and youth)	Training materials focusing on climate adaptation solutions for improved livelihoods on the post-harvest part of the fisheries sector not developed yet. Capacity building on resilience for educational institutions not yet available	At least 10,000 people in coastal project areas are sensitized on the project delivered results and lessons learner, at least 50% women and youth	Project monitoring Training satisfaction questionnaire & report	Targeted educational institutions willing to offer these training to their students Coastal communities are willing to participate in such training
Output 3.3.	Lessons learned documented and disseminated to relevant audiences, with support for regional uptake, replication and scaled up investments.	Knowledge incl. lessons learned are shared and presented at different workshops, on project and external websites and social media	Tbc, based on launch of this particular project	Newsletters and promotion materials disseminated Project visibility developed and maintained inc. social media and relevant websites - the ECOWAS Observatory (ECOWREX) Knowledge sharing materials are gender-sensitive	Provided newsletters Project monitoring (communication chapter) Evaluation reports ECOWREX database/web site	Communication efforts are not sufficient Communication plans for the project are integrated into the tasks of the Project Assistant of the PMO and to be supported by partners incl. MoF/DoF and UNIDO (for inputs)

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

1. Question 4 of the PIF review Sheet: by CEO Endorsement, please consider potential adverse effects of climate change on current and planned fisheries investments and elaborate how those effects will be integrated in the project design.

Response:

The potential adverse effects of climate change on coastal fisheries resources are considered and relevant information elaborated under Paragraphs 5-14 of the CEO document and Table 1. Subdivisions of the fishery value chain that are affected by the impacts of climate change, with proposed adaptation measures. The information is incorporated in the project design which is focusing on existing and planned fish processing and post-harvest investments for the project and will be using these portions of the coastal fisheries value chains to deliver on the ground actions and to leverage scaled solutions including the upgrade of the fish landing port of Banjul that is expected to allow for landing of commercial and industrial catch and fish processing in The Gambia.

2. Question 8 - Recommendations of the PIF review: By CEO Endorsement: The PIF mentions at several places that 'climate resilient' measures will be undertaken. Please ensure that by CEO Endorsement, a clear rationale is provided as to how measures will build resilience to climate change and/or increased climate variability.

Response:

Investments realized by the project for fish processing and post-harvest value chain resilience building will be operated and maintained by enterprises; directly involving at least 5,000 direct beneficiaries (60% male, and 40% female by numbers) and 5,000 people from coastal fisheries dependent communities as direct beneficiaries, and at least 20,000 people as indirect beneficiaries. At least 10,000 people will be part of the project supported training and knowledge and awareness-raising. The project addresses increased fish production through the preservation of post-harvest fishery products as well as creating enabling services for linkages to financing in the existing and innovative new or upgraded value chains and services. Under Component 2, concrete business level and community support in terms of technology, process, and skills transfer, and wider dissemination of the relevant practices along with coastal and inland areas. Concrete climate resilience-building measures that will be undertaken under the Investment components (Component 2) Output 2.3 include developed or updated feasibility plans of diversified aquaculture enterprises, training on fish processing, and developed value chains that are diversified in terms of the source of raw materials and value-added such as utilizing fish and agro-waste for aquaculture, livestock, and poultry feed. Post-harvest fisheries technologies will include isotherms fabricated using materials within the country and region such as fibred grass, insulators, and storage boxes. Fish drying and cold chains will be linked to solar applications ensuring scale of operations. Therefore, diversification improved post-harvest loss, and waste mitigation and reduction thereof along supply chains generated employment and incomes, and addressing value chain deficiencies such as sanitary and Phytosanitary (HACCP) practices and norms, and promotion of HACCP-based quality management systems are the concrete 'climate-resilient' measures. Scaling up will be supported by component 1 that will deliver comprehensive and enabling policy and regulatory interventions such as environmental regulations and standards, and Components 3 and 4 that will ensure knowledge and technology transfer, raising awareness on good practices and lessons, and greater private sector engagement. The project rationale is reflected in the sections on Barriers to be addressed and the baseline scenario, as well as corresponding and practically adopted alternative and incremental scenarios.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS.

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

PPG Grant Approved at PIF: USD 50,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
EXPERT MISSION 1: - Launch PPG activities, recruit experts and draft activity plans including schedules of country missions - Preparing documentation and presentations of PIF for the first country mission; and - Prepare draft stakeholders workshop programme, and seek validation by the key project counterparts from Ministry of Fisheries/Department of Fisheries, Department of Fisheries (MoFWR/DoF); National Environmental Agency (NEA) and UNIDO during the first mission. EXPERT AND UNIDO PROJECT MANAGER MISSION 2: - Compile baseline updates and reports for the CEO project formulation, and prepare relevant documentation including the project brochures and the PPT presentations for the Stakeholders? Workshop during the second mission. - Facilitated presentations and feedback at the stakeholder's workshop, and support counterparts to prepare the workshop report	\$ 50,000	\$ 41,899.96	\$ 6,074.83
Total	\$ 50,000	\$ 41,899.96	\$ 7,412.46

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

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

N/A

ANNEX E: GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, Table G to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Please refer to Annex E uploaded under the project's roadmap.

ANNEX F: Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part I by ticking the most relevant keywords/topics//themes that best describes the project

Please refer to Annex F in the attached CEO Endorsement document.

ANNEX G: Project Budget Table

Please attach a project budget table.

The below budget table is also available in the revised Annex H.

ANNEX H

Output Based Budget for the GEF Grant										Execution Agencies	PEE Budget
Component 1 - Gender-responsive Climate Change Adaptation (CCA) measures mainstreamed into relevant sector policies and national strategies	Type of Input	GEF Grant Budget Component 1									
		Yr 1		Yr 2		Yr 3		Output Total			
		w/w	\$	w/w	\$	w/w	\$	w/w	\$		
1.1: Recommendations developed through private sector engagement for mainstreaming gender-responsive CCA into sectoral / coastal fisheries value chain-related policies and strategies.	International Expertise	2	7,000	2	7,000	2	7,000	6	21,000	MoFWR/DoF	International Expertise, CCA, Fisheries technical specialists and short-term target value chains specialists through national executing agency, MoFWR/DoF.
	Local Travel		2,000						2,000		
	National Expertise	4	3,000	4	3,000	4	3,000	12	9,000		
	Training/Workshops		1,500		1,000		1,000		3,500		
	Equipment								0		
	Miscellaneous								0		
	Output sub-total	6	13,500	6	11,000	6	11,000	18	35,500		
1.2: Climate resilient business model for fisheries waste management and processing developed and demonstrated for private/public uptake.	International Expertise	6	21,000	4	14,000	4	14,000	14	49,000	MoFWR/DoF	International Expertise, Business Development and Procurement Specialist through national executing agency, MoFWR/DoF National and Tech. International Specialists Providers
	Local Travel		1,000		2,000		2,000		5,000		
	National Expertise	6	4,500	10	7,500	10	7,500	26	19,500		
	Training/Workshops		4,000		2,000		2,000		8,000		
	Equipment				20,000				20,000		
	Miscellaneous								0		
	Output sub-total	12	30,500	14	45,500	14	25,500	40	101,500		
1.3: Staff of DoF, local government, environmental and business sector regulators, industries and cooperatives trained on gender-responsive climate-resilient adaptation measures, supporting the integration of CCA into fisheries value chain development.	International Expertise	8	28,000	2	7,000	2	7,000	12	42,000	MoFWR/DoF	Standards adoption incl. ESMP, Export Controls, National and International Expertise
	Local Travel		1,000		500		500		2,000		
	National Expertise	4	3,000	6	4,500	6	4,500	16	12,000		
	Training/Workshops		3,000		2,000		2,000		7,000		
	Equipment								0		
	Miscellaneous								0		
	Output sub-total	12	35,000	8	14,000	8	14,000	28	63,000		
TOTAL Component 1	30	79,000	28	70,500	28	50,500	86	200,000			

		GEF Grant Budget Component 2										
Component 2 - Resilience building for small-scale fisheries-dependent enterprises and populated coastal communities	Type of Input	Yr 1		Yr 2		Yr 3		Output Total		Execution Agencies		
		w/w	\$	w/w	\$	w/w	\$	w/w	\$			
2.1: Innovative climate-proof post-harvest technologies implemented at three Community Fisheries Centers (CFCs) with capacity building.												
	International Expertise								0	MoFWR/DoF		
	Local Travel		6.000		7.000		7.000		20.000			
	National Expertise	11	6.600	11	6.600	12	7.200	34	20.400			
	Training/Workshops		11.000		11.000		11.600		33.600			
	Equipment		210.000		300.000		300.000		810.000			
	Miscellaneous								0			
	Output sub-total	11	233.600	11	324.600	12	325.800	34	884.000			
2.2: Business service providers are trained to train enterprises on business skills and innovative climate-resilient strategies for value added fish storage and processing.												
	International Expertise	14	49.000	12	42.000	12	42.000	38	133.000	GTII	National and Tech. International Specialists Providers	
	Local Travel		5.000		5.000		5.000		15.000			
	National Expertise	16	12.000	16	12.000	16	12.000	48	36.000			National Expertise including implementing agencies and individual technical experts, in accordance with work plans
	Training/Workshops		5.000		7.000		7.000		19.000			
	Equipment		12.000		14.000		4.000		30.000			
	Miscellaneous								0			
	Output sub-total	30	83.000	28	80.000	28	70.000	86	233.000			
2.3: Climate-resilient business plans developed by selected enterprises.												
	International Expertise	6	21.000	4	14.000	4	14.000	14	49.000	MoTIE	Sub contracted International individual experts and service providers, in accordance with work plans	
	Local Travel		10.000		10.000		10.000		30.000			
	National Expertise	12	9.000	10	7.500	10	7.500	32	24.000			
	Training/Workshops		5.000		5.000		5.000		15.000			
	Equipment				118.000				0			118.000
	Miscellaneous		5.000		6.000		5.000		16.000			
	Output sub-total	18	50.000	14	160.500	14	41.500	46	252.000		National agencies and UNIDO direct contracted implementing agencies for specialized and international procurements, in accordance with work plans	
TOTAL Component 2		59	366.600	53	565.100	54	437.300	166	1.369.000			

		GEF Grant Budget Component 3										
Component 3 - Community Empowerment and Awareness Raising on CCA focusing on the post-harvest coastal fisheries value chain	Type of Input	Yr 1		Yr 2		Yr 3		Output Total		Execution Agencies		
		w/w	\$	w/w	\$	w/w	\$	w/w	\$			
3.1: Plan for public awareness campaigns implemented to enhance communication and dialogue on CC impacts on coastal fisheries livelihoods.												
	International Expertise	8	28.000	3	10.500	3	10.500	14	49.000	MoFWR/DoF lead with GFQSA, and CFCs	International Expertise, EWS Specialists through national agencies and UNIDO direct sub contracted entities	
	Local Travel				2.000		2.000	0	4.000			
	National Expertise	10	7.500	10	7.500	10	7.500	30	22.500			
	Training/Workshops		4.000		5.000		5.000	0	14.000			
	Equipment		1.000		1.000		1.000	0	3.000			
	Miscellaneous							0	0			
	Output sub-total	18	40.500	13	26.000	13	26.000	44	92.500			
3.2: Training materials to introduce climate adaptation solutions in the coastal fisheries sector developed and resilience capacity building workshops held for selected CFCs and educational institutions.												
	International Expertise	8	28.000	4	14.000	4	14.000	16	56.000	MoFWR/DoF lead with GTII/WARD, CFCs	International Expertise, Business Development and Procurement Specialists	
	Local Travel		2.000		5.000		5.000	0	12.000			
	National Expertise	10	7.500	12	9.000	12	9.000	34	25.500			International Expertise, Business Development and Procurement Specialists through national agencies
	Training/Workshops		5.000		5.000		5.000	0	15.000			
	Equipment		4.000		2.000		2.000	0	8.000			
	Miscellaneous							0	0			
	Output sub-total	18	46.500	16	35.000	16	35.000	50	116.500			
3.3: Lessons learned documented and disseminated to relevant audiences, with support for regional uptake, replication and scaled up investments												
	International Expertise	6	21.000	4	14.000	4	14.000	14	49.000	MoFWR/DoF lead with GFQSA, and CFCs	Sub contract service providers, International National agencies, in accordance with work plans	
	Local Travel		2.000		2.000		2.000	0	6.000			
	National Expertise	10	6.000	10	6.000	10	6.000	30	18.000			
	Training/Workshops		8.000		5.000		5.000	0	18.000			
	Equipment		9.000		22.000		9.000	0	40.000			
	Miscellaneous							0	0			
	Output sub-total	16	46.000		49.000		36.000	44	131.000			
TOTAL Component 3		34	86.500	13	75.000	13	62.000	88	340.000			

Component 4: M&E	International Expertise	w/w	\$	w/w	\$	w/w	\$	w/w	\$	UNIDO as Implementing Agency
		5		5	17,500	7	25,000	17	42,500	
	Local Travel		8,000		5,000		10,000	0	23,000	
	National Expertise	17	8,500	17	8,500	14	7,000	48	24,000	
	Training/Workshops		8,000		5,000		7,500	0	20,500	
	Equipment							0	0	
	Miscellaneous							0	0	
TOTAL Component 4		22	24,500	22	36,000	21	49,500	65	110,000	
Project Management Costs (PMC)	Local Travel	w/w	\$	w/w	\$	w/w	\$	w/w	\$	MoFWR/DoF
			8,000		8,000		8,000	0	24,000	
	National Expertise (e.g. Project Coordinator)	90	45,000	90	45,000	90	45,000	270	135,000	
	National Expertise (e.g. Procurement Specialist, Fin. And Admin)	10	4,000	10	4,000	10	4,000	30	12,000	
	Training/Workshops							0	0	
	Equipment		4,000					0	4,000	
	Miscellaneous		2,000		2,000		2,000	0	6,000	
TOTAL PMC		100	63,000	100	59,000	100	59,000	300	181,000	
TOTAL										2,200,000

Guidance Points

As per GEF/C.52/Inf.06/Rev.01: Execution generally includes the management and administration of the activities of projects, in addition to management of the project. BL2100 (Contractual Arrangements) will primarily be used for the contracting of Executing Agencies (EAs)

**The Project Management Costs shall be included in the Execution Agreement with EA 1 for the day-to-day management of project execution. Specifically,