GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title	
Artisanal Fisheries Resilient Development Project (PROPEIXE)	
Region	GEF Project ID
Mozambique	11419
Country(ies)	Type of Project
Mozambique	FSP
GEF Agency(ies):	GEF Agency ID
IFAD	2000004749
Executing Partner	Executing Partner Type
The Ministry of Sea, Inland Waters and Fisheries (MIMAIP) , Ministry of Land and Environment	Government
GEF Focal Area (s)	Submission Date
Climate Change	10/18/2023
Project Sector (CCM Only)	
Climate Change Adaptation Sector	

Taxonomy

Climate Change, Focal Areas, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Climate Change Adaptation, Climate resilience, Livelihoods, Least Developed Countries, Mainstreaming adaptation, Climate information, Ecosystem-based Adaptation, Community-based adaptation, Biodiversity, Mainstreaming, Agriculture and agrobiodiversity, Fisheries, Protected Areas and Landscapes, Productive Landscapes, Productive Seascapes, Biomes, Mangroves, Wetlands, Rivers, Tropical Rain Forests, Grasslands, Land Degradation, Sustainable Land Management, Integrated and Cross-sectoral approach, Income Generating Activities, Improved Soil and Water Management Techniques, Restoration and Rehabilitation of Degraded Lands, Community-Based Natural Resource Management, Sustainable Pasture Management, Ecosystem Approach, Sustainable Agriculture, Drought Mitigation, Sustainable Livelihoods, Land Degradation Neutrality, Land Cover and Land cover change, Land Productivity, Carbon stocks above or below ground, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Transform policy and regulatory environments, Stakeholders, Beneficiaries, Civil Society, Community Based Organization, Academia, Type of Engagement, Information Dissemination, Participation, Consultation, Partnership, Local Communities, Gender Equality, Gender results areas, Participation and leadership, Capacity Development, Access to benefits and services, Awareness Raising, Access and control over natural resources, Knowledge Generation and Exchange, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Sex-disaggregated indicators, Capacity, Knowledge and Research, Knowledge Generation, Learning, Knowledge Exchange

Type of Trust Fund	Project Duration (Months)
LDCF	84
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
8,932,420.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)

848,580.00	0.00
Total GEF Financing: (a+b+c+d) 9,781,000.00	Total Co-financing 54,448,000.00
PPG Amount: (e) 200,000.00	PPG Agency Fee(s): (f) 19,000.00
PPG total amount: (e+f) 219,000.00	Total GEF Resources: (a+b+c+d+e+f) 10,000,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: No	

Project Summary

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

The Artisanal Fisheries Resilient Development Project (PROPEIXE) – GEF to be funded through the Least Developed Country Fund (LDCF) was conceived to tackle problems associated with the impacts of the following climate induced hazards: a) rising sea levels and in some cases reduction of river water levels b) low precipitation and uneven rainfall patterns; c) uncontrolled bush fires and; d) forest degradation. In addition to these hazards, deforestation is also a challenge because of indiscriminate felling of trees for charcoal, firewood and building materials (timber, stakes, etc.). Coastal communities in Mozambique heavily rely on marine resources, particularly artisanal fisheries, for their livelihoods. However, these communities are exceptionally sensitive to climate hazards, including cyclones, flooding and sea level rise, which pose severe threats to their livelihoods and well-being. The importance of coastal areas to Mozambique's economy is substantial, with sectors like fisheries, tourism and trade contributing significantly to the nation's GDP. Nonetheless, the vulnerability of these regions to climate change underscores the urgent need for sustainable development and climate change adaptation measures to protect the livelihoods of coastal communities and enhance the nation's economic resilience.

PROPEIXE–GEF objective’s is to increase the sustainability and climate resilience of fishery value chains, by upscaling and promoting climate resilient technologies/practices, restoration of degraded ecosystems while also supporting diversification of green alternative livelihoods in five coastal provinces in Mozambique.

LDCF resources are intended to blend seamlessly with International Fund for Agriculture Development’s (IFAD's) larger investment ‘’PROPEIXE’’ by strategically focusing on vulnerable areas. By targeting climate-resilient infrastructure, innovative mariculture technologies, improved climate information systems and gender-sensitive climate change adaptation initiatives, LDCF investments will complement IFAD's efforts, creating a synergistic impact. The collaboration between LDCF and IFAD will ensure that climate resilience

is integrated into the broader development framework, fostering transformational change in the artisanal fishery sector and enhancing the overall sustainability and adaptive capacity of the communities involved.

The project's focus on climate proofing and greening the fishery value chain and supporting local MSMEs through a graduation approach based on climate smart fishing techniques/practices to improve climate resilience are innovative. The transformative initiative emphasizes capacity development, research and development and policy development to enhance climate change adaptation in ecosystems.

The Project is expected to bring positive adaptation benefits such as enhanced adaptive capacity of 90,000 vulnerable people including 50% women and 50% men enhancing resilience of fisheries to climate change impacts;

- 2,000 hectares of mangroves and 800 hectares of coral reefs and seagrass beds, promoting community participation and enhancing coastal climate resilience.
- Climate Information and Early Warning Systems (EWS) empowering fishers with timely information for informed decisions and climate change adaptation.
- Sustainable green alternative livelihoods benefiting 10,000 people, replacing harmful practices like beach seining and increase climate resilience.
- Strengthening of institutional capacity and extension services, including support for government institutions, law enforcement, and marine ecosystem protection.
- Gender-responsive fisheries technologies, ensuring 50% women's participation in climate-smart fisheries enterprises and financial services.
- Inclusive policies considering climate change, fostering multi-stakeholder dialogue, and disseminating climate-resilient fishery value chain initiatives.

Indicative Project Overview

Project Objective

To increase the sustainability and climate resilience of fishery value chains, by upscaling and promoting climate resilient technologies/practices, restoration of degraded ecosystems while also supporting diversification of green alternative livelihoods in five coastal provinces of Mozambique.

Project Components

Component 1: Resilient Artisanal Fisheries & Ecosystem management

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	Co-financing ($)
3,193,907.00	9,622,700.00

Outcome:

Outcome 1: Increased productivity through promotion of climate adaptive practices of the artisanal fishery

Output:

Output 1.1 Demonstration and adoption of climate smart adaptive practices/technologies & climate resilient fisheries management by 30 000 farmers (50% women and 40% youth)

Output 1.2: 240 Community Fishery Councils (CCPs) strengthened to better manage fisheries ecosystems (mangroves & coral reefs) for climate resilience

Output 1.3: 2000 ha degraded habitats with the mangroves, 800ha (coral reefs and seagrass beds) rehabilitated, enhancing coastal climate resilience

Component 2: Inclusive fisheries climate resilient value chain development and livelihood diversification

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	**Co-financing ($)**
4,208,944.00	29,766,671.00

Outcome:

Outcome 2.

Enhanced economic, climate resilience and profitability of climate resilient artisanal fisheries and local livelihoods

Output:

Output 2.1: Climate adaptive fisheries technologies successfully piloted under Component 1 up scaled.

Output 2.2: 1 080 climate smart fisheries enterprises developed (supporting 50% women and 40% youth)

Output 2.3: Access to financial services for climate resilient enterprises facilitated benefitting 24 000 persons (70 % women)

Output 2.4: Sustainable green alternative livelihoods developed (supporting 10 000 beneficiaries 50% women and 40% youth including those contributing to the replacement of beach seining).

Output 2.5 Infrastructure (markets, market access roads, storage facilities) Climate-proofed to withstand extreme weather benefiting entire communities.

Component 3: Strengthening the enabling environment for climate resilient fisheries

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	**Co-financing ($)**
652,108.00	11,975,000.00

Outcome:

Outcome 3.1

Strengthened public sector capacity for the long-term sustainable adaptive management of the artisanal fishery sector

Outcome 3.2 Improved development and implementation of policies that support climate-resilient and sustainable fisheries

Output:

Output 3.1.1: 5 Government institutions and extension services trained to increase adaptive management capacity

Output 3.1.2: Gender responsive climate information and Early Warning System (EWS) established

Output 3.2.1: Inclusive Policy support for gender sensitive climate resilient and sustainable fishery value chains developed

Component 4 Knowledge Management and learning

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
252,108.00	512,300.00

Outcome:

Outcome 4.

Enhanced adaptive management of climate resilient, fishery value chain

Output:

Output 4.1. Knowledge management enhanced and awareness raised on gender sensitive climate resilient, fishery value chains to enable scaling up

M&E

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
200,000.00	28,000.00

Outcome:

Project implementation and results strengthened through participatory monitoring and evaluation

Output:

Project monitoring, evaluation and reporting systems established and implemented

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Resilient Artisanal Fisheries & Ecosystem management	3,193,907.00	9,622,700.00
Component 2: Inclusive fisheries climate resilient value chain development and livelihood diversification	4,208,944.00	29,766,671.00
Component 3: Strengthening the enabling environment for climate resilient fisheries	652,108.00	11,975,000.00
Component 4 Knowledge Management and learning	252,108.00	512,300.00
M&E	200,000.00	28,000.00
Subtotal	**8,507,067.00**	**51,904,671.00**
Project Management Cost	425,353.00	2,543,329.00
Total Project Cost ($)	**8,932,420.00**	**54,448,000.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Mozambique, recognized as a Least Developed Country (LDC) by the United Nations (UN), is situated in southeastern Africa, with a vast coastline along the Indian Ocean[1]1. The nation grapples with a low Human Development Index (HDI) ranking, reflecting ongoing development challenges, such as high poverty rates, limited access to healthcare, and education disparities[2]2. Coastal communities in Mozambique heavily rely on marine resources, particularly artisanal fisheries, for their livelihoods[3]3. However, these communities are exceptionally sensitive to climate hazards, including cyclones, flooding and sea level rise, which pose severe threats to their economic activities and well-being[4]4. The importance of coastal areas to Mozambique's economy is substantial, with sectors like fisheries, tourism and trade contributing significantly to the nation's GDP[5]5. Nonetheless, the vulnerability of these regions to climate change underscores the urgent need for sustainable development and climate change adaptation measures to protect the livelihoods of coastal communities and enhance the nation's economic resilience.

Mozambique's economy is characterized by a diverse landscape, with agriculture playing a pivotal role. The agricultural sector contributes significantly to the country's Gross Domestic Product (GDP), with approximately 25% of Mozambique's GDP generated by agriculture[6]6. Within agriculture, several crops hold prominence, including maize, cassava, rice and cashew nuts, which are essential staples for the population.[7]7 Additionally, Mozambique boasts an extensive coastline along the Indian Ocean, making fishing a crucial economic activity. The fishing industry, supported by both artisanal and commercial operations, contributes to food security and the nation's economy.[8]8

Trend of economic growth: Mozambique suffered from two consecutive years of El Niño-related drought, which had a negative impact on agriculture production and rural livelihoods in general. The country is also prone to other natural disasters, including cyclones and floods, which can disrupt the country’s economic development and affect particularly the poor population. Since 2016, the combination of the hidden debt crisis, the tropical cyclones that affected the Central and Northern parts of the country in 2019 and more recently, the COVID-19 pandemic resulted in a significant slowdown of growth and increased poverty and

vulnerability. Mozambique is a low-income country with a GDP per capita of US$ 417, which is among the lowest in the world. The average annual per capita growth rate is negative: it was -0.6 in 2019, -4.1 in 2021 and stood at -0.5 in 2021[9]. The impact of these events on growth has affected the wellbeing of the Mozambican population and especially rural poor people.

State of the coastal and marine ecosystems

Mangroves: Mozambique's coastal and marine ecosystems, particularly its mangroves, play a crucial role in the country's environmental services and biodiversity. These mangrove ecosystems cover approximately 1,000 square kilometers of Mozambique's coastline[10]10. They provide invaluable services by acting as nurseries for marine species, including fish and shrimp, supporting the livelihoods of coastal communities[11]11. However, they face several threats, including overharvesting for firewood and timber, pollution from agricultural runoff and industrial activities and overfishing, which can negatively impact the ecological balance and resilience of these ecosystems[12]12

Sea grass and coral reefs: Mozambique's marine ecosystems, encompassing coral reefs and seagrass beds, hold immense ecological significance and provide various vital services. Coral reefs along Mozambique's coastline are of great importance as they support an array of marine life, including fish and invertebrates and serve as natural barriers that protect the coast from erosion and storm surges[13]13. Furthermore, these coral reefs are essential for tourism and fisheries, contributing to both the national economy and food security.[14]14 Seagrass beds in Mozambique's coastal waters are equally valuable, as they provide habitat for various species, contribute to carbon sequestration and help maintain water quality by trapping sediments and nutrients.[15]15

Unfortunately, human pressures on these marine ecosystems are increasing. Overfishing, destructive fishing practices, and coastal development are among the main threats to coral reefs in Mozambique.[16]16 Additionally, deforestation in the coastal areas can exacerbate sedimentation and runoff into the sea, negatively affecting coral health.[17]17 Conservation efforts, including the establishment of marine protected areas, are vital to mitigate these threats and preserve the ecological integrity of Mozambique's coral reefs and seagrass bed.

Coastal line: Mozambique's coastline faces several threats and significant coastal degradation issues that impact biodiversity and ecosystems health. The state of the coastline is characterized by vulnerabilities to coastal erosion, sea-level rise, and storm events due to its low-lying topography[18]18. These vulnerabilities

are exacerbated by human activities such as sand mining, infrastructure development and removal of coastal vegetation, which have contributed to significant coastal degradation[19][19].

One major coastal degradation issue is the loss of critical habitats like mangrove forests and seagrass beds, which serve as essential breeding grounds for marine species and provide coastal protection[20][20],[21][21]. These ecosystems are under threat from land-use changes, pollution and overharvesting.

Additionally, the loss of biodiversity along the coastline is a pressing concern. Coastal ecosystems are home to a diverse range of species, many of which are already at risk due to habitat degradation.[22][22] Anthropogenic pressures, such as overfishing and destructive fishing practices, are contributing to the decline of several marine species.[23][23]

Climate change. Mozambique ranks third among African countries most exposed to multiple extreme weather events, natural disasters and the impacts of climate change. These include droughts, floods, cyclones, heat waves, etc. The country ranks 10th globally in exposure to natural disasters and extreme weather events. Mozambique's high vulnerability is exacerbated by its geographic location and terrain due to its long coastline, extensive land area below sea level, and the confluence of many transnational rivers into the Indian Ocean[24][24]. High poverty levels, overreliance on rain fed agriculture, human induced forest and land degradation, low adaptive capacities and weak early warning systems further aggravate the situation.

Climate change, natural disasters and extreme weather will continue to devastate livelihoods, food security and well-being of rural populations if action is not taken. Mozambique seeks to promote a low carbon development pathway powered by a green economy and to enhance resilience building among communities. In 2020, Mozambique submitted its updated Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC)[25][25]. The NDCs seek to reduce 40 million tCO2eq of greenhouse gas emissions between 2020 and 2025 through mitigation measures such as renewable energy, low carbon agricultural practices and scaling up Reduction of Emissions from Deforestation and Degradation (REDD+). Adaptation measures in agriculture also feature in the NDCs and focus on resilience building, strengthening the early warning system and increasing the adaptive capacities of vulnerable people among others.

Extreme weather events. Mozambique has a high vulnerability (0.517 vulnerability score on the ND-Gain Matrix) to severe droughts, cyclones and floods particularly in the southern and central provinces. Around 60% of Mozambique's population lives along the coastline, exposing them to climate-related hazards such as tropical cyclones, recurring droughts, coastal and inland flooding. In 2019, Cyclones Idai and Kenneth caused severe floods resulting in US$3 billion worth of losses and damages. In 2021 cyclone Eloise

affected over 400 000 people and in 2022 over 200 000 people were affected by three natural disasters during the cyclonic season[26]26,[27]27. El Niño-related drought events have historically occurred every 3 to 4 years in Mozambique, primarily in the central and southern regions.

The combined impacts of floods, droughts, cyclones, food insecurity, conflicts in the North etc. have to date increased the vulnerability of about 8 million people (e.g. in Sofala, Manica, Tete, and Zambezia, Cabo Delgado, Maputo, Gaza, and Inhambane). In 2021, the global index for risk management ranked Mozambique 10th in exposure to natural and human hazards and very highly in lack of adaptive capacities. The country integrated context analysis (ICA) conducted by WFP in 2017 revealed that high food insecure risk regions are mainly located in arid and semi-arid provinces of central and southern parts – Tete, Sofala, Manica, and Inhambane provinces[28]28.

Climate trends. The average rainfall has decreased by 3.1 % (2.5mm per month) per decade since the 1960s, according to historical trends[29]29. Rainfall varies by region, with Northern provinces (e.g., Cabo Delgado, Niassa, Nampula, and Zambezia) receiving more (over 2000mm). The Central regions have high rainfall variability, while the South has persistent droughts and floods. The rainy season lasts from October to May, with the most rain falling between November and May Southern provinces, primarily Maputo, Gaza and Inhambane, have lower rainfall, with the lowest being around 500mm.

Mozambique's mean annual temperatures range from 25 to 30 °C in summer and 15 to 21 °C in winter, with extreme summer temperatures exceeding 40°C in some areas[30]30. Increases in maximum temperature are most noticeable from October to November and February to March, with increases more noticeable in the country's west and south, such as Inhambane, Gaza and Maputo[31]31. Floods and cyclones are more common in the country's center, followed by the north and south, while droughts are more common in the south.[32]32

Overall, over the past 30 years, the intensity and frequency of droughts, floods and cyclones has increased. Between the years 1956-2023, the country experienced 11 droughts, 24 floods, 23 tropical cyclones, 20 epidemics and 2 earthquakes[33]33. The two Category 4 cyclones that hit Mozambique in March (Idai) and April (Kenneth) 2019, as well as the floods in Cabo Delgado, Zambezia, Tete, Sofala and Manica Provinces in December 2019 and January 2020 affected approximately 150,000 people, including smallholder farmers. Tropical cyclone Freddy affected over 230 000 people in southern and northern Mozambique

before a second landfall[34]34. These disasters also lead to extensive crop and livestock losses, including destruction of property and infrastructure in rural areas. Future projections show that the country will continue facing increasingly stronger and frequent extreme weather events with devastating impacts to the economy, food security and livelihoods of people.[35]35

Climate projections

Temperature: According to projections, the average temperature in all provinces of Mozambique will rise annually. Temperatures are expected to rise by at least 1.45° Celsius by 2050, with increases of 2.0-2.1° Celsius from October to December compared to the historical average. Landlocked regions of the country will warm faster, while coastal areas will see less temperature variation. Droughts and the frequency and intensity of extreme heat days are also expected to increase.

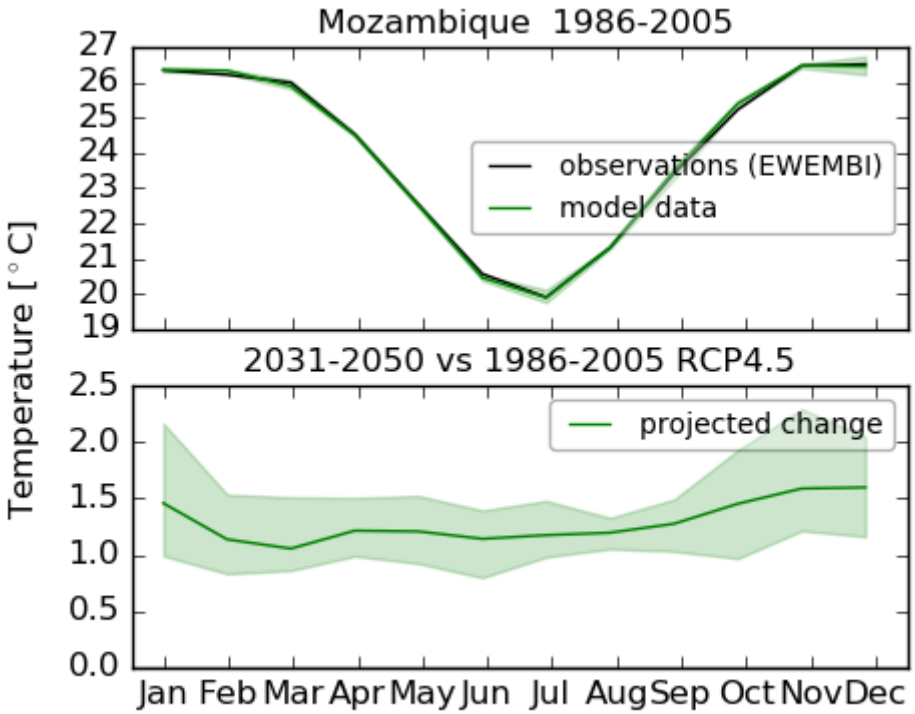

Figure 1. a) Temperature over the reference period 1986-2005. b) Projected change in Temperature for 2021-2030 compared to the reference period 1986-2005.

Precipitation projections: show that by 2050, mean monthly precipitation and total annual precipitation will be reduced in all provinces, and total rainfall at the start of the rainy season in October, November and December will be reduced from 24 to 11.5 mm/month, 67 to 45 mm/month and 162 to 140 mm/month, respectively. These trends may indicate the possibility of delayed rainy seasons or shorter rain durations compared to historical trends, with a projected overall reduction of 131 mm of rainfall between the historical and future scenarios. The frequency of days with heavy rainfall is also expected to increase,

resulting in more floods. Models also show that the frequency of tropical cyclones will decrease but their intensity will increase[36]36.

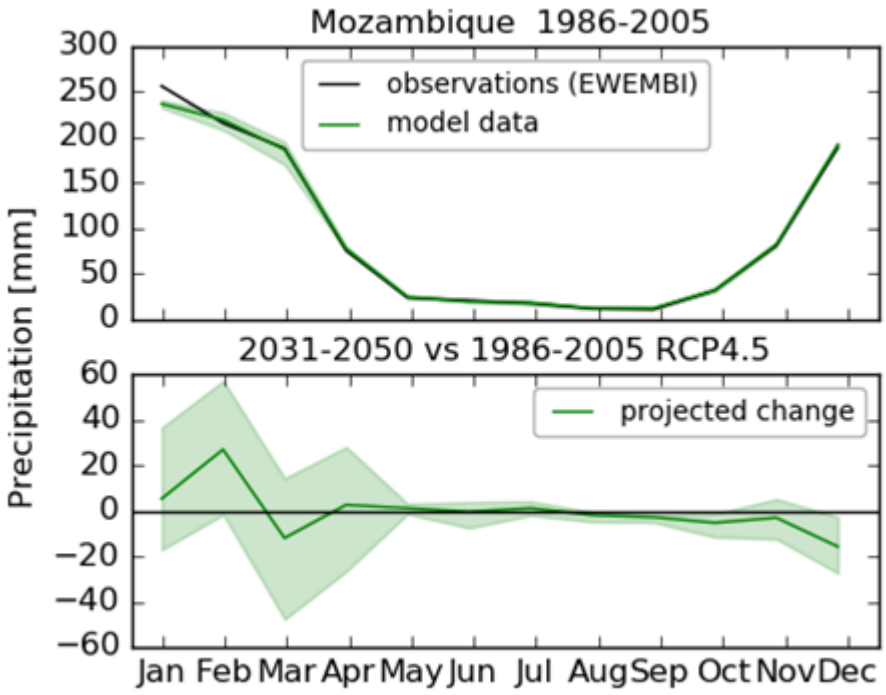

Figure 2. a) Precipitation sum over the reference period 1986-2005. b) Projected change in precipitation for 2021-2030 compared to the reference period 1986-2005.

Impact of climate change

Climate change in Mozambique has had significant impacts on its coastal and marine ecosystems. Mangroves, crucial for coastal protection and biodiversity, are facing increased stress due to rising temperatures, sea-level rise, and extreme weather events[37]37. Coral reefs, vital for fisheries and tourism, are experiencing coral bleaching and degradation caused by elevated sea temperatures[37]. The coastline is vulnerable to erosion and more frequent and severe storm surges, posing risks to coastal communities and infrastructure[38]38. These changes have resulted in shifts in fisheries distribution and availability, affecting the livelihoods and economic assets of coastal communities[37]. Additionally, Mozambique is experiencing the adverse effects of floods on infrastructure, which further exacerbates the challenges faced by coastal communities[39]39. Climate change is also affecting water availability and quality, leading to increased salinity in coastal areas[38] .Coastal infrastructure, including boats and safety at sea measures,

and is at risk due to climate change-induced hazards, posing threats to the safety and well-being of coastal populations[38].

Climate vulnerability

Demographic: Mozambique has a population of approximately 32 million inhabitants (50.9 % women) and 62.3 % of rural population with a 2 % growth. Life expectancy is 61 years (58 men and 64 for women). The infant mortality rate is estimated at 51 deaths per 1,000 live births[40][40] . In 2022, Mozambique ranked 181/188 on the Human Development Index.

Poverty: Even though Mozambique has managed to reduce, poverty in all forms measured during the last 15 years, with significant improvements in rural areas and in every province, with reduced economic gap between women and men, large pockets of poverty remain with high levels of vulnerability. About 63.7 % and 82.4 % of the population live below the international poverty line of USD 1.90 and USD 3.20 per day, respectively, with multidimensional poverty rate at 73.2[5].

Poverty significantly contributes to the climate vulnerability of coastal communities in Mozambique[38]. Impoverished communities often lack the resources and capacity to adapt to the impacts of climate change, making them more susceptible to its adverse effects. Limited access to financial resources, infrastructure and technology hinders their ability to implement resilience-building measures. Moreover, poverty can force communities to rely on unsustainable practices that further degrade coastal ecosystems and exacerbate vulnerability. Addressing poverty is a crucial component of enhancing the climate resilience of these communities.

Challenges in the fishery sector: The demand for animal protein and fisheries products in Mozambique is expanding. This is attributed to the increasing population, incomes, evolving urban markets, the growing private investments in the country's fisheries and tourism sectors, and the long and extensive coastal line[1]. However, current fisheries production is not enough to meet the prevailing demand levels, in terms of quantity and quality. Much of this supply-demand gap is due to the fact that 80% of landings are by artisanal fishers who do not have access to improved fishing gear, often work individually and are not structured to bulk and supply beyond markets, and have limited if any access to cold chain facilities if they are to enter to the fresh fish – high value supply chain. The situation is exacerbated by recurrent climate shocks that costal communities are affected, as well as degradation of the natural resources with its negative impact on fisheries stocks. It is anticipated that the frequency of extreme weather events such as cyclones, floods, droughts, and thunderstorms will increase, with devastating consequences for the fisheries industry and the livelihoods of the rural poor. Climate disasters have also had significant destructive impact on public investment in value chain infrastructure such as landing sites and solar installations.

This, therefore, requires measures to be taken to transform the prevalent unsustainable fishing practices with a climate resilient perspective. The previous supported projects in the sector (Project for the Strengthening of Access Rights to Resources for Artisanal Fishermen (PRODIRPA) and Artisanal Fisheries Promotion Project (PROPESCA)), already initiated the process in different areas with great results and

impacts ensuring the sustainable use of the fisheries resources. With the approval of the new Marine Regulation (REPMAR), the introduction of new measures to reinforce the biodiversity and ecosystems conservation led by the community, as well as the ban of one of the most used fishing gears in the country (beach seins), there is a need to reinforce the modernization of the artisanal fisheries sector in terms of technology, and selective and environmentally friendly mechanization.

Hence, PROPEIXE-GEF aims to unlock the development potential of fisheries, a key sector in the economy with high growth and rural poverty reduction potential. It does so by addressing the key challenges for the artisanal fisheries sector and fisheries communities, including: (i) the degradation of natural resources and its negative impact on fisheries stocks – by introducing activities under Component 1 to empower communities to act (ii) low profitability of fishing activities due to inefficiencies and value chain fragmentation, poor fish handling, mobility of youth away from the sector and invisibility of women's contribution to post capture activities – by introducing activities under Sub-Component 2.1 to strengthen local MSME creation and viability and market linkages; (iii) climate vulnerability of value chain infrastructure – by jointly with public and private sector make climate proofing upgrades to key infrastructure; (iv) and the need to strengthen the capacity of relevant Government institutions in the delivery of last mile services and adaptive capacity– by helping rebuild technical and logistical capacities for outreach.

The GEF financing will be used to improve the adaptive capacity of the targeted communities particularly to the climate risks such as rising sea levels, higher temperatures, worsening droughts, intensifying floods and their impacts that can affect water resources, fisheries and aquaculture productivity, crop yields, and the health of people and the ecosystems. This will support the establishment or enhancement of climate information systems and early warning systems at the community and regional levels. These systems provide timely and accurate climate information to fishing communities, enabling them to make informed decisions and take appropriate adaptive measures. This includes access to weather forecasts, oceanographic data and relevant climate-related information. It will also provide targeted capacity building and training programs for fishing communities and value chain actors on climate adaptation strategies. This can include training on climate-resilient fishing practices, climate risk assessment and management, and the use of climate information and early warning systems. Building the capacity of stakeholders enhances their ability to respond to climate challenges and integrate adaptation measures into their activities.

The design and implementation approach of the project is based on community consultation, placing attention on capturing and integrating the view of all stakeholders into their self-driven development. Mobilization activities include key steps such as: information, consultation, engagement with all social actors and specific measures for social inclusion of the most vulnerable as outlined in the targeting and social inclusion strategy will ensure adequate engagement of all stakeholders. Being a multiple coordination mechanism, which requires the engagement of the various stakeholders some result based MoU agreements would be signed to ensure project deliveries and for ease of monitoring of each stakeholders' performance. All the stakeholders would be involved in data collection, validation and verification at every level.

The project will build into the existing locally based community structures and technologies, ensuring the adoption of climate smart and environmentally sustainable technologies and practices. PROPEIXE-GEF will work with targeted beneficiaries, assist them to address their activities constrains, introduce adequate and biosafety measures for semi-processing/processing functions and link them to organized market opportunities.

Key sustainability approaches deployed in PROPEIXE-GEF are: Private sector-led value chain interventions approaches that focus on creating financially viable models for local MSME growth and linkages between market players to ensure demand-based investment rational; Piloting of PPP models for infrastructure management as part of a strategy to provide long-term sustainability of the operations and services; Climate proofing of infrastructure as part of the public investment in sector resilience; Building the capacity of women and youth to engage proactively in sustainable resource use and management, the development of green alternative livelihoods, and sustainable fishery related businesses and; Strengthening the capacity of local institutions such as CCPs to pro-actively manage the fishery resources and ensure their sustainability.

[1] https://documents1.worldbank.org/curated/en/403651525888008345/pdf/Communities-livelihoods-fisheries-fisheries-governance-and-shared-growth-in-Mozambique.pdf

Project Objective

To increase the sustainability and climate resilience of fishery value chains, by upscaling and promoting climate resilient technologies/practices, restoration of degraded ecosystems while also supporting diversification of green alternative livelihoods in five coastal provinces.

The PROPEIXE-GEF has design has been informed by lessons from previous IFAD-funded projects (Project for Promotion of Small-Scale Aquaculture (PROAQUA), Project for the Strengthening of Access Rights to Resources for Artisanal Fishermen (PRODIRPA) and Artisanal Fisheries Promotion Project (PROPESCA)) and from other countries in the region. The PROPEIXE-GEF will be aligned with IFAD's baseline project ''PROPEIXE'' and will focus on increasing adoption of climate resilient technologies/practices to enhance adaptive capacity of the fisheries sector. The project will actively involve a wide range of stakeholders, including local communities, civil society organizations, private sector entities and government agencies, in decision-making processes related to climate change adaptation and resilience-building activities. The approach aims to ensure that the voices and perspectives of all relevant actors are considered.

Project sites

The artisanal fisheries interventions will cover fishing communities along the coastline, targeting mainly households who are poor and on the fringes of the market economy, with high vulnerability due to the impacts of climate change. The main target group consists of small-scale fishers engaged in artisanal fishery (production level) and other sectors along the value chain (e.g. processing, marketing and service

provision). In addition, the project will target specific vulnerable groups such as women, youth, Persons with Disability (PwD) and also Internally Displaced People (IDPs) and returnees in the Northern Provinces.

The IFAD baseline project and LDCF investments blended total outreach is estimated at approximately 90,000 direct beneficiaries or 40 000 households corresponding to 172,000 individuals (household members)[41]. Among these 90, 000 persons, approximately 57,500 persons will receive a full set of project services (e.g. information, demonstration and training, access to finance), while an estimated number of 32,500 persons will be directly benefiting only from the rehabilitation of feeder roads. Women will constitute at least 50 percent of the total programme participants (about 27,800) and youth 40 percent or 23,000 (with 50 percent being female youth)[42]. Some beneficiaries will receive multiple services.

In terms of coverage PROPEIXE's-GEF activities will be implemented in five provinces: Inhambane, Sofala, Zambézia, Nampula and Cabo Delgado and a total number of 21 districts. The provinces, districts and fishing growth poles have been selected based on the following criteria: (i) conditions and potential of fishing resources (including data on number of fishers; percentage of production; number of boats and gears); (ii) socio-economic (poverty and food insecurity rates); (iii) Habitats diversity and environmental challenges (highly affected ecosystems)[43]; (iv) areas most affected by climatic shocks[44]. Other elements taken into account were proximity for project implementation and presence of other interventions to create synergies and maximize the impact[45]. Special project focus will be for northern Mozambique and Cabo Delgado in particular, which is affected by the insurgency. The key and primary consideration for the project targeted areas is the fact that they are prone to the deleterious effects of the changing climate with the attendant effects on the fish population and aquatic biodiversity; and which in turn contributes to poverty in the areas. Further considerations for selection of project areas include a: (i) community poverty and nutrition profiles; (ii) population profiles, with a focus on gender and youth considerations; (iii) consideration of IFAD's past engagement through PROPESCA.

Alignment with national priorities

Mozambique has a number of policies, strategies, and action plans in place to deal with climate change and natural disasters. The National Climate Change Adaptation and Mitigation Strategy ((ENMC) 2013-2025), the National Adaptation Plan (NAP) Roadmap (2020-2025), and the Master Plan for Risk and Disaster Reduction are among them (2017-2030). The ENMC articulates a set of strategic actions that will help ensure a more prosperous, resilient and sustainable future.

The National Climate Change Adaptation and Mitigation Strategy (NCCAMS) identifies adaptation and climate risk reduction as a national priority and presents eight strategic actions aimed at creating resilience and reducing climate risk in communities, ecosystems and the national economy. The eight strategic actions aim to reduce climate risk, water resources, agriculture, fisheries, food security and nutrition (SAN), social protection, health, biodiversity, forests and infrastructure. The country intends to

update its NAP in the medium (2020-2025) and long (2026-2030) term. PROPEIXE-GEF aligns with Mozambique's NAP, which identifies the coastal zones as highly vulnerable to climate change impacts. By promoting climate resilience in fishery value chains and supporting ecosystem restoration, the project addresses key NAP priorities. As a result, from 2020 to 2025, the country intends to increase provincial resilience and incorporate adaptation into provincial planning.

Monitoring and evaluation: The Mozambican government has approved the National System for Monitoring and Evaluating Climate Change, which will be used for the measurement, reporting and verification (MRV) of adaptation actions.

Nationally Determined Contributions. In 2020, the country submitted its updated NDCs to the UNFCCC. The NDCs aim to reduce 40 million tCO2eq of greenhouse gas emissions between 2020 and 2025 through mitigation measures such as renewable energy, low-carbon agricultural practices, and scaling up Reducing Emissions from Deforestation and Degradation (REDD+). Agricultural adaptation measures include resilience building in the agriculture, livestock, and fisheries sectors, as well as strengthening the early warning system, efficient water resource management and increasing the adaptive capacities of vulnerable people.

Land Degradation Neutrality (LDN): Mozambique committed to reverse forest and land degradation by 2030, as part of its UNCCD commitment in 2021, as well as to have 62 % of its energy be renewable within the same period.

UN Sustainable Development Cooperation Framework (UNSDCF): The project aligns with the UNSDCF's overarching goal to support Mozambique's development efforts, especially in the context of climate resilience and sustainable livelihoods. It contributes to the UNSDCF's focus on environmental sustainability and economic development in coastal zones.

Mozambique Coastal Zone Management Strategy: The project's activities related to the restoration of degraded ecosystems and biodiversity conservation are in line with the country's Coastal Zone Management Strategy. This strategy aims to sustainably manage and protect coastal resources, including fisheries and ecosystems.

National Disaster Risk Reduction and Management Strategy: Mozambique recognizes the need to reduce disaster risks in coastal areas. The project's climate-resilient practices contribute to disaster risk reduction, aligning with the objectives of the aforementioned Strategy.

Biodiversity Conservation and Sustainable Use Strategy: Mozambique's strategy for biodiversity conservation emphasizes the importance of responsible fisheries and ecosystem restoration. The project's efforts to promote responsible fisheries and restore ecosystems align with this strategy.

National Poverty Reduction Strategy (PARP): Diversification of livelihoods, a key focus of the project, is a central component of poverty reduction efforts outlined in PARP. The project's support for green alternative livelihoods directly contributes to poverty reduction in coastal communities.

National Development Strategy (PEDN): The project's overarching goals of sustainable development, ecosystem restoration, and livelihood diversification align with PEDN's objectives of promoting sustainable development in coastal areas.

Mangrove Conservation and Restoration Policies: Mozambique has policies in place to protect and restore mangrove ecosystems. The project's activities related to mangrove rehabilitation support these policies and contribute to the conservation of coastal resources.

Barriers

The project will address key challenges (specifically) for the artisanal fisheries sector and artisanal fisheries communities such as:

Barrier 1: The degradation of natural resources and its negative impact on fisheries stocks

In Mozambique, several barriers contribute to the degradation of natural resources, with particularly adverse effects on fisheries stocks. These challenges include overfishing and illegal fishing practices, weak regulatory frameworks, inadequate surveillance and monitoring, the impacts of climate change and environmental degradation, insufficient community engagement and alternative livelihood opportunities, a lack of capacity building and education, institutional challenges and high levels of poverty and food insecurity[46]46. These barriers collectively result in the depletion of fish stocks, undermining both the ecological sustainability of marine ecosystems and the economic viability of the fishing industry. Addressing these challenges necessitates coordinated efforts in fisheries management, regulatory enforcement, community involvement and sustainable resource utilization to ensure the preservation of Mozambique's vital fisheries resources.[47]47

Barrier 2: Low profitability of the fishing activity due to inefficiencies and value chain fragmentation, as well as low food quality and safety standards

Inadequate contribution of fish to balanced diets combined with poor dietary knowledge and practices, mobility of youth away from the sector and invisibility of women's contribution to production and post-harvest activities, the fishing sector faces a multitude of barriers that collectively hinder its development and sustainability. These include the low profitability of fishing activities stemming from inefficiencies and value chain fragmentation, inadequate fish handling practices, limited access to modern technologies, and a lack of business opportunities that would attract the youth. Furthermore, the sector grapples with gender disparities, with women's significant contributions to post-capture activities often going unrecognized and undervalued. These multifaceted challenges not only hinder the sector's economic potential but also contribute to the youth's migration away from fishing, perpetuating the cycle of underdevelopment in this critical industry[48]48.

Barrier 3: The vulnerability of value chain infrastructure due to climate impacts is a significant barrier in many coastal regions, including Mozambique

Rising sea levels, increased storm intensity and other climate-related factors can lead to the degradation and damage of key infrastructure elements, such as ports, processing facilities and transportation networks, which are essential for the functioning of fisheries value chains.[49]49 Furthermore, the vulnerability of coastal fisheries infrastructure to climate change is a well-documented concern[50]50.

Coastal infrastructure, including fishing harbors, landing sites and storage facilities, can be exposed to sea-level rise, erosion and extreme weather events, jeopardizing the livelihoods of fishing communities and the sustainability of the fisheries sector. Addressing these vulnerabilities requires adaptive infrastructure planning and investments to ensure the resilience of value chains and coastal fisheries infrastructure in the face of climate impacts.

Barrier 4: The need to strengthen the capacity of relevant Government institutions in the delivery of last mile services

Numerous barriers impede the efficient delivery of last-mile services in the fisheries sector, particularly to remote and underserved coastal communities. These challenges encompass limited infrastructure, inadequate access to essential services, such as healthcare and education and difficulties in ensuring food security and sanitation. To overcome these barriers and enhance the resilience of coastal communities dependent on fisheries, there is an urgent need to strengthen the capacity of relevant government institutions responsible for delivering last-mile services in the fisheries sector. This capacity-building effort is crucial to improving the accessibility of essential services, promoting sustainable resource management, and ensuring the socio-economic well-being of marginalized populations in coastal areas[51][51]. By bolstering the capabilities of these institutions, Mozambique can better address the unique challenges faced by its coastal fishing communities.

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[41] Average household size is 4.3.

[42] This project will benefit more than one person per household with the full set of services, (e.g. information, trainings, access to finances), that is why 90 000 direct beneficiaries do not correspond to 90 000 households. On the other hand, the 32 500 beneficiaries of roads will be the whole members of the equivalent households (around 7 558) benefiting from the rehabilitation of feeder roads.

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[45]Various ongoing or soon-to-be-started initiatives supporting sustainable artisanal fisheries in the project area will provide good opportunities for collaboration and complementarity of operations. Most notably: (i) four World Bank supported initiatives (MozRural, MozNorte, ProBlue and NCRP in northern and central Mozambique, providing assistance to build social and economic resilience of farming and fishing communities, including integrated development of marine communities and coastal resources and support for internally displaced persons; Initiatives supported by the WB which include the provision of matching grants for investments in the fisheries and aquaculture value chains (managed by the Blue Economy Development Fund, PROAZUL) which will be available for financing investments and operations of PROPEIXE beneficiaries.

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B. PROJECT DESCRIPTION

Project description

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

Theory of change

Challenges to be addressed: PROPIEXE aims to address significant challenges faced by Mozambique's artisanal fisheries sector, including natural resource degradation, low profitability, inadequate nutrition, youth migration, gender disparities, climate vulnerability and weak governance.

The solution to these challenges will be achieved through:

Component 1: Sustainable Resource Management will combat natural resource degradation. It will do this by promoting climate-smart practices and technologies tailored to women and youth empowerment and participation in climate action. This will include strengthening community-based management and creating Fisheries Community Councils (CCPs) to implement fisheries management plans and uphold public integrity standards. Rehabilitation of planting of mangroves, coral reef protection and sea grass conservation. Additionally, it will introduce improved fishing technology to boost the sustainability of catches and create new, environmentally friendly livelihoods.

Component 2: Climate-Resilient Value Chain Development focuses on reducing climate vulnerability and enhancing food security. Under Sub-component 2.1, it will foster sustainable entrepreneurship and livelihoods along the fishery value chain, with special emphasis on women and youth. Experimental activities from Component 1 will transition into Sub-component 2.1, fostering market interest and financial viability. Support will extend across the value chain, including mariculture start-ups and auxiliary services, to diversify livelihoods and improve nutrition. The project will promote emerging local entrepreneurs and Micro, Small and Medium Enterprises (MSMEs), particularly among women and youth, offering business skills development and access to inclusive financial services to increase climate resilience.

Sub-component 2.2: Climate Proofed Infrastructure aims to build private sector-driven, sustainable climate resilient fisheries value chains that will benefit whole communities. By supporting successful Public-Private Partnerships (PPP) and Public Private Producer Partnerships (4P) market management models, it will ensure inclusive access and economic viability. Investments in climate-resilient infrastructure, such as cold chain facilities and processing units, will add economic and market value, improve food safety, and upgrade performance and competitiveness throughout the artisanal fishery sector. This will strengthen value chain linkages and remove inefficiencies, enhancing the resilience of fisheries incomes for all, including women and youth.

Component 3: Institutional Strengthening focuses on improving public sector adaptive support for long-term sustainable development. The project will also pilot weather insurance and Early Warning Systems (EWS) to enhance resilience. Sub-component 3.1 will strengthen institutions and policies to support the sustainable growth of artisanal fisheries. This includes academic scholarship awards to address capacity gaps, legal and regulatory framework enhancements and improved resource management.

Component 4: A comprehensive collection of knowledge and learning activities has been outlined and will be enhanced at the design stage. These initiatives are aimed at strengthening the adaptive capacities of fishing stakeholders, disseminating adaptive practices and technology, and fostering a collaborative learning environment that supports the value chain's climate change resilience. The activities includes) Public

awareness, b) research and dissemination, c) knowledge exchange programmes, and d) stakeholder engagement forums to foster a culture of public integrity and climate change consciousness.

Expected Outcomes:

1. Increased productivity through promotion of climate adaptive practices of the artisanal fishery.

2. Enhanced economic, climate resilience and profitability of artisanal fisheries and local livelihoods.

3.1 Strengthened public sector capacity for the long-term sustainable management of climate resilient artisanal fishery sector.

3.2 Improved development and implementation of policies that support climate-resilient and sustainable fisheries

4. Enhanced adaptive management of climate resilient fishery value chains.

Assumptions:

1. Communities will adopt climate-smart practices. - Directly linked to Component 1. If communities don't adopt climate-smart practices, marine habitats may not be restored or protected, affecting fish stocks and livelihoodsWomen and youth will embrace climate-resilient technologies.- Related to both Component 1 and 2. The success of climate-resilient technologies is dependent on them being embraced by key demographic groups, ensuring inclusivity and wider reach.

2. Market-driven models will ensure economic viability and inclusivity. – Linked to component 2. If the PPP and 4P market management models are not economically viable and inclusive, the value chains may not be sustainable or accessible to all.

3. Institutional strengthening will lead to improved governance and adaptive capacity. - Pertains to Component 3. If institutions are not strengthened, it can lead to a lack of oversight, regulation, and support for artisanal fisheries.

4. Private sector engagement will drive sustainable development. Linked to Component 2, The development of infrastructure and technologies relies heavily on private sector engagement

Causal Pathways: Necessity and Sufficiency

The ToC for PROPIEXE is rooted in understanding the interconnected challenges facing Mozambique's artisanal fisheries sector. Each challenge isn't isolated but overlaps and influences the others. Addressing these multifaceted challenges requires a multi-pronged approach that takes into account the following Pathways.

1. **Enhanced coastal management and rehabilitation of marine habitats**: A direct causal pathway is established between resource degradation and the project's focus on promoting climate-smart practices and rehabilitation of essential marine habitats. If the resources (like fish stocks and marine habitats) are not protected and restored, the entire fisheries sector remains at risk. Therefore, interventions in Component 1 are necessary.

2. **Enhanced profitable and climate resilient fish value chains**: There's a clear link between climate vulnerability, the declining profitability of fisheries and food security. A climate event can result in loss of catch, leading to income loss and food scarcity. Component 2 bridges this gap by ensuring that fisheries sub-sectors and value chains are not only climate-resilient but also economically viable.

3. **Strengthened enabling environment for a climate resilient fisheries sector**: Without strengthened institutions, policies, and implementation mechanisms, even the best-laid plans can falter. Component 3 is crucial as it ensures that the other interventions are grounded in a supportive, well-regulated environment.

For the project objective to be achieved, all these pathways must be addressed simultaneously. Each is necessary and collectively, they are sufficient, creating a holistic intervention model.

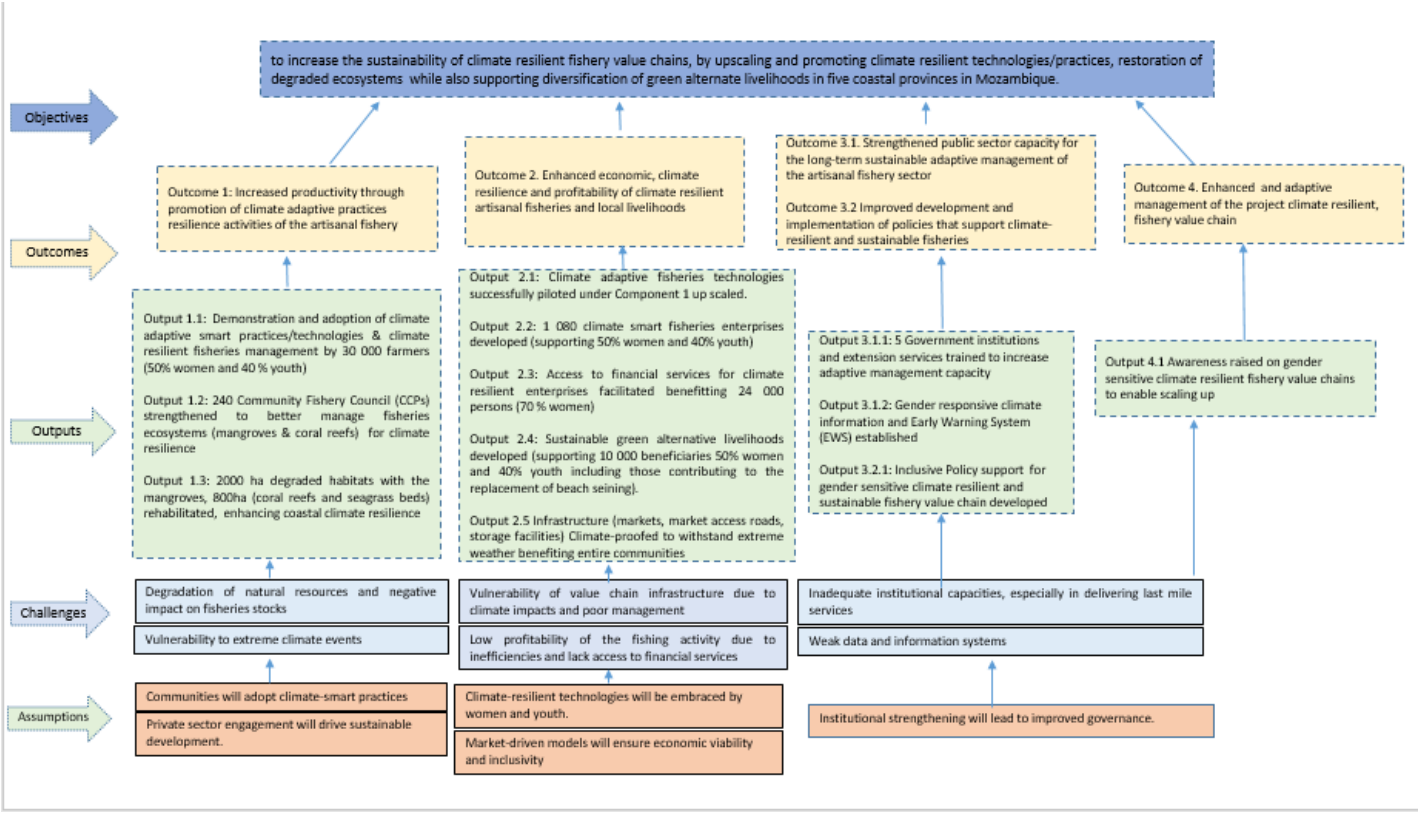
Theory of Change: If the project effectively addresses the key challenges of natural resource degradation, low profitability, climate vulnerability and weak governance through climate smart practices, climate-resilient technologies and institutional strengthening, then it will enhance the resilience and profitability of artisanal fisheries. This will lead to improved resilience, livelihoods, nutrition and food security for communities because they will have access to sustainable fisheries resources and diversified income streams.

PROPIEXE's ToC is based on understanding the interlinked challenges and creating overlapping solutions. By addressing each challenge through a comprehensive component and by ensuring that the causal pathways are both necessary and sufficient, the project stands to enhance the resilience and profitability of artisanal fisheries in Mozambique.

Enablers

PROPIEXE-GEF key enablers include strong stakeholder engagement and partnerships with relevant organizations, active gender mainstreaming to ensure equitable participation, robust knowledge management and learning systems for continuous improvement, policy support to create an enabling environment, capacity building to enhance skills, financial inclusion to empower local communities, climate information systems for informed decision-making, climate-proof infrastructure development, adaptive management practices, and a focus on research and innovation to explore new opportunities and technologies. These enablers collectively contribute to the project's effectiveness and resilience, ensuring that climate-resilient fishery value chains are established and sustained in Mozambique.

Diagram of Theory of change



Adaptation benefits

PROPIEXE – GEF will be blended with IFAD baseline project ''PROPIEXE'' which will provide co-finance. The LDCF investment within PROPIEXE – GEF will increase the resilience of fisheries value chain for PROPIEXE IFAD funded baseline project. Several areas, activities and targeted communities within PROPIEXE IFAD baseline are highly vulnerable to climate change and would require investments from the LDCF to increase the adaptive capacity. These areas include:

1. **Mangrove Rehabilitation and Protection**: The project aims to rehabilitate degraded mangrove habitats. Mangroves are highly vulnerable to climate change, particularly rising sea levels and extreme weather events. Investments in mangrove restoration are crucial for coastal protection and biodiversity conservation.
2. **Fisheries Management and Livelihoods:** Climate change affects fish migration patterns and the availability of fish stocks. Sustainable fisheries management, including the implementation of climate-resilient fishing practices, is essential. Investments in climate-smart fisheries management would enhance the resilience of local communities dependent on fishing.
3. **Climate-Resilient Infrastructure:** The project includes the rehabilitation and construction of infrastructure such as roads, markets and processing facilities. Climate proofing these infrastructures (e.g., using climate-resilient materials, considering future climate scenarios in

design and siting) is vital to ensure they can withstand climate-related challenges such as flooding, erosion and extreme weather events.

4. **Mariculture and Mariculture Species:** Mari culture activities, particularly those involving oysters and seaweed, are mentioned in the project. Rising sea temperatures and ocean acidification due to climate change can impact mariculture. Investments in research and technology to adapt mariculture to changing ocean conditions are crucial.
5. **Climate Information Systems and Early Warning Systems (EWS):** Strengthening climate information systems and EWS for fishing communities is essential for adapting to changing weather patterns and avoiding climate-related risks. Investments in meteorological stations, data dissemination technologies and community training programs would enhance resilience.
6. **Alternative Livelihood Initiatives:** The development of alternative income-generating activities for communities, which is critical for reducing climate vulnerability. These initiatives, such as mangrove honey production, need to be designed with climate resilience in mind, considering potential climate impacts on production and market access.
7. **Capacity Building and Training:** Ensuring that training programs include climate change adaptation strategies, climate-resilient practices and disaster risk management would enhance the adaptive capacity of local communities.
8. **Policy Development and Institutional Strengthening**: Strengthening institutions and policies to cope with climate change is crucial. This includes policies related to fisheries management, coastal zone planning, disaster risk reduction and gender mainstreaming. Investments in research and policy formulation in these areas would be vital.

Given these vulnerable areas, LDCF investments will be targeted towards climate-resilient infrastructure, research and technology development for mariculture, climate-smart fisheries management practices, strengthening climate information systems and enhancing the adaptive capacity of communities through training and policy support. Additionally, investments in gender-sensitive climate change adaptation initiatives would be essential, considering the focus on mainstreaming gender in the project.

Project components

Component 1: Resilient Artisanal Fisheries & Ecosystem management

Outcome 1: Increased productivity through promotion of climate resilience activities of the artisanal fishery sector

This component will address the challenge of natural resource degradation by laying the foundation for sustainably managed and climate-resilient fisheries through community management and promotion of sustainable new climate smart practices/technologies appropriate for women and youth. The project interventions will strengthen existing and create new CCPs to develop and implement fisheries management

plans, it will also pilot/demonstrate improved fishing technology and practices that improve sustainability of catches and can give rise to new economically and environmentally viable artisanal fisheries livelihoods.

In line with the provisions of the new Maritime Fisheries Regulation (REPMAR, 2020), which prohibits beach seining from January 2024, PROPEIXE-GEF will contribute to efforts helping fishers transition to working with appropriate environmentally friendly fishing gear. These measures contribute to the long-term viability of fisheries and enhance their resilience to climate change impacts. REPMAR also clarifies the path for CCPs to become legal entities, which will allow them to designate community management areas and better implement rules regulating access to marine resources. The component will strengthen CCPs to better manage fisheries and support ecosystem activities, including the restoration of degraded habitats in the mangroves (highly effective in sequestering carbon dioxide), coral reef and seagrass areas. To incentivize the conservation of mangroves, the project will support assessments on the viability of carbon markets with the possibility to pilot in future interventions.

The project will finance the implementation of: a) action research focused on fishing trials to demonstrate improved/selective fishing methods and techniques and training of artisanal fishers; b) support Oceanographic Institute of Mozambique (InOM) to survey and map potential areas for promotion of mariculture activities and National Institute for Development of Fisheries and Aquaculture (IDEPA); c) will work with InOM in mapping out sensitive and degraded habitats with the mangroves, coral reefs and seagrass beds for rehabilitation; d) will support Meteorology National Institute (INAM)[1]52 in equipping a meteorological station to provide updated information to fishers and thereby strengthen the availability of suitable tools for climate resilience. All these activities are in support of sustainable fishing activities and other forms of livelihoods, which are adaptation mechanisms to the challenges posed by climate change.

Outputs

Output 1.1: Demonstration and a*doption of climate smart practices/technologies and climate resilient fisheries management by 30 000 farmers (50% women and 40 % youth)*

Action research focused on fishing trials to demonstrate improved/selective fishing climate smart methods and techniques and training of artisanal fishers on responsible fisheries and offshore fishing; assessment of the technical, economic, and social viability of the proposed new climate smart practices, piloting new fishing gear. Other technologies includes testing ecosystem-based management strategies to restore fish stocks and biodiversity, use of satellite data for weather prediction and ocean monitoring to inform fishing practices, use of solar-powered cooling systems to maintain the quality of the catch. Furthermore, dissemination of results at village level, as well as provision of extension services for uptake of those operations that prove to be successful. The demonstration of existing technologies and the exploration of innovative practices through research will ensure that the project's objectives are met through evidence-based process. In Mozambique, there have been examples for such initiatives in regions

like Sofala and Nampula, Food and Agriculture Organisation led project[1] where the integration of women in resource management has shown to improve sustainability outcomes. The training of artisanal fishers will include critical issues on security for open sea activities for the operators, boats, equipment and fishing gear. This training will include the use of radios, communication equipment and sea safety measures, use life saving equipment, evacuation procedures, navigation aids and fish locating equipment. This activity will cover all the project districts and will be completed within the first year of implementation.

The selection of climate-smart practices will be based on technologies adaptable to local ecosystems, cultural suitability, and demonstrated success in enhancing climate resilience. The practices will be tailored to women from the targeted communities. This ensures that the technologies and practices are not only accessible and appropriate for women's unique needs but also support women's empowerment and participation in climate action. To identify gender sensitive technologies, the project will conduct gender analysis and needs assessments to understand the specific roles, responsibilities, rights and constraints of women in the local context of targeted areas. Consultations with women's groups, female entrepreneurs and community leaders will further refine the selection to ensure it aligns with women's preferences and contributes to reducing gender gaps. Trainings and capacity-building workshops will also be part of the engagement, allowing women to directly influence the design and implementation of the project, resulting in a more inclusive and effective climate-smart strategy. Increasing access to technologies for women will focus on time and energy saving among others and by changing dynamics in the division of labour at household level.

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[1] ID5433 Mozambique LDCF CCA_PIF for resubmission_05 June 2013.pdf

Output 1.2: Strengthening 240 Community Fishery Council (CCPs) to better manage fisheries ecosystems (mangroves & coral reefs) for climate resilience

Activity Set 2: support InOM to survey and map potential areas for promotion of mariculture activities, as part of which IDEPA will implement the pilot trials with selected farmers in the project areas. A clear criterion for suitability, selection and exclusion will be developed for all mariculture activities. IDEPA technical team and extension staff on the culture systems will equally train the fish farmers. This activity will focus on identified and high potential mariculture species mainly on oysters and seaweed culture and bulking. Implementation of these activities will be led by National Fisheries Administration (ADNAP), IDEPA and involve InOM and the Fisheries School. Selection of species for mariculture will be based on screening for growth characteristics, endemism and preferences, availability of seeds and feeds and proven culture technologies. The assessment will also take into account actual or potential market demand for the selected species and products. Year 1 survey will focus on Pemba, Metuge and Quissanga in Cabo Delgado; in Memba, Mussorli and Ilha de Moçambique in Nampula; Pabane, Mocubela and Maganja da Costa in Zambézia; Beira, Buzi and Machanga in Sofala; and Govuro and Inhassoro in Inhambane. Year 2 activities will be expanded to Mocimboa de Praia in Cabo Delgado; Angoche and Moma in Nampula; Chinde and Quelimane in Zambézia; Muanza in Sofala; and Vilankulo in Inhambane, taking into consideration the logistics of contagious and isolated districts.

The project will support capacity building of the fishermen, extension workers and relevant project staff on climate smart fishing techniques, and monitoring of artisanal catches will be promoted through capacity

building and demonstrations, based on evidence collected by the CCPs and artisanal fishermen in collaboration with ADNAP. Thirty thousand (30 000) fishers will receive training.

The project will ensure that gender issues are mainstreamed and women empowered to participate in fishery trials and experimentation.

Output 1.3: 2000 ha (mangroves) and 800 ha (coral reefs and seagrass beds) rehabilitated, enhancing coastal climate resilience

This includes work with InOM to map out sensitive and degraded habitats with the mangroves, coral reefs and seagrass beds for rehabilitation. This will entail activities such as: the participatory identification of high priority areas for restoration and protection, using ecosystem-based approaches, secondary data and empirical evidence from the coastal communities; training of CCPs on fisheries co-management and building their capacity for leadership and governance; development of fisheries management plans that define the roles and responsibilities of various stakeholders; support community efforts towards the development of mangrove tree nurseries and production of mangrove seedlings for both planting and re-planting; improve disaster risk management and climate adapted technologies; pilot new technologies such as energy efficient stoves as well as pilot risk mitigation measures such as weather asset insurance schemes, potentially engaging with PULA. It is expected that at least 240 CCPs will be strengthened, benefiting 2 400 CCP members. High loss of mangroves has been reported in Zambezi delta *Primeiras* and *Segundas* from 2 000 – 8 000 ha. Sites for rehabilitation will be identified through participatory mapping engaging all communities members. This activity set will be closely linked to co-management activities that will define non fishing zones (conservancies), fish breeding areas, re-forestation areas and restoration activities to be carried out. Planting and replanting of mangroves will be carried out as outlined in the co-management plans. An Integrated Coastal Zone Management (ICZM) approach will be used for synergy among complementary conservation interventions. Specific activities will include: i) designation of Community Conservation Areas (CCAs) by where human activities, such as fishing and mining, are restricted or regulated to protect marine biodiversity; ii) coral reef protection include coral restoration projects and enforcing fishing regulations; iii) seagrass restoration involve replanting seagrasses and reducing sources of degradation; iv) mangrove conservation activities including replanting mangroves, protecting existing mangrove areas, and managing human activities in these zones; v) fisheries management involving enforcing catch limits where they exists, reducing bycatch, and promoting responsible fishing methods; vi) reducing land-based pollution, such as plastic waste and agricultural runoff through organic and climate smart agriculture, materials recycling programs, strict waste disposal regulations, and promoting eco-friendly practices; and vii) climate change mitigation such as reducing greenhouse gas emissions, promotion of green economy, carbon capture, supporting R&D on resilient marine species and ecosystems. These activities will be complemented by education and outreach by raising awareness and educating the public about the importance of marine habitat conservation. Encouraging responsible and sustainable tourism practices to reduce the negative impacts of tourism on marine habitats while providing economic benefits to local communities.

Sustainable fishing activities and other forms of livelihoods that emerge through the piloting under this component, which develop beyond household subsistence needs, will graduate towards Component 2, Sub Component 2.2, to receive entrepreneurship development support.

COMPONENT 2: Inclusive fisheries climate resilient value chain development and livelihood diversification

Outcome 2: Enhanced economic, climate resilience and profitability of artisanal fisheries and local livelihoods

This result will be achieved through the implementation of interventions that lead to a better performance of artisanal fishing production, post-harvest and commercialization of fish, awareness on climate change impacts and adaptation opportunities, greater entrepreneurship capacity and access to finance; and the development of climate-resilient infrastructure, while addressing issues related to social vulnerability, financial inclusion, and nutrition and gender mainstreaming in targeted fishing communities. This will involve: *Sustainable entrepreneurship and livelihoods development*; b) *Value chain driven and climate resilient infrastructure development* both with activities that: a) promote the private upscale of sustainable fisheries technologies being piloted ; b) promote the development of sustainable fisheries enterprises for business start-ups and MSMEs and facilitate access to financial services; c) facilitation of access to financial services; d) promoting alternative livelihood initiatives, including those contributing to the replacement of beach seining. It is expected that alternative Income Generating Activities (IGA) will benefit about 10,000 beneficiaries (60 percent women). Furthermore, this component will promote value chain driven, and climate resilient infrastructure development including rehabilitation, climate proofing and maintenance of feeder roads; construction/rehabilitation or upgrade of market, processing and storage facilities that will be accessible and beneficial to whole communities.

Outputs

Output 2.1: Climate adaptive fisheries technologies successfully piloted under Component 1 up-scaled.

The project will support interventions in fishery production and post-production, including alternative IGAs, such as provision of technological packages and support services to: (i) upscale pilot mariculture initiatives crucial for climate adaptation by reducing pressure on terrestrial ecosystems strained partly by climatic factors such as massive floods and enhancing coastal communities economic and environmental resilience; (ii) expand open sea fishing; (iii) improve post-production activities; and (iv) implement viable off-fishery alternative livelihood options. In addition, green alternative livelihoods such as mangrove honey production, mariculture and micro-food businesses, piloted successfully under C1 will be up-scaled in C2.

Output 2.2: *1 080 Climate smart fisheries enterprises developed (supporting 50% women and 40% youth)*

PROPEIXE-GEF will provide support to incubators and start-ups to form MSMEs in fishing and post-production operations[2][53], through training to strengthen business skills and assistance to develop business plans that will enable presenting bankable requests to financial service providers. The project will support the identification and piloting of 4P models that can strengthen inclusive supply chain linkages between small and larger players, as well as provide engagement capacity of local fishing communities in these 4P models and brokering of buyers-seller's agreements. Service providers, currently supporting various donors and projects in agriculture, will be outsourced to design and implement the following programs: (i) youth employment and entrepreneurship; (ii) formation of Gender Action Learning System (GALS) champions; and (iii) nutrition education activities. Within this context, the project will also strive to support women's capacity to remain engaged in the different nodes of the VC (and other remunerative opportunities) and keep on benefiting from it as they engage in more market-oriented operations. Under Activity Set 2, the project will support business enterprise development through: (i) provision of business development services; (ii) support to group enterprise development; (iii) promotion of 4Ps; and (iv) youth employment and enterprise development. The project will install a limited number of fish aggregation devices (FADs) and artificial reefs using tubular concrete structures, cinder blocks, old tires, shell cultch banks, etc., will also be supported under Component 1. Artificial reefs function as climate-smart approaches by enhancing marine biodiversity, protecting coastal areas from erosion, and sequestering carbon dioxide, contributing to ecosystem resilience and climate change adaptation.

Output 2.3: Access to financial services for climate resilient enterprises facilitated benefitting 24 000 persons (70 % women)

The activities will enable local MSME growth and help expand business operations, by assisting enterprises to prepare bankable business proposals and submit applications for financing by the Rural Enterprise Financing Project (REFP) and the Fund for Development of Blue Economy (PROAZUL). PROPEIXE will also support interventions aimed to build and strengthen the capacity of 1 200 Credit groups (PCRs) to partially fill the existing gap in financial service provision and strengthen the foundations for sustainable financial service delivery, through: establishment of a network of local promoters[3][54] and facilitating wider use of existing mobile platforms, such as mobile money and payment etc.; linkages to commercial lenders and other innovative financing solutions; mobilisation of women's membership in PCRs groups and finance literacy education among other services; delivery of nutrition education activities via PCRs. These activities are expected to reach 24 000 persons (70 % women) as members of PCRs and at least 50 % of them (or 12 000 participants) to be very poor women also targeted by nutrition education interventions.

The project will support interventions aimed to bring financial solutions for investments in the VCs, namely: (i) Facilitation of access to financial services; and (ii) Strengthening of PCR groups.

Financial mechanisms and insurance schemes that contribute to climate change adaptation tailored to the needs of fishing communities can help them cope with climate-related risks and shocks. This can include microfinance programs, weather-based index insurance, and community-based risk-sharing mechanisms to provide financial support during adverse events.

Output 2.4: Sustainable green alternative livelihoods developed (supporting 10 000 beneficiaries 50% women and 40% youth including those contributing to the replacement of beach seining)

Alternative livelihoods developed in response to climate resilience and improved resource management needs will include initiatives contributing to the replacement of beach seining. These will be supported working in partnership with local Non Governmental Organisations (NGOs) already involved in similar operations. It is expected that alternative IGAs will benefit about 10 000 beneficiaries (60 % women). The project will also hire a Markets and Fishery VC Specialist, housed at IDEPA's Directorate of Fishery Commercialization, who will help coordinate action leading to the sustainable development of fishery enterprises. Continuous on the ground support will be provided by a local service provider of business development services that will also support development of 4P relationships. Qualified service providers will also be outsourced to design and implement the following programs: (i) Creation and capacity building of group enterprises; (ii) Support for youth employment and entrepreneurship; (iii) Strengthening PCR groups; (iv) Formation of GALS champions; and (v) Nutrition education activities.

Output 2.5: Infrastructure (markets, market access roads, storage facilities) climate-proofed to withstand extreme weather benefiting entire communities.

The component will invest in fish value chains related climate proof infrastructure and will support interventions aimed at addressing infrastructure-related constraints faced by artisanal fishers, traders, and other relevant actors caused by climate change. Planned interventions will include climate proofing of supporting climate-resilient and accessible infrastructure investments rehabilitated/upgraded by IFAD investments that: (i) reduce post-harvest losses and add economic and market value; (ii) guarantee food safety and extend shelf life; (iii) upgrade performance and competitiveness of the sector; and (iv) improve the resilience, incomes and livelihoods of poor households involved in artisanal fisheries, including women, youth, and PWD. Activities will include rehabilitation of roads and climate proofing as well as construction/rehabilitation or upgrade of market, processing and storage facilities. The project will: rehabilitate/upgrade and operationalize 12 existing fish markets[4]55; construct/equip 10 fish transit centres with solar powered cold storage equipment and ice making plants and facilities for traditional drying methods, and warehouses; Rehabilitate/Upgrade handling facilities for high quality fish and dried fish (including warehouses) in the wholesale/reference markets (4). LDCF resources will compliment IFAD resources by

climate proofing infrastructure to ensure they can withstand climate-related challenges such as flooding, erosion and extreme weather events.

Component 3. Institutional strengthening, project management and policy initiatives

Outcome 3. 1 Strengthened public sector support for the long-term sustainable development of the climate resilient artisanal fishery sector.

It will involve institutional strengthening and policy support; project coordination and implementation support and institutional strengthening for relevant government agencies responsible for fisheries, agriculture, environment and climate change adaptation to ensure a coordinated and synergistic approach to climate resilience. PROPEIXE activities under this component will include *Capacity Building of Relevant Government Institutions* such as institutional strengthening of IDEPA departments and delegations; Institutional strengthening of InOM, ADNAP, INAMAR, and National Institute for Fisheries Inspection (INIP). The support will be on (i) the establishment of quality standards for the national artisanal fisheries value chain, among other activities, and (ii) support in the introduction of procedures for the traceability of fish originating from artisanal fishing that allow for certifying the quality of fishery products for export.

On the other hand, the component will provide Policy Support and Development including the Finalization of PESPA II, Census of Artisanal Fisheries 2027, Organization of the fisheries co-management system, Gender Policy in the Artisanal Fishery Sector and Action Plan, other particularly relevant initiatives that may contribute to support the Sea, Inland Waters and Fisheries. Policies, strategies, planning and legislative initiatives to further strengthen the capacity for the sustainable development of the resilient artisanal fisheries, in collaboration and partnership with other partners and donors, as well as relevant gender policies to address gender related issues, and update of existing policies incorporating climate change considerations in fisheries can also be considered.

Output 3.1: Government institutions strengthened and extension services trained to increase adaptive management capacity

The research interventions will be key for the project. Activities will be the following: (i) collection of biological data; (ii) conduct specific studies and (iii) biodiversity conservation and restoration interventions as detailed in component 1.

Supporting ADNAP will include: (i) the scaling up of Open ArtFish statistical system; (ii) the electronic registration of artisanal fishers formalizing their activity; and (iii) strengthening district capacity to promote co-management arrangements and CCPs (in support to Component 2).

Institutional strengthening of INAMAR will be supported through strengthening law enforcing capacity and regulations on safety, protection, ordering of the maritime and the coastal zones, fishing activities, protection of marine and coastal ecosystems, sustainable exploitation, conservation and preservation of aquatic ecosystems, carrying out maritime search and rescue activities, as well as security equipment and training and awareness raising. Institutional strengthening of INIP will focus on the establishment of quality standards for the national artisanal fisheries value chains and introduction of traceability procedures allowing product certification for exportation.

Output 3.2: Climate information and Early Warning System (EWS) established

The activities will support Meteorology National Institute (INAM)[5][56] in equipping a meteorological station to provide updated information to fishers and thereby strengthen the availability of suitable tools for climate resilience. This will support the establishment or enhancement of climate information systems and Early Warning Systems (EWS) at the community and regional levels, enabling fishing communities to make informed decisions and take appropriate adaptive measures. This includes access to weather forecasts, oceanographic data and relevant climate-related information. It will also provide targeted capacity building and training programs for fishing communities and value chain actors on climate change adaptation strategies. This can include training on climate-resilient fishing practices, climate risk assessment and management and the use of climate information and EWS.

Output 3.3: Inclusive Policy support for climate resilient and sustainable fishery value chain developed

It will consider supporting proper update and innovative policy elements in light of the institutional and sectoral changes with implication to climate change adaptation gender and nutrition. In addition, considering the strong nexus between climate, gender and nutrition the process will be accompanied by nutrition mainstreaming. Multi-stakeholder and multisectoral policy dialogue and dissemination workshops will also be considered. The project will engage in advocacy efforts to mobilize support and resources from various stakeholders, including government institutions, private sector actors and civil society, to scale up climate-resilience initiatives. The civil society organizations will be key partners in both implementation and advocacy, leveraging their unique position to engage communities and uphold public integrity standards.

Component 4. Knowledge management and learning

Outcome 4. Enhanced adaptive management of climate resilient fishery value chain

A comprehensive set of knowledge and learning activities have been outlined for PROPEIXE-GEF which will be further refined at design. These activities are focused on building the capacities of fishery stakeholders, disseminating adaptive practices and technologies and fostering a collaborative learning environment that underpins the climate resilience of the value chains.

Output 4.1 Awareness raised on gender sensitive climate resilient *fishery value chains to enable scaling up*

Knowledge and learning activities

a) **Raising awareness**: The project will conduct community awareness campaigns emphasing a culture of public integrity and climate change consciousness highlighting the importance of climate resilience in fisheries and showcasing the benefits of adopting gender sensitive adaptive practices. Through radio, TV campaigns, and events organized in primary and secondary schools, PROPEIXE-GEF will promote a broader societal awareness of the importance of conserving marine natural resources. The Project will produce audio and visual material to communicate and build knowledge of farmers on mariculture. Exchanges will be promoted between people new to mariculture in the north and people in the south who already have some experience. The Project will also organize fish fairs for fishermen to show and promote their products and gain exposure to new technologies.

b) Research and dissemination. The Project will collect its own lessons and disseminate these to relevant stakeholders through briefs, newsletters and studies. An effort will be made to ensure that all knowledge products are accessible and beneficial to the entire communities and stakeholders by using stakeholder feedback platform on best methods of dissemination. In collaboration with InOM, PROPEIXE will carry out studies on successful approaches for community-led environmental conservation and the establishment of early warning systems; on productivity of coastal systems; and on how to best promote the participation of youth, women and PwD in the fish value chain. KM will also aim at translating the findings of research supported by the Project into accessible knowledge products to be disseminated amongst fishermen and extension officers.

c) Knowledge Exchange Programs: Knowledge sharing stands at the heart of adaptive management. Local knowledge exchange platforms will be initiated, fostering a community where fishery stakeholders share indigenous practices and lessons learned in adapting to climatic shifts. Beyond the local sphere, international exchange programs can be instrumental. By facilitating visits or exchanges with fishery communities from other countries, stakeholders can glean insights from counterparts who've successfully tackled similar climate adversities.

d) Stakeholder Engagement Forums: A collaborative approach is key to addressing the multifaceted challenges of climate change. Platforms for multi-stakeholder dialogues will be set up, convening fishers, policymakers, NGOs and industry representatives to jointly brainstorm and action adaptive strategies. Equally

crucial will be the establishment of feedback mechanisms, inviting stakeholders to critique and refine adaptive measures, ensuring they remain relevant and effective.

Knowledge management, Communication and Learning, Innovation and scaling up

PROPEIXE-GEF will first be a learning project, integrating lessons from PROPESCA and capitalizing on experiences from other African countries on equipping artisanal fishing boats (Senegal, Mauritius) and on promoting mariculture. Technical staff and extension officers will visit countries like Madagascar and Tanzania (Zanzibar) who are already engaged in promoting cultivation of mussels and seaweed. In a second step, the Project will collect its own lessons and disseminate these to relevant stakeholders through briefs, newsletters and studies. Knowledge Management (KM) and communications shall be closely linked to the policy engagement objectives and will disseminate lessons learned from PROPEIXE-GEF approaches. The KM studies will be informed also from the M&E system of PROPEIXE-GEF. In collaboration with InOM, PROPEIXE-GEF will carry out diverse studies and translate the findings of research supported by the Project into accessible knowledge products to be disseminated amongst fishermen, extension officers and other relevant value chain actors. Synergies will be promoted between the KM activities of different IFAD-supported projects in Mozambique. In collaboration with PRODAPE, the project will establish a digital library to store and promote accessibility of all project documents. The PROPEIXE-GEF KM officer will ensure visibility of project interventions through social media, and specialized international communities of practice success stories will be publicized through short videos. PROPEIXE-GEF's visibility will be enhanced through a dedicated website. The KM officer will work in close collaboration with the M&E officer to ensure that M&E findings on project results are widely disseminated in a clear, synthetized and interesting way and that knowledge products are backed up by solid M&E evidence. Field visits to collect stories by the KM officer will be also used for triangulating M&E data. Case studies will be used to deepen the understanding of factors contributing to successes and failures, and to enable full documentation of impact. Knowledge Management (KM) and communications shall be closely linked to the policy engagement objectives and will disseminate lessons learned from PROPEIXE-GEF approaches, such as the fisheries co-management through CCPs and the impact of household methodologies.

Communication plan for raising awareness

To effectively raise awareness and disseminate information about the innovative climate smart technologies and practices, a communication strategy will be put in place. At its core, the strategy will reflect knowledge is dynamic and evolves through sharing and collaboration. Initially, stakeholder consultations will be conducted to identify key informational needs and tailor the communication outputs to these needs. Various multimedia channels, including local workshops, digital platforms, print media and community radio broadcasts, will be employed to ensure broad reach across diverse demographic groups. Emphasizing storytelling, PROPEIXE-GEF will spotlight success stories and testimonials from early adopters, creating relatable narratives that resonate with potential users. For continuous engagement, interactive platforms like webinars, forums and community dialogues will be organized, fostering a space for feedback, discussions and shared learning. To ensure the sustainability of knowledge, PROPEIXE-GEF will collaborate with local educational institutions and community organizations to integrate the technologies and practices into their curricula and training programs. Furthermore, a digital repository will be established to archive all resources, ensuring long-term access and updates. Through this holistic and inclusive approach, the project aims not just to disseminate knowledge but to embed it within communities, ensuring its relevance and use for years to come.

Monitoring and Evaluation

Outcome: Project implementation and results strengthened through participatory monitoring and evaluation

Output: Project monitoring, evaluation and reporting systems established and implemented

PROPEIXE-GEF will set up a solid M&E system in line with IFAD and Government guidelines, aimed at consolidating and enriching existing country data systems on artisanal fisheries. The M&E system will generate timely information to support decision-making and adaptive management, and it will provide the necessary elements for a robust evaluation of project results. A proper Management Information System (MIS) will be attached to the M&E system to collect data and produce regular reports with appropriate analysis and graphs.

Building on lessons learned from M&E-related challenges faced by IFAD-supported projects in the country, PROPEIXE-GEF's M&E system will be based on two principles: simplicity and focus on existing country data systems. The system will incorporate the monitoring of the gender action plan into the M&E component. This will be participatory and ensure gender specific objectives are achieved. This will involve the establishment of gender-sensitive indicators and the systematic collection of data disaggregated by gender, age, PwDs and by IDPs. This data will be important to track progress against the gender action plan's goals. Regular analysis of this data will help identify any gaps in gender equality and inform necessary adjustments in project implementation. Additionally, the M&E framework will include periodic gender-focused reviews, conducted in collaboration with gender experts, to evaluate the effectiveness of the gender action plan and ensure that gender considerations are central to project decision-making. This process will also empower stakeholders, particularly women and marginalized groups, by involving them in the M&E processes, thereby upholding the principles of inclusivity and representation. By embedding these practices into the M&E system, the project will demonstrate a clear commitment to not only tracking but also actively promoting gender equity within its operations.

Data on outcomes and impact will be collected on a sample of beneficiaries through baseline, mid-line and completion surveys in alignment to the IFAD guidelines for the measurement of Core Indicators at Outcome level. These surveys will be in line with the mainstreaming themes and will include all the relevant questions related to empowerment and to nutrition. Qualitative thematic studies will be carried out if and as needed to shed additional light on specific findings of the quantitative surveys. Data collection, verification and use will be a joint task by all project stakeholders. The primary responsibility will lie with the M&E unit within the PMU, composed of a senior M&E officer, an M&E assistant, and a KM and Communications officer. At district or community level, data will be collected mainly by fisheries extension officers but also by selected and trained beneficiaries such as CCPs, contact fishermen, representatives of trading and processing associations, etc., in these cases to be validated by the extension officers, SDAEs, IDEPA provincial M&E team and by SPAEs, before it is shared with IDEPA at central level.

PROPEIXE-GEF will support ADNAP in transitioning from the Pescart system for the collection and analysis of fisheries-related data to Open ArtFish Digital data collection at landing sites through Open Data Kit (ODK). PROPEIXE-GEF will support ADNAP in delivering the necessary training and equipment to data collectors. By providing equipment and training to extension officers, the project will also support ADNAP with the ongoing registration of artisanal fishermen. Completing the digital registry of artisanal fishermen will facilitate data collection by providing each fisherman with a unique identification card.

PROPEIXE-GEF will also set up its own MIS, which will include geospatial data to allow mapping of fishery resources. Data on fisheries is currently collected prevalently by IDEPA extension officers, who face challenges due to insufficient training, equipment and means of transport. In addition to the above-mentioned provision of training and equipment to extension officers, PROPEIXE-GEF will also address this challenge by encouraging CCPs to play a role in data collection. This participatory approach to M&E is expected to both improve data availability, to strengthen community ownership of project interventions and to contribute to sustainability of project interventions. Indicators and mechanisms will be included in the M&E system to assess the level of participation, engagement and collaboration among diverse stakeholders. A grievance redress mechanism will be developed at PPG stage to highlight how feedback from stakeholders will be incorporated into project adjustments to ensure a responsive and inclusive approach.

How the project will generate global environmental benefits and/or adaptation benefits which would not have accrued without the GEF project (additionally).

Baseline Scenario	GEF PROJECT ADDITIONALITY
Component 1	
In a business-as-usual scenario without GEF resources, the artisanal fisheries and coastal ecosystems in the project's target areas would likely continue to face numerous challenges. These challenges include unsustainable fishing practices, habitat degradation, and vulnerability to climate change impacts. Without the intervention proposed by PROPEIXE-GEF, there would be limited efforts to transition fishers to environmentally friendly gear, improve fishing techniques, and enhance fisheries management. Additionally, the absence of GEF support would likely result in a lack of capacity-building initiatives, particularly for fisherfolk, extension workers, and women in the community. Coastal habitats, such as mangroves, coral reefs, and seagrass beds, may continue to deteriorate, leading to reduced resilience and biodiversity loss. Overall, the absence of GEF resources would hinder the sustainable management of artisanal fisheries and the restoration of vital coastal ecosystems, limiting the prospects for increased resilience and improved livelihoods in these communities.	PROPEIXE GEF funded project demonstrates clear additionally by creating substantial global environmental and adaptation benefits that would not have materialized under a business-as-usual scenario. This project tackles multiple fronts of environmental and climate challenges simultaneously, making it unique and impactful. It promotes sustainable artisanal fisheries, facilitates the transition to eco-friendly fishing gear, and strengthens the resilience of coastal ecosystems. By supporting the restoration of critical habitats like mangroves, coral reefs, and seagrass beds, it enhances carbon sequestration, biodiversity, and the capacity of these ecosystems to withstand climate change impacts. Furthermore, the project empowers local fishing communities, particularly women, through capacity building and gender mainstreaming. It introduces innovative approaches such as exploring carbon markets for mangrove conservation and piloting climate risk mitigation measures. This multifaceted approach, addressing both ecosystem restoration and community resilience, amplifies the project's positive adaptation impacts.

	The GEF project goes beyond business-as-usual efforts, leveraging its resources and expertise to enhance adaptation to climate change. Its comprehensive strategies and innovative initiatives make it a critical intervention for safeguarding the resilience of artisanal fisheries and coastal ecosystems, benefiting not only local communities but also contributing significantly to global environmental conservation and climate adaptation efforts.
Component 2	
In the absence of GEF resources and support, the baseline scenario for Component 2: Inclusive Fisheries Climate Resilient Value Chain Development and Livelihood Diversification would likely involve several challenges and limitations for the artisanal fisheries sub-sector and local livelihoods: - Without GEF resources, the development of climate-resilient infrastructure and practices would be constrained. This could leave fishing communities vulnerable to the adverse impacts of climate change, such as extreme weather events and changing ocean conditions. - The absence of GEF funding could result in a lack of financial and technical support for sustainable entrepreneurship and livelihood development in the artisanal fishing sector. This may hinder the growth of green and climate-smart enterprises. - Access to finance for small and medium-sized enterprises (SMEs) in the fisheries sector could remain limited, making it difficult for them to expand their operations and invest in sustainable technologies. - The rehabilitation and climate-proofing of feeder roads, fish markets, processing facilities, and storage facilities might progress at a slower pace or be delayed, impacting the efficiency and competitiveness of the value chain. - Without GEF resources, the scaling up of alternative income-generating activities like	The GEF project outlined here demonstrates significant additionally by generating adaptation benefits that would not have been realized under business-as-usual scenarios. This project adopts a comprehensive approach to address the challenges facing artisanal fisheries and coastal communities, emphasizing climate resilience and sustainability. The project's Sub Component 2.1 focuses on promoting sustainable entrepreneurship and livelihoods, including alternative income-generating activities, which will not only improve the economic resilience of fishing communities but also contribute to climate adaptation by reducing pressure on terrestrial ecosystems and promoting climate-smart practices. Furthermore, the project's Sub Component 2.2 invests in climate-resilient infrastructure, such as road rehabilitation and market facilities, which will directly enhance the resilience of the fisheries value chain. These infrastructure improvements will reduce post-harvest losses, improve food safety, and extend the shelf life of fishery products. Additionally, the project adopts a green and climate-proof approach in infrastructure development, ensuring that these assets are resilient to climate change impacts, thereby increasing the adaptive capacity of the communities relying on them. The project's focus on sustainable practices, entrepreneurship development, and climate-proofed infrastructure contributes to the global effort to combat climate change, enhance

mangrove honey production and mariculture could be slower, and fewer communities may benefit from diversified livelihoods. - The expansion of access to financial services for micro, small, and medium-sized enterprises (MSMEs) may not occur at the desired rate, hampering the growth of businesses in the fisheries sector. - Private sector companies, especially those involved in supplying production inputs may be less incentivized to engage with small-scale fishing and mariculture producers, potentially limiting economic opportunities for fishing communities. Climate-resilient practices and early warning systems would also be underdeveloped, leaving fishing communities ill prepared to adapt to climate-related challenges. The absence of GEF resources could result in a slower and less comprehensive approach to enhancing the resilience and profitability of artisanal fisheries and local livelihoods in the face of climate change and other challenges. Collaboration with other donor-funded initiatives may partially address some of these gaps, but the impact and scale of interventions would likely be reduced compared to what could be achieved with GEF support.	ecosystem resilience, and promote sustainable livelihoods. The establishment of climate information systems and Early Warning Systems (EWS) equips fishing communities with vital tools to adapt to climate-related risks. These benefits go beyond what would have been achieved through standard development initiatives, making the GEF project a critical intervention in safeguarding the well-being of artisanal fishers and the ecosystems they depend on while simultaneously generating broader environmental and adaptation advantages on a global scale.
Component 3	
In the absence of GEF support, the artisanal fishery sector in the project area would continue to face challenges related to overfishing, habitat degradation, and climate change impacts, leading to declining fish stocks, reduced livelihood opportunities, and increased vulnerability to climate-related events. The project's institutional strengthening and policy support (Subcomponent 3.1) go beyond business-as-usual efforts by enhancing the capacity of key government institutions responsible for overseeing and implementing sustainable fisheries management practices. Without GEF intervention, these institutions would lack the resources and	The GEF project's contribution to generating adaptation benefits with additionally lies in its holistic approach to addressing the challenges faced by the artisanal fishery sector while simultaneously promoting sustainability and climate resilience. Firstly, through its institutional strengthening and policy support efforts (Subcomponent 3.1), the project enhances the capacity of key institutions responsible for overseeing and implementing sustainable fisheries management practices. This ensures that the long-term sustainability of the artisanal fishery sector is prioritized, which may not have occurred without the GEF project's

expertise needed to enforce regulations, promote co-management arrangements, and conserve marine ecosystems effectively. The introduction of traceability procedures and quality standards would also be unlikely without GEF support, leaving the sector exposed to potential illegal and unsustainable practices. Furthermore, the project's policy initiatives address critical gaps in policy frameworks for sustainable fisheries management, co-management, and gender inclusivity, which may not have been prioritized in the absence of GEF resources. These policy developments create an enabling environment for long-term adaptation and resilience building, with a strong focus on gender-sensitive approaches and nutrition mainstreaming. In summary, the GEF project provides the critical financial and technical resources needed to catalyse sustainable practices and climate resilience in the artisanal fishery sector, offering a comprehensive and integrated approach that significantly surpasses what would have been achieved in the baseline scenario. It fosters global environmental and adaptation benefits by promoting responsible fishing practices, marine ecosystem conservation, and inclusive policies, ultimately contributing to the long-term sustainability of this vital sector.	intervention. Strengthened institutions can enforce regulations, promote climate smart practices, and foster co-management arrangements, thereby contributing to the conservation and preservation of aquatic ecosystems. Moreover, the project's focus on electronic registration of artisanal fishers, traceability procedures, and product certification for exportation reinforces quality standards and ensures the traceability of fishery products. This, in turn, adds to the project's contribution to global environmental benefits by promoting responsible fishing practices and reducing the risk of illegal, unreported, and unregulated (IUU) fishing, which can have detrimental effects on global fish stocks. Additionally, the project's policy support initiatives demonstrate its commitment to advancing policy frameworks for sustainable fisheries management, co-management systems, and gender inclusivity within the sector. These policy developments create a conducive environment for long-term adaptation and resilience-building, emphasizing gender-sensitive approaches that can improve both environmental and social outcomes. The GEF project's multifaceted approach, encompassing institutional strengthening, policy support, and on-the-ground interventions, ensures that it goes beyond business-as-usual efforts, making a substantial contribution to and adaptation efforts that would not have been achieved without its targeted and comprehensive intervention.

Key Stakeholders

Stakeholders	Roles and responsibilities
Government	The Ministry of Sea, Inland Waters and Fisheries (MIMAIP) will be the GEF executing agency

Ministry of Land and Environment (MITA)	National expert on environment and climate change, marine and coastal environment, Environment and Forests Department, in charge of the NAP
The Ministry of Mineral Resources and Energy	Eelectricity, fuels and renewable energy) oversee energy production and distribution.
National Institute for Development of Fisheries and Aquaculture (IDEPA)	IDEPA will be the PROPEIXE-GEF lead agency therefore, it will be responsible for the overall supervision and implementation of the project
National Sea Institute INAMAR	The project will support strengthening law enforcing capacity and regulations on safety, protection, ordering of the maritime and the coastal zones, fishing activities, protection of marine and coastal ecosystems, sustainable exploitation, conservation, and preservation of aquatic ecosystems, carrying out maritime search and rescue activities, as well as security equipment, and training and awareness.
Oceanographic Institute of Mozambique INOM	The research interventions will be key for the project. Activities will be the following: (i) collection of biological data; (ii) conduct specific studies and (iii) biodiversity conservation and restoration interventions as detailed in the project components
National Institute for Fisheries Inspection INIP	Support will be on the establishment of quality standards for the national artisanal fisheries value chain and introduction of traceability procedures allowing product certification for exportation.
ADNAP	Supporting ADNAP will include: (i) the scaling up of Open ArtFish statistical system; (ii) the electronic registration of artisanal fishers formalizing their activity; and (iii) strengthening district capacity to promote co-management arrangements and CCPs (in support to Component 2).
Meteorology National Institute	Monitors and forecasts the weather and climate. At the national, provincial, and district levels
National Institute for Disaster Management	Coordinates disaster risk management, emergencies, disaster prevention, and early warning systems. It has three emergency response centres to deal with cyclones, droughts, and floods.
Academic institutions	A pivotal role in fishery projects by providing expertise, research capabilities, and knowledge dissemination. These institutions contribute to the success and sustainability of fishery initiatives through various means. They conduct research to understand fish populations, ecosystems, and environmental factors, providing crucial data for informed decision-making. Additionally, academic institutions foster innovation by developing new fishing technologies and practices that enhance efficiency and reduce environmental impact. They offer training and capacity-building programs to empower fisheries stakeholders with the skills and knowledge needed for sustainable practices. Furthermore, academic institutions engage in policy research and collaborate with government agencies to improve fisheries governance. Their role in environmental conservation, monitoring and evaluation, and long-term planning ensures that fishery projects align with sustainability goals and benefit both fish stocks and local communities. Through partnerships and knowledge dissemination, academic institutions bridge the gap between scientific research

	and practical solutions in the fisheries sector, contributing significantly to its sustainable development.
NGO,CSO	Non-governmental organisations (NGOs), civil society organisations (CSOs), and various stakeholder groups, such as women, youth, and diverse ethnic groups, play a crucial role in both the initial stages of project development and its subsequent implementation. These actors, along with the direct beneficiaries, are actively involved in shaping and executing the project. The primary areas of emphasis within the project will revolve around gender mainstreaming, as well as the incorporation of women and other marginalised populations in society, such as the elderly and individuals with disabilities. The project will primarily centre on the individual, with participation and guidance facilitated by established interest groups such as non-governmental organisations (NGOs) and civil society organisations (CSOs). The involvement of these interest groups will be crucial in shaping the Stakeholder Engagement strategy and Gender Action Plan of the project. Additionally, they will contribute their insights and opinions regarding the social and environmental screening processes and the development of the project's strategy.
Beneficiaries	Beneficiaries are owners of the project and have a key role in terms of successful implementation of the project and most importantly ensuring its sustainability. Project target groups will be empowered to own the project, provide cash and in-kind contributions, adoption of innovative ideas/technologies. Specifically, beneficiaries will be engaged in the efficient utilization of marine resources, livelihood diversification activities, mangrove development in the coastal area and landscape management in the inland fish development.
Private Sector	The Project will engage the private sector in climate change adaptation activities by promoting climate resilient and environmentally friendly investment and harnessing skills and knowledge to integrate climate risk analysis into their investments. The Project will also support development of climate resilient infrastructure, improving energy and water use efficiency and supporting natural capital and ecosystems all of which are required to bring the private sector on board for climate resilience building. The Project will promote the dissemination of evidences that will spur the private sector to invest in activities that bring good environmental outcomes, which at the same time has cost saving implications for their business case. The project will engage the cooperative support unit as well as women cooperatives.

Identifying and engaging local NGOs and private enterprises in the context of scaling up fisheries technologies, fostering entrepreneurship, and expanding finance necessitates a multifaceted approach. First, PROPEIXE -GEF will undergo a thorough research on organizations active in fisheries and sustainable development will be conducted using online databases, government records and local community consultations. Engaging these stakeholders will involve hosting collaborative roundtable discussions to explore shared interests and potential partnerships. Pilot projects will be initiated to blend the technological strengths of private enterprises with the grassroots reach of NGOs. Furthermore, workshops will be organized to enhance skills in fisheries technologies and financial literacy, with private enterprises showcasing tech solutions and NGOs bridging the gap with local fisherfolk. Additionally, collaborating with finance-focused entities will pave the way for accessible loans and investment opportunities, propelling entrepreneurship in the fisheries sector. This integrated approach ensures that technology, entrepreneurship and finance evolve cohesively to benefit the fisheries community.

How the project will generate knowledge, how that knowledge will be managed and exchanged, and how lessons learned will be captured to benefit future projects

PROPEIXE-GEF will first be a learning project, integrating lessons from PROPESCA and capitalizing on experiences from other African countries on equipping artisanal fishing boats (Senegal, Mauritius) and on promoting mariculture. Technical staff and extension officers will visit countries like Madagascar and Tanzania (Zanzibar) who are already engaged in promoting cultivation of mussels and seaweed. In general, terms KM activities will be the main responsibility of the KM Officer, with immediate support of the M&E Unit and M&E staff at IDEPA's provincial delegations. In a second step, the Project will collect its own lessons and disseminate these to relevant stakeholders through briefs, newsletters, and studies. These lessons will primarily be conceived by the technical staff, extension officers and beneficiaries since those are the ones with direct implementation on the field, and will be then discussed and discussed by the PMT and other staff from relevant National Institutions, and disseminated under the main responsibility of the KM Officer. Knowledge Management (KM) and communications shall be closely linked to the policy engagement objectives and will disseminate lessons learned from PROPEIXE-GEF approaches. The KM studies will be informed also from the M&E system of PROPEIXE-GEF.

In collaboration with InOM, PROPEIXE-GEF will carry out diverse studies. The KM Officer holds the responsibility of translating the findings of research supported by the Project into accessible knowledge products to be disseminated amongst fishermen, extension officers and other relevant value chain actors.

Synergies will be promoted between the KM activities of different IFAD-supported projects in Mozambique. In collaboration with PRODAPE, the KM Officer will establish a digital library to store and promote accessibility of all project documents, and will ensure visibility of project interventions through social media, and specialized international communities of practice Success stories will be publicized through short videos. PROPEIXE-GEF's visibility will be enhanced through a dedicated website, to be developed by a consultant/ consultancy firm

Through radio, TV campaigns, and events organized in primary and secondary schools, PROPEIXE-GEF will promote a broader societal awareness of the importance of conserving marine natural resources. The Project will produce audio and visual material to communicate and build knowledge of farmers on mariculture. Exchanges will be promoted between people new to mariculture in the north and people in the south who already have some experience. The Project will also organize fish fairs for fishermen to show and promote their products and gain exposure to new technologies. These activities are the main responsibility of the KM team, in collaboration of the technical project staff, extension officers and local Governments.

The KM officer will work in close collaboration with the M&E officer to ensure that M&E findings on project results are widely disseminated in a clear, synthetized, and interesting way and those knowledge products are backed up by solid M&E evidence. Field visits to collect stories by the KM team will be also used for triangulating M&E data, and case studies will be used to deepen the understanding of factors contributing to successes and failures, and to enable full documentation of impact.

Innovation and scaling up

PROPEIXE-GEF will pilot and promote different innovative technologies at production or post-production levels that can be further considered for scale up emphasizing the engagement of multiple actors from different sectors and levels of communities. These include the use of innovative techniques for boat construction, as well as post-handling practices, particularly for fish drying and smoking using affordable and green efficient technologies; solar powered cold storage equipment and ice making plants, as well as environmental green and resilient technologies on climate proofed infrastructures. In addition, carbon markets, micro insurance and digital information platforms (Open Artfish) will be piloted and scaled-up by private sector and public interventions, based on the successful outcomes demonstrated in this project.

The innovative features of the project include its focus on climate proofing and greening the fishery value chain, as well as supporting the development of local MSMEs through a graduation approach based on the introduction of new sustainable fishing techniques and practices that are to be assessed in terms of their economic and financial viability and where appropriate supported to transition into local MSME start-ups.

The scaling-up of the activities is to be achieved through strategic partnerships with other IFAD investments, such as REFP, which will offer business financing opportunities to support expansion of existing and the creation of new businesses based on the alternative green livelihoods and sustainable fishing opportunities created by the project. . To implement this partnership effectively, the project will establish clear guidelines and procedures for accessing financing through REFP. This will include facilitating the preparation of gender sensitive bankable business proposals from beneficiaries. Furthermore, PROPIEXE will provide training and capacity building to empower climate smart artisanal fishery enterprises in presenting compelling business plans to financial service providers. This training will focus on enhancing the financial literacy and business skills of project participants. Monitoring and evaluation mechanisms will track the progress of businesses that access financing, allowing for the assessment of their growth and the identification of successful models that can be replicated.

Successful mariculture pilots, especially seaweed production based on demand from industry off-takers offers an opportunity for scaling up and replication along the coast. The mariculture pilots initiated under the project are learning and demonstration sites. They will serve as models to showcase the feasibility and benefits of mariculture for climate adaptation and economic resilience. As these pilots prove successful and generate positive outcomes, the project will develop a clear strategy for scaling up mariculture activities. This may involve identifying additional suitable sites along the coastline and expanding the range of mariculture species.

The project will actively engage with local farmers and communities to promote the adoption of mariculture practices. Training and capacity-building programs will be expanded to reach a wider audience of potential mariculture practitioners. Collaboration with local NGOs and organizations will be intensified to facilitate the dissemination of mariculture knowledge and provide support to interested individuals and groups. Lessons

learned from the initial mariculture pilots will inform the scaling-up strategy, ensuring that best practices are incorporated into future expansion efforts.

Similarly, the successful demonstration of PPP models for market infrastructure and value chain services will provide an opportunity for replication in other existing fishing market sites that are currently underperforming. A clear pathway for successful public-private engagement would result in scaling of increased private sector participation in vital sector infrastructure and service development and lead to replication at national level. Successful introduction of PPP models will involve a structured approach, which includes identifying suitable partners, including private sector entities interested in investing in climate-resilient market facilities. This may involve discussions and negotiations with local businesses, cooperatives, or investors. Developing clear agreements and memorandums of understanding (MOUs) outlining the roles and responsibilities of public and private partners in managing and maintaining market infrastructure. Implement pilot PPP models in selected locations to test their feasibility and effectiveness. These pilots will serve as learning experiences to refine the PPP approach. It will be important to monitor and evaluate the performance of PPP models, taking into account factors like market access, quality control, and the economic viability of market facilities. Based on the success of pilot PPP models, the project will explore opportunities to replicate and scale up these initiatives in other regions or markets.

Finally, a key innovation will be the formalization of the role of the CCPs as resource management partners to the government institutions and their capacity building beyond data collection, but also data analysis and reflection of results into local resource management plans that ensures ownership, compliance and evidence-based management practices. The positive impacts on fisheries stocks and the resilience to environmental shocks will provide an example to be replicated along the coast. In order to support the capacity for replication, IDEPA capacity on the ground will be enhanced in order to achieve the effective delivery of its mandate.

Private Sector. Direct private sector engagement, focused on off-takers and markets that create trade opportunities as well as input suppliers that enable climate smart production is important for strengthening supply chain linkages between artisanal fishers and markets, ensuring effective management of resilient infrastructures, and provision of key post-production and auxiliary services, such as ice production or storage. Thus, public investment must create an enabling environment to leverage private investment, through engaging in Public Private Partnerships (PPPs) or Public Private Producer Partnerships (4Ps), as appropriate. PROPEIXE design has strong inclusion of the private sector in the delivery of the climate resilient value chain investments and services.

PROPEIXE's successful implementation will require the active participation of both government institutions and carefully selected private sector institutions with strong pedigree in development. Engagement of service providers will be through a competitive process that will, eventually, involve the issuance of performance-based contracts with clearly defined deliverables. The Programme will work along the artisanal fisheries value chain, from input suppliers through to consumers, to improve the economic surplus generated by the value chains, by addressing the identified areas where efficiency, productivity and quality can be improved. When needed, capacity of the implementing institutions will be augmented to equip them with ability to effectively steer and oversee PROPEIXE implementation; this is the focus of component 3.

Project management and coordination

MIMAIP will be the execution partner responsible for policy and legislative initiatives for promoting any institutional adjustments in the fisheries administration, and for overseeing the project. MITA will be a co-executing agency which is the national agency with expertise on environment and climate change, marine and coastal environment, Environment and Forests Department, in charge of the NAP. MITA will also be responsible for project supervision to ensure consistency with GEF policies and IFAD climate, social and environment procedures. Coordination and management will be delegated to IDEPA. A Project Management Unit (PMU) will be sourced with the responsibilities of daily management and supervision of the project, under the leadership of a Project Coordinator. It will be responsible for programming, budgeting, and allocation of resources, monitoring and providing information for the evaluation of the project and preparation of GEF reporting.

Implementation will be carried out by respective IDEPA's provincial delegations in coordination with ADNAP, INAMAR, INIP and InOM provincial delegations to reach out to district level and local beneficiaries. The project will secure partnerships with institutions from other sectors of the state administration, with an important role in the pursuit of its objectives: (i) ANE for the implementation of road rehabilitation activities; (ii) EDM to implement activities related to extending the national public electricity network to fishing centers and fishing communities; and (iii) FUNAE for the energy supply through renewable sources. INAM will support the EWS and INGD in communities' preparedness and disaster management.

A Project Steering Committee (PSC) will be established to oversee the project and will be chaired by the Permanent Secretary of MIMAIP. Other members will be from relevant institutions to the project's implementation (e.g. MEF, MOPHRH, MIREME, MTC, MTA, etc.) Representatives of CCPs , Civil Society Organisations (CSOs) and the private sector (CTA) will also be members. Provincial-PSCs will be established and led by the Provincial Governor, their composition and tasks will mirror those of the PSC.

PROPEIXE sustainability is based on its alignment with national priorities and support for national institutions under Component 3. PROPEIXE-GEF would be integrated and implemented within fisheries institutions through a decentralized structure, thus IDEPA capacity at local level will be strengthened to ensure long-term sustainability of interventions through systemic improvements of service delivery on the ground.

Core Indicators:

The methodological approach for establishing the target levels for Core and Sub-Indicators is rooted in the overarching goal of the project, which is to enhance climate resilience in the coastal provinces while ensuring inclusivity and gender equality.

1. **CORE INDICATOR 1 - Total number of direct beneficiaries (90,000):** This target reflects the project's aspiration to make a substantial positive impact on the livelihoods and well-being of coastal communities. The baseline target number of beneficiary households (HH) for PROPEIXE-GEF in the selected target area is estimated at 40,000HHs. This includes 25,600 HHs (64%) who will receive a full set of project services under different value chains, and 14,400 HH (36%) who will directly benefit from feeder roads rehabilitation only. Using gradual adoption rates, the corresponding number of households is estimated at 23,843 HH adopting the proposed investment. The HH aggregation is

aligned to the project annual budget allocation. The nature of the project is such that it will need heavy investments in the initial years

2. **CORE INDICATOR 2 - Area of Coastal and marine area managed for climate resilience (ha):** This based on the 12.5% contribution to the NDC target a contribution to global carbon sequestration is aimed for through enhanced vegetative cover on the targeted 16,000 ha.
3. **CORE INDICATOR 3 - Number of policies/plans/frameworks/institutions for strengthening climate adaptation (14):** The target number of 14 reflects a strategic approach, identifying a specific number of policies, plans, frameworks, or institutions deemed necessary to achieve effective climate adaptation. It signifies a deliberate effort to work with existing structures and establish new ones where required.
4. **CORE INDICATOR 4 - Number of people trained or with awareness raised (30,000):** This target recognizes the importance of building awareness and knowledge among coastal residents. The 30% gender balance could signify a focus on increasing female participation in training and awareness programs, acknowledging that women often play crucial roles in climate adaptation.
5. **CORE INDICATOR 5 - Number of private sector enterprises engaged in climate change adaptation and resilience action (1,080):** This target reflects the project's intention to leverage private sector involvement in climate resilience initiatives. The 50% gender balance in private sector engagement underscores the commitment to gender equality in economic activities.

In summary, the methodological approach is a balance between setting ambitious but achievable targets while allowing for flexibility in adaptation efforts to accommodate the diverse and dynamic coastal environments. It demonstrates a commitment to both climate resilience and gender equity as fundamental principles guiding the project's implementation.

The proposed target levels of core indicators have been informed by consultations of key stakeholders from Government Agencies. The targets are also informed by an assessment of the target areas for the land and marine areas to be covered. The target levels also reflect the cost of achieving these targets as well as the institutional capacities to support the implementation of activities to achieve the proposed targets. During the project preparation phase, the estimates will be informed by further assessments and studies.

Safeguards Rating (PIF level):

The environmental and social classification of PROPEIXE-GEF is substantial because potential adverse environmental and social effects may pose threats to the environment and humans but are reversible through proposed mitigation measures. Potential threats include overfishing, habitat damage from certain fishing equipment or techniques, mangrove overexploitation for firewood, loss of biodiversity and degradation of coastal ecosystems, and liquid effluent from fisheries processing, packaging, and marketing operations. In addition to solid waste, marine debris, and microplastics, mobile solar dryers will produce hazardous refuse (end-of-life waste). Due to increased competition for resources, there is a significant risk of conflict with other users, such as industrial fishing fleets and other land and marine users in the coastal zone. There is also a risk of conflict between different actors of the value chain due to the introduction of the REPMAR regulations to ban the beach sein, and possible unemployment due to the introduction of new technologies.

Thanks to the project's emphasis on environmental management, primarily positive environmental effects are anticipated. The project will use participatory methods to identify these impacts, mitigate their severity, and offer alternatives to those who may be adversely affected. Promoting eco-friendly solutions,

such as protecting biodiversity and ecosystems, utilizing natural resources in a sustainable manner, providing youth with employment opportunities, and adhering to ILO standards for children in the workplace, will help mitigate risks. The Environment and Social Management Framework (ESMF), which includes the Environment and Social Management Plan, Grievance Redress Mechanism (GRM), Stakeholder engagement plan, FPIC implementation plan, and security management plan, has been developed during baseline project design to guide implementation and prevent negative effects on the environment and social systems and has been used in the development of the PIF. To avoid introduction of invasive and alien species of mangroves, native species will be used.

Gender Equality and Women's Empowerment

To support the enabling environment of the sector the project will contribute to the development/strengthening of the gender policy in the artisanal fishery sector. The gender policy and action plan will consider supporting proper update and innovative policy elements in light of the institutional and sectoral changes that may have occurred in the sector and its implication from a gender and nutrition perspective. Furthermore, considering the strong nexus between gender and Nutrition the process will be accompanied by nutrition mainstreaming: the policy document will have dedicated sessions, as well as multi-stakeholder and multisectoral workshops for its dissemination, including events to promote inclusive policy dialogue on gender and nutrition in the artisanal fishery sector positions in fisheries sector organizations/bodies; facilitate participatory capacity building sessions, workshops and trainings to encourage knowledge sharing and ensure women's and men's priorities, needs and ideas are respected and recognized and; set a quota for women in leadership as per the national standard of minimum 30% seats reserved for women, with the ability of running for the other 70% equally. Furthermore, the Project will improve the fisheries value chain and provide post-harvest training and technical know-how to women and men engaged directly and indirectly in the fisheries sector.

Gender transformative approaches will be incorporated during project design and implementation (i) to address the underlying social norms, attitudes and behaviours that perpetuate gender inequalities, (ii) through use of participatory approaches to facilitate dialogue, trust, ownership, visioning and behaviour change at various levels , (iii) by promotion of critical reflection on deep-rooted social and gender norms and attitudes in order to challenge power dynamics and bring about a paradigm shift at all levels, (iv) through explicitly engaging with men and boys to address the concepts of masculinity and gender and (v) by engaging with influential community members. The incorporation will be done through applying the Gender Action Learning System (GALS) focusing on voice, representation and exploring ways to reduce women's workloads.

[1] PRODAPE and PROCAVA are also working with INAM with meteorological stations and climate information systems for farmers.

[2] Individual or group enterprises

[3]Contracted PCR practitioners will hire and train community promotors as part of the strategy to achieve sustainability. They will be assisted to register as associations of local service providers and continue servicing existing groups beyond the project duration, and also help other community members wishing to form new groups and engage in similar operations. More importantly, they will ensure that at the end of each cycle, all members receive their savings back, plus the correspondent interest. The service comes with a fee agreed with the groups. (described in further detail in the PIM)

[4] Including upgrading existing relevant wholesale markets

[5] PRODAPE and PROCAVA are also working with INAM with meteorological stations and climate information systems for farmers.

Coordination and Cooperation with Ongoing Initiatives and Project.

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

No

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

PROPEIXE IFAD funded project (2024 -2032) will be the baseline project for PROPEIXE – GEF. The present Project Identification Form (PIF) was developed in close coordination with the design team of the PROPEIXE IFAD investment. LDCF investments for PROPEIXE – GEF will focus on climate-resilient infrastructure, supporting mariculture research and technology, implementing climate-smart fisheries management practices, strengthening climate information systems, and enhancing adaptive capacity through policy support and training, with a strong gender-sensitive approach within the scope of PROPEIXE – GEF. LDCF resources will blend with IFAD's larger investment by bolstering climate adaptation initiatives, ensuring the resilience of fisheries and coastal communities, amplifying the impact of IFAD's broader efforts, and fostering transformational change in vulnerable regions.

The Project reinforces the existing portfolio of GEF in Mozambique (particularly the national projects) which consist of those that cover the focal areas of Biodiversity, Climate Change and Land Degradation. The PROPEIXE-GEF activities are also in consonance with, and draw lessons from the designs and implementation not only the national projects but Regional and Global GEF Projects as well, for which Mozambique is a beneficiary. The proposed LDCF project will seek linkages and synergy with the following projects

1. Conservation Areas for Biodiversity Conservation and Development II-Additional Financing (2020-2024) being managed by the World Bank, which aims to improve management of target conservation area landscapes and enhance the living conditions of communities in and around these conservation areas; PROPEIXE-GEF can collaborate with this project by aligning its efforts to improve the management of target conservation areas with the conservation of coastal ecosystems. This collaboration could involve sharing best practices and lessons learned in ecosystem-based approaches to adaptation (EbA) and community engagement.
2. Towards Sustainable Energy for All in Mozambique (2017-2023): Promoting Market-Based Dissemination of Integrated Renewable Energy Systems for Productive Activities in Rural Areas being managed by UNIDO which has the objective to promote market-based dissemination of integrated renewable energy systems for productive uses in rural areas of Mozambique; Since energy access and sustainability are critical for coastal communities, PROPEIXE-GEF can explore opportunities to integrate renewable energy solutions, especially in remote areas where artisanal fishers reside. This could involve partnerships to promote renewable energy systems for productive uses within the fishing sector.
3. Mozambique: Building Resilience in the Coastal Zone through Ecosystem Based Approaches to Adaptation (EbA) (2020-2024) under the purview of UNEP has the objective to increase the capacity of vulnerable communities in the Greater Maputo Area to implement ecosystem-based approaches to adaptation (EbA); Given the shared objectives of enhancing community resilience and ecosystem-based adaptation, PROPEIXE-GEF can collaborate by exchanging knowledge and approaches related to EbA. This could include joint training, capacity building, and sharing of successful adaptation strategies.

4. Strengthening Capacities of Agricultural Producers to Cope with Climate Change for Increased Food Security through the Farmers Field School Approach (2017-2024) under the purview of FAO of the UN to enhance the capacity of Mozambique's agricultural and pastoral sectors to cope with climate change, by upscaling farmers adoption of Climate Change Adaptation (CCA) technologies and practices; While focusing on agriculture, this project's experiences in building adaptive capacity can be valuable for PROPEIXE-GEF. The two projects can coordinate on training and capacity-building initiatives related to climate change adaptation, which are relevant to both agriculture and fisheries.
5. Strengthening the Conservation of Globally Threatened Species in Mozambique through Improving Biodiversity Enforcement and Expanding Community Conservancies around Protected Areas to strengthen the conservation of globally threatened species in Mozambique (2017-2024) through implementation of the Conservation Areas Act – improving biodiversity enforcement and expanding protected areas through community conservancies and targeted rural development action. PROPEIXE-GEF and this project share the goal of conserving biodiversity. Collaboration could involve aligning efforts to support community conservancies and promoting sustainable resource management practices that benefit both biodiversity conservation and artisanal fisheries.

To ensure effective coordination and cooperation, PROPEIXE-GEF has developed mechanisms for regular communication and information sharing with these projects. Joint workshops, knowledge exchange platforms, and coordination meetings can facilitate the sharing of experiences, lessons learned and best practices. Additionally, efforts should be made to harmonize policies and strategies related to climate change adaptation, conservation and sustainable livelihoods to create a supportive and enabling environment for all projects involved. By working together and leveraging each other's strengths, these projects can collectively contribute to building resilience and sustainability in Mozambique's coastal communities.

Lessons from the existing portfolio in terms of building adaptive capacity of the local communities, devolution of coordination activities from the central levels to the provinces and improvement and harmonization of policies to facilitate project and programme implementation were taken into consideration in the design and formulation PROPEIXE-GEF. PROPEIXE-GEF will also tap on the experiences of the various executing agencies of GEF projects such as of the Agriculture Research Institute of Mozambique, Ministry of Land, the Environment and Rural Development (MITADER); and Ministry of Agriculture and Food security (MASA) to build synergy with the existing projects and avoid duplication of efforts and resources.

Key Lessons

Resilient infrastructure. Mozambique's exposure to extreme climatic events (most recently Cyclone Freddy in March 2023), has caused significant losses to IFAD's investments in the fisheries and aquaculture sector (including fishponds, markets, rural roads, fishing boats etc.), hence infrastructure investments must be climate resilient. Contingency preparedness for early warning a will be developed under PROPEIXE-GEF

Gender Action Learning System (GALS), whose success has been proven under PROMER[1]57, shall be replicated. Based on PROMER female beneficiaries' perception, they experienced a more equitable work

balance at home, a greater voice in household decision-making, a fairer share of economic benefits, improved food security and nutrition and reduction in domestic violence.[2]58

Private Sector. Direct private sector engagement, focused on off-takers and markets that create trade opportunities as well as input suppliers that enable production is important for strengthening supply chain linkages between artisanal fishers and markets, ensuring effective management of infrastructures, and provision of key post-production and auxiliary services, such as ice production or storage. Thus, public investment must create an enabling environment to leverage private investment, through engaging in Public Private Partnerships (PPPs) or Public Private Producer Partnerships (4Ps), as appropriate. PROPEIXE design has strong inclusion of the private sector in the delivery of the value chain investments and services.

Financial Services. Using public financial institutions to distribute formal credit in fishing communities was a necessary first-stage development approach, but due to various organizational weaknesses it does not offer a long-term solution for financing critical investments in the fisheries VC. Since access to finance is a key enabler for investments, it is essential to continue empowering community-based financial organizations to partially fill the existing gap and prepare a pipeline for micro-credit and MSME lending to attract financial institutions that can provide medium to larger lending options. PROPEIXE will use the existing rural finance services (viable and less time consuming) and involving other development partners (e.g. REFP, PROAZUL) rather than attempting to establish project-specific rural finance component. REFP is currently offering adapted and affordable financial products and services to the smallholder farmers, rural entrepreneurs, MSME's, as well as the direct support to ASCAs through its facilitators network.

The design of **PROPEIXE-GEF** is anchored on IFAD's experience in Mozambique especially with the lessons being learned from the ongoing projects in the portfolio namely: (i) Inclusive Agri-food Value Chain Development Programme (PROCAVA); (ii) Small-scale Aquaculture Development Project (PRODAPE) and (iii) Rural Enterprise Financing Project (REFP). Like other operations, PROPEIXE-GEF is designed to be implemented with country programme focus. PROPEIXE-GEF offers strong synergies that strengthen the impact of the individual investments in the agrarian sector and in private sector development, presenting a systems approach to the proposed assistance for the artisanal fisheries sector.

[1] an IFAD-funded project in Mozambique

[2] "Sementes da Mudança" PROMER's approach in promoting gender equality (report on lessons learned).

Core Indicators

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

META INFORMATION – LDCF

LDCF **true**	SCCF-B (Window B) on technology transfer	SCCF-A (Window-A) on climate Change adaptation **false**

	false	

Is this project LDCF SCCF challenge program?

false

This Project involves at least one small island developing State(SIDS).

false

This Project involves at least one fragile and conflict affected state.

true

This Project will provide direct adaptation benefits to the private sector.

true

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).

false

This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund	Adaptation Fund	Pilot Program for Climate Resilience (PPCR)
false	**false**	**false**

This Project has an urban focus.

false

This project will directly engage local communities in project design and implementation

false

This project will support South-South knowledge exchange

false

This Project covers the following sector(s)[the total should be 100%]: *

Agriculture	5.00%
Nature-based management	25.00%
Climate information services	5.00%
Coastal zone management	50.00%
Water resources management	5.00%
Disaster risk management	5.00%
Other infrastructure	5.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise	Change in mean temperature	Increased climatic variability	Natural hazards
true	**true**	**true**	**true**

Land degradation	Coastal and/or Coral reef degradation	Groundwater quality/quantity
true	**true**	**false**

CORE INDICATORS – LDCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	90,000	45,000.00	45,000.00	50.00%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	0.00 2,000.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	14.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	30,000	21,000.00	9,000.00	30.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience action	1,080.00			

Risks to Project Preparation and Implementation

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation-such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the "Project description" section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
Climate	Substantial	Risk : Extreme weather Events Mitigation: Awareness and preparedness of the communities Weather indexed insurance Early Warning Systems Met-Stations and access to climate information
Environment and Social	Substantial	Risk Over exploitation of fish resources. Inappropriate fishing and poor harvesting techniquesSetting conservative target catch levels. Provide training to fishing communities on fishing practices, restocking and sustainable harvesting. Fishing Effort through Catch per Unit Effort (CPUE) Survey and regular assessments. Mitigations: Promoting the use of modern climate smart appropriate fishing gears. - No

		allowance of fishing over the set fishing limits. Use of the developed standard operating procedures of good fishing practices. Fisheries statistical Data analysis published
Political and Governance	Substantial	Risk The risk that the country can suffer from governance breakdowns (lack of/weak political checks and balances; lack of/weak public auditing systems; lack of/weak transparent information on government rules, regulations, and decisions; lack of/weak standards to prevent fraud and corruption; lack of/poor quality/transparency of allocation of resources for rural development) which can negatively affect the achievement of project objectives. Mitigations: Through the implementation of IFAD's "Framework for Operational Feedback from Stakeholders: Enhancing Transparency, Governance and Accountability", inclusive governance, transparency and accountability in development processes, including in associated grievance redress mechanisms, will be fostered. Information about the existence and functioning of such mechanisms will be made readily available to all stakeholders. Further, information regarding whistle-blower protection measures, and confidential reporting channels will be widely accessible in order to receive and address grievances appropriately, including allegations of fraud and corruption, and sexual exploitation and abuse. Engage, support and strengthen the National Audit Office (Tribunal Administrativo) for regular auditing of IFAD supported investments, in accordance with the International Standards of Supreme Audit Institutions (ISSAI).

		Strengthen and reinforce the use of national systems, particularly e-SISTAFE (Government Financial Management System).
Macro-economic	Substantial	Risk: The risk that macroeconomic policies (monetary, fiscal, debt management/sustainability, trade) are overall fragile, unsustainable, and/or vulnerable to domestic or external shocks, thus resulting in high inflation, low foreign exchange reserves, large fiscal deficits and debt distress. This could lead to government inability to mobilize counterpart funding, and to an overall adverse impact on market dynamics of value chains, (market prices and profit margins for IFAD's target groups) Mitigations: Taking into account the country's debt unsustainability, last programme financing has been negotiated to be 80% as grant and 20% as loan on highly concessional terms. Currently, the PROPEIXE-GEF financing terms are at 100% DSF grant. IFAD will continue it is supporting the production and productivity increases and build sustainable and market-oriented value chains, as well as macro-economic stability. IFAD is incentivizing the project teams to collect and document In-Kind-Contribution (IKC). Therefore, it is expected that PROPEIXE-GEF will report on IKC.
Strategies and Policies	Moderate	Risk The risk that a country's strategies and policies governing the rural and agricultural/Fisheries sector are not sufficiently pro-poor and/or aligned to IFAD's priorities (e.g. on land, environment, climate, gender, indigenous peoples, PwD, nutrition, youth, private sector engagement), undermining IFAD objectives. The

		Marine Regulation (REPMAR) will restrict the use of Beach Seine gear in the all-Mozambican coastal area in two years in order to ensure proper conservation and restauration of marine resources. This technique is used by the majority of the fisherman/women and is key for the food security, income and livelihoods of millions of coastal communities. The ban of Seine without any alternative livelihood options will put thousands of HHs, which rely on seine on a critical situation. Mitigation: Leverage on Development Partners Group and IFAD country office in Mozambique (through the new Blue Economy Working Group – BewG) to remain engaged with the MIMAIP and restore country-level policy dialogue in a structured manner and support the design of sectoral strategies with clear milestones and indicators. Continue to engage IFAD to the in-country Policy Dialogue, with the Ministry of Fisheries and bring to the attention of the Senior Management the relevance of the provincial IDEPA delegations for implementing Fisheries policies/strategies and for supporting PROPEIXE-GEF and other development projects/programmes that are being implemented in the fisheries sector. With the current reestablishment of the IDEPA Delegations, the project will provide institutional support to reinforce the capacity of these provincial delegations and support the finalization of the new Artisanal Fisheries Strategy, the new Blue Economy Strategy, the and implementation of Marine Regulation. PROPEIXE-GEF will contribute to create alternative

		livelihood and income generation activities, and will strength the CCPs to play a great role when the decision to ban the gear takes place.
Technical design of project or program	Moderate	Risk(s): As noted in the completion report of PROPESCA, it is prudent to pay attention to setting realistic goals in order to ensure all the activities are carried out, and done within the project lifespan. The completion report also noted the necessity to allocate sufficient time for launching the preparation period and coordination of activities pertaining to availability of resources and disbursement. Although the targets laid out in the logical framework are quite realistic, there is always a risk of underachievement of targets especially if activities and outputs are not monitored and documented properly, and problems arising along the way addressed swiftly and effectively Mitigation: Continued monitoring and evaluation of the project with the aim of reviewing the achievement of targets. At mid-term review, the project will review achievement of mid-term targets against those set at design. This will provide an opportunity for revision/restructuring of the targets in order to ensure better results at completion, and sustainability beyond the project's life span.
Institutional capacity for implementation and sustainability	Substantial	Risk Lack of capacity in the local institutions for the administration of artisanal fisheries in terms of staff, functional organization, responsibilities for promoting development initiatives and supervise the co-management system Mitigation: Support MIMAIP in strengthening its capacity for the development and the supervision of

		the co-management in the artisanal fisheries subsector, as well the functional interconnections between institutions of the Fisheries administration in general, fishing operators and other stakeholders with links to artisanal fishing.
Fiduciary: Financial Management and Procurement	Substantial	FINANCIAL MANAGEMENT: Project Organization and Staffing The LPA has demonstrated adequate FM organisation and staffing capacity. Accounting staff of the IDEPA are adequately qualified and experienced. The current and past projects have had dedicated finance staff, and there is additional support from the LPA finance team when necessary, especially in relation to approval of transactions through the government systems, and follow up of sub-national FM reporting. There is a risk that the staff to be recruited for the new project at national and sub-national levels will not have sufficient knowledge of IFAD FM requirements. Mitigations: Final FM structure of the PMU to be refined and staff recruited within six months of entry into force. Training of all finance staff at national and sub-national level to be conducted within the start-up phase of the project. Project Budgeting Risk: Budgets for the current IFAD supported project are reasonable. The process of developing the AWPBs is participatory. There have been revisions in the past, which slowed implementation. Approval of the budgets is done by the PSC. Delays in preparation and approval of budgets could significantly affect implementation of the project. Mitigations: Preparation of project AWPBs will be participatory to ensure reasonable/realistic targets for

		both national and sub-national implementation. Set-up of the PSC should be completed (including selection of PSC members and drafting the relevant TORs) before commencement of the project. Project Funds Flow/Disbursement Arrangements Risk: The project is likely to have multiple financing facilities (IFAD, GEF, and GoM and potentially other co-financiers such as OFID). This could complicate the treasury arrangements leading to delays in accessing funding, thus adversely affecting implementation of project activities. Mitigations: DA for each financier to the project and corresponding operational accounts in CUT will be opened prior to the first withdrawal. Develop tools during the start-up phase to capture all counterpart contributions by government and beneficiaries. Project Internal Controls Risk: There are sufficient controls within the government financial systems in Mozambique to effectively manage external funding. Specific to project financing, there has not been incidences of government interference with project funds that would cast doubt on the ability of the project to successfully implement the project. There is a risk that with limited monitoring, the controls in place may not work optimally which could lead to inefficient and inappropriate use of project resources. There is also a risk that internal audit department of IDEPA will not carry out audit reviews of the project, and if carried out, may not have adequate coverage given the multiple implementation levels. Mitigations: Project specific FM policies and procedures to be detailed

		in the PIM. The new project will be included in the annual plan of the internal audit department. Consideration to be made regarding recruitment of an internal auditor to supplement the efforts of the internal audit department of IDEPA, focusing mainly on the two IFAD financed projects. Project Accounting and Financial Reporting Risk: The accounting system (e-SISTAFE) allows for proper recording of financial transactions. However, the system is not fully tailored for IFAD financial reporting requirements. The customisation process is ongoing for the current project (PRODAPE) and should be suitable for PROPEIXE-GEF as well. Mitigations: Complete the customisation process of e-SISTAFE to suit IFAD financial reporting requirements prior to the first withdrawal. Project External Audit Risk: The Administrative Court ('Tribunal Administrativo': TA) is the Supreme Audit Institution in Mozambique in charge of the audit of all public institutions and State entities at central, provincial and local levels. Whereas this assessment did not specifically cover the structures of the SAI, the institution has not audited IFAD projects in previous years. There is therefore a risk that TA will not include the IFAD project audit in their work plan and meet IFAD timeliness requirement. However, there is agreement to commence the review of IFAD projects in the country commencing with the financial year ending 31 December 2023. Mitigations: Project to prepare financial statements in compliance with IPSAS cash basis standard. Engage the TA early for inclusion

		into their external audit plan from the first year of the project. PROCUREMENT: Legal and Regulatory Framework High Risk; The risk that the implementing regulations that supplement and detail the provisions of the procurement decree are not updated regularly to allow adequate implementation of the decree and/or to address the identified gaps such as opportunities for the use of Direct Contracting and other less competitive methods that impact on competition and result in poor procurement outcomes, the unavailability of updated Standard Bidding Documents (SBDs) and updated operating guidelines for use by procurement implementing units. Mitigations: The project to use IFAD procurement Guidelines and Handbook to ensure competition among market participants until a time when the GoM SBDs are updated to a level that is acceptable to IFAD for use in IFAD-funded projects. Avoiding the use of Direct Contracting since it is highly regulated and can only be used in exceptional circumstances as provided in the IFAD Procurement Guidelines and Procurement Handbook. Accountability and Transparency High Risk: The risk that there may be loss of trust of the public procurement system by the stakeholders, in particular the bidders and private sector due to the absence of an effective enforcement of non-judicial dispute resolution mechanism (no independent appeals body at administrative level), non-implementation of audit findings/recommendations, and lack of comprehensive information on

		public procurement on a centralized portal to facilitate effective public and civil society participation. Mitigations": Publish procurement opportunities to ensure wide availability of public procurement information which can in turn spur effective participation by stakeholders (citizens, private sector and civil society), for example by publishing procurement plans and General Procurement Notices well in advance of procurement time, inviting the public to observe tender opening sessions, publishing bid awards and debriefing unsuccessful bidders. Arrange Business Opportunity Seminars to sensitise the private sector on how to access procurement opportunities, how to do business with IFAD projects, how to participate and submit tender documents, how to register at the Cadastro, conditions for pre-qualification/post qualification, and how to register complaints/appeals. Capability in Public Procurement Moderate Risk: Lack of a professionalized procurement cadre. This poses the risk of procurement processes being carried out by unqualified procurement practitioners and may lead to incidences of non-compliance with the procurement law. Mitigations: The procurement regulatory agency (UFSA) should lobby for the legislation of a Procurement Practitioners Act for public procurement to be treated as a strategic level activity in corporate structures to give the procurement profession better recognition by stakeholders. UFSA to conduct regular procurement training to close the skills gap among procurement

		practitioners. Public Procurement Processes Moderate Risk: Procurement planning based on limited market scoping. Procurement plans are not published. Manual procurement system that prolonged the procurement process and causes delays. Hence limited ability to track and monitor procurement progress and processes. Weak contract management. The Finance department manages contracts and levels in the contract management process are not clarified in the contract management framework. Mitigations: Adopt a risk-based approach to procurement. Train procurement staff on procurement planning, contract management, and sustainability and SECAP requirements. Publish procurement plans on the project website and the UFSA portal. Computerize and integrate technology into procurement processes. The introduction of e-procurement. Since there is a framework already in place.
Stakeholder Engagement	Moderate	Risk Elite capture may limit participation from the most vulnerable households and direct project resources to areas which are nor relevant for them. A spart of PPP engagement with multiple stakeholders, it is key that poverty focus is maintained to ensure poverty targeting. Mitigations: The project will put attention to capture and integrate the view of all stakeholders and include key steps such as: information, consultation, engagement with all social actors and specific measures for social inclusion of the most vulnerable as outlined in the targeting and social inclusion strategy. Field staff will be attentive to critical monitoring of intended

		beneficiaries to ensure they are effectively reached and understand the effects of interventions within each target group. Detailed Stakeholder Engagement plan will be prepared Stakeholder Grievances Low Risk: Inadequate or delayed activation of grievance/complaint redress mechanisms, resulting in unresolved stakeholder complaints, which may result in low motivation and project participation. This could jeopardize project implementation and the achievement of project development goals. Mitigations: PROPEIXE-GEF will provide capacity building for project staff and senior government representatives from lead project executing agencies so that they can effectively engage stakeholders and provide feedback on IFAD investments. For the project, a grievance redress mechanism will be developed to provide a channel for complaints.
Other		
Financial Risks for NGI projects		
Overall Risk Rating	Substantial	

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

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

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

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

The project activities are aimed at advancing the key priority areas of the LDCF which include: 1) Scaling up finance by strengthening institutional capacity and enhancing tools and metrics as enablers for adaptation impact; 2) strengthening innovation and private sector engagement through advancing technology transfer and 3) fostering partnership for inclusion and whole-of-society approach by focusing on institutional strengthening and capacity building efforts at all levels. Other LDCF priorities such as food security and social resilience will be promoted through capacity building and implementation of best practices, livelihood diversification, planning and management.

Partnership for inclusion and whole-of-society approach will be fostered through the promotion of diverse and significant adaptation benefits, including the development and implementation of participatory sustainable land management plans integrating risks associated to climate change in key habitats (mangroves), watershed and coastal areas. The project will also invest in livelihood diversification generating opportunities in the agriculture and fishery sectors and adopting climate smart agricultural practices and preserving biodiversity hotspots contributing to the adaptive capacity of local communities to face the impacts of climate change.

Scaling up finance and enhancing tools and metrics as enablers for adaptation impact will be through the sustainable use of land and forest (including 2000 ha mangroves) resources, which will enhance adaptation capacity of natural systems as well as contribute to the transformational shift to a low-emission and resilient development path. A significant contribution to global carbon sequestration is aimed for through enhanced vegetative cover on the targeted 2800 ha, and through mainstreaming mitigation concerns into sustainable development strategies, closely aligned with NDC targets. The total CO_2 sequestration potential will be assessed during project preparation. Finally, the improved management of 2800 ha of coastal ecosystems will be a major contribution to maintain globally significant biodiversity, of coastal areas.

The strengthening innovation and private sector engagement through advancing technology transfer will be through specific investments in fisheries focusing on post-harvest loss reduction and improved market linkages. The project will promote, nature based solutions as well as early warning and climate information system through the application of approaches such as ecosystem, landscape and value chain based approaches to contribute to the climate change adaptation outcomes: (i) enhanced adaptive capacity of communities and ecosystems through improved access to adaptation solutions and (ii) Systematic resilience built in key ecosystems, value chains and regions to reduce vulnerability while supporting green, blue and resilient recovery.

The environmental challenges in terms of loss of biodiversity, land degradation and climate change in Mozambique are interlinked – necessitating a multi-sectoral and holistic approach to address the challenges. In this regard, building the climate change resilience of communities and their livelihoods will have co-benefits such as addressing deforestation, biodiversity loss and land degradation therefore supporting the broader objective of improving environmental management and enhancing socioeconomic opportunities of local communities. Given that the majority of the Mozambican population are dependent upon ecosystem goods and services for their livelihoods, enhancing the resilience and productive capacity of ecosystems is essential to ensure the economic and social wellbeing of local communities – this is particularly critical for rural communities who withstand the worst of constrained social service delivery in the country. To achieve the goal of building the climate change resilience of coastal and inland rural communities and their livelihoods, the need for technical assistance and investments in institutional capacity for mainstreaming sustainability into national development plans and aspirations cannot be overemphasized. The project is consistent with and aligned to all relevant international and national strategies and plans within the framework of sustainable development and climate change adaptation namely:

NDC 2018: As prepared and submitted during the Paris Conference of Parties (CoP) Mozambique's NDC focuses on both mitigation and adaptation measures. Notable amongst these are for mitigation: The plan to

reduce emissions by 50% focusing on intervention and activities in the following sectors energy, agriculture, forestry, and waste management. The NDC also included plans to increase the share of renewable energy in its energy mix by focusing on promising potentials for hydropower, solar energy, and wind power as against fossil fuels. While on the other hand, NDC highlights the need for adaptation measures to enhance resilience in sectors such as agriculture, water resources, coastal areas, and infrastructure.

The priorities for fisheries in the Mozambique Nationally Determined Contributions (NDC) are centered on safeguarding and enhancing the resilience of the country's coastal and marine ecosystems while promoting sustainable and climate-resilient fishing practices. These priorities include efforts to combat overfishing and illegal, unreported, and unregulated (IUU) fishing, reduce post-harvest losses, and improve the management of fishery resources through the implementation of effective policies and regulations. Additionally, Mozambique aims to promote climate-smart fisheries by integrating climate adaptation and mitigation measures into the sector, such as adopting climate-resilient technologies and practices, restoring degraded ecosystems, and conserving biodiversity. Gender inclusivity and support for local livelihood diversification are also key considerations in these priorities, ensuring that vulnerable coastal communities, particularly women and youth, benefit from sustainable fisheries management practices and have access to alternative green livelihoods. Ultimately, the priorities outlined in the Mozambique NDC aim to build the country's resilience to climate change while fostering the long-term sustainability of its fisheries sector. PROPEIXE-GEF will specifically promotes rehabilitation of eroded or degraded lands, habitats restoration and sustainable use and management of marine and coastal resources, combining socioeconomic development with natural habitats and resources conservation.

Mozambique's NAPA outlines its specific adaptation needs and priorities, taking into account the country's vulnerability to climate change impacts such as increased frequency and intensity of cyclones, sea-level rise, droughts, and floods. The Mozambique NAPA typically includes an assessment of the country's vulnerability to climate change, an identification of adaptation priorities, and a description of proposed adaptation projects and measures. These projects and measures may cover areas such as agriculture, water resources management, coastal zone management, disaster risk reduction, and capacity-building initiatives

Mozambique's current PRSP is the 'Plano Quinquenal do Governo' (Five-Year Government Plan) for the period of 2020-2024. The plan aims to promote economic growth, reduce poverty, and improve social development in Mozambique. It focuses on key areas such as agriculture, infrastructure development, education, health, and governance.

The project is aligned to **TARGET 2** of the the Kunming-Montreal Global Biodiversity Framework to ensure that by 2030 at least 30 % of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

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

Yes

Stakeholder Engagement

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

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector: Yes

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

The project approach is based on community consultation, placing attention to capture and integrate the view of all stakeholders into their self-driven development. Mobilization activities include key steps such as: information, consultation, engagement with all social actors and specific measures for social inclusion of the most vulnerable as outlined in the targeting and social inclusion strategy. In the initial stages of implementation, the project will work with community members and community-based organizations (CBOs) including village elders and local leaders, to inform them about the project activities. Consultations will take place in all communities as well as separate discussion with women, youth, representatives from marginalized groups (IDPs and also PwD) as well as their representation in decision making will be a key enabling instrument to ensure their pro-active participation, consultation, and feedback.

The most important issues raised include: (i) the project should address water salinity in the coastal area, fish stock management, conflict of interest in the inland fishery (between fish production and agriculture), post-harvest loss of fish (including Food safety (ii) the project should incorporate coastal fish production, fish processing, conservation, value chain development including export and (iii) the need to consider lack of policies and legal framework, (iv) Nutrition: Sensitization and awareness to increase fish consumption (including accessibility) fish meals at schools.

A Stakeholder Engagement Strategy/Plan will be developed as part of the project preparation phase. The main objective of the strategy is to ensure that all stakeholders are adequately engaged in the project planning, design and implementation and ensure that their inputs are integrated into and inform the overall project implementation. The Stakeholder Engagement Strategy/Plan will have three main parts: (i) identification and engagement of all stakeholders and project target group, (ii) Grievance Redress Mechanism to ensure any complaints are resolved in a timely manner and (iii) capacity development and awareness.

A list of people met is attached.

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

Site investigations and field surveys where carried out in Maputo, Nampula, Sofala and Inhambane provinces of Mozambique between 28th May and 3rd June, 2022. The PIF was developed using a participatory method that involved engaging stakeholders and conducting consultations at multiple levels. The consulted government ministries encompass a range of sectors, namely: i) the Ministry of Agriculture; ii) the Ministry of Public Works and Housing; iii) the Ministry of Planning and Development; iv) the Ministry of Sea, Inland Waters and Fisheries); v) the Ministry of Transport and Communications; vi) Ministry of Economy and Finance; and vii) the Ministry of Land and Environment.

Additional pertinent national actors met comprised of the following: i) Meteorology National Institute; ii) National Sea Institute; iii) National Institute for Fisheries Infrastructure; iv) National Institute for Disaster Management; v) National Institute for Fisheries Inspection; vi) National Institute for Development of Fisheries and Aquaculture; vii) the Centre for Sustainable Development of Coastal Zones, and viii) Oceanographic Institute of Mozambique. The stakeholders met also encompassed various non-governmental organisations (NGOs), namely: i) the World Wildlife Fund for Nature (WWF); iii) PROAZUL; and UN agencies (World Food Programme, Food and Agriculture Organisation).

The primary stakeholders of the PROPIEXE-GEF project, as envisioned, will encompass the local communities residing in the coastal regions of five provinces within Mozambique.

Consultation was conducted with experts in the relevant sectors of project initiatives. The individuals encompassed in this group consist of: i) experts in riparian and mangrove habitats; ii) specialists in socio-economic development; iii) biodiversity conservation; iv) hydrologists with expertise in water systems; v) Community Leaders and Local Stakeholders; vi) professionals knowledgeable in the field of agriculture; vii) Environmental Scientists and; viii) climate and weather Experts. The aforementioned specialists supported in the evaluation of the criteria utilised in the selection process of project sites and the actions associated with ecosystem restoration and climate change adaptation. The attached Appendix provides a complete compilation of the stakeholders met. Additional discussions will be conducted and documented during the development of the CEO endorsement.

Summary of key areas of concern raised by stakeholders

During the stakeholder consultation, several key concerns were identified and shaped the project's activities to address key pressing issues. Stakeholders expressed a strong desire to conserve biodiversity, emphasizing the need for the protection and rehabilitation of coastal ecosystems, including mangroves, coral reefs, seagrass beds and estuaries. They stressed the importance of developing and implementing fisheries management plans to ensure the sustainable harvesting of fish and the protection of endangered species. Coastal land degradation and erosion were also major concerns, leading to a focus on mangrove restoration and coastal protection measures.

Stakeholders were acutely aware of the challenges posed by climate change, calling for climate-resilient infrastructure, climate smart practices, renewable energy and improved access to weather information. They highlighted the importance of building resilience within artisanal fisheries and promoting inclusivity in the sector to enhance socio-economic development. The establishment and revitalization of CCPs were viewed as

a means to empower local communities, foster inter-community awareness and promote data gathering for better fisheries management.

Creating employment opportunities, especially for women and youth, was a priority for stakeholders, as was modernizing and motorizing fishing vessels to access higher-value fish stocks in the open sea. Infrastructure development to support the entire fisheries value chain, from catch to consumer, was recognized as vital for improving livelihoods. Additionally, stakeholders emphasized the need to enhance food and nutrition security for vulnerable households and explored alternative livelihoods such as beekeeping in mangroves.

Social inclusion, particularly the participation of women and youth in the fisheries value chain, was a recurring theme. Stakeholders called for targeted support to promote efficient production systems and economic empowerment. The development of a Gender Policy and action plan within the Artisanal Fisheries sector aimed at empowering women and promoting gender equality will be key for PROPEIXE-GEF.

These concerns voiced by stakeholders at various levels guided the PIF development and activities, ensuring that it aligns with the priorities and needs of the local communities and contributes to sustainable fisheries management and socio-economic development in Mozambique.

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

Private Sector

Will there be private sector engagement in the project?

Yes

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

Yes

Environmental and Social Safeguard (ESS) Risks

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

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

E. OTHER REQUIREMENTS

Knowledge management

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

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
IFAD	LDCF	Mozambique	Climate Change	LDCF Country allocation	Grant	8,932,420.00	848,580.00	9,781,000.00
Total GEF Resources ($)						**8,932,420.00**	**848,580.00**	**9,781,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

200000

PPG Agency Fee ($)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
IFAD	LDCF	Mozambique	Climate Change	LDCF Country allocation	Grant	200,000.00	19,000.00	219,000.00
Total PPG Amount ($)						**200,000.00**	**19,000.00**	**219,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CCA-1-1	LDCF	8,932,420.00	54448000
Total Project Cost		**8,932,420.00**	**54,448,000.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	IFAD	Grant	Investment mobilized	29300000
Recipient Country Government	The Ministry of Sea, Inland Waters and Fisheries (MIMAIP)	In-kind	Recurrent expenditures	3403000
Donor Agency	International organization	Grant	Investment mobilized	11068000
Beneficiaries	Beneficiaries	In-kind	Recurrent expenditures	2200000
Private Sector	Private partners	Other	Investment mobilized	5477000
Donor Agency	Norwegian Agency for Development Cooperation	Grant	Investment mobilized	3000000
Total Co-financing				**54,448,000.00**

Describe how any "Investment Mobilized" was identified

The co-financing presented is from the baseline project of IFAD also titled “’Artisanal Fisheries Resilient Development Project’’ (PROPEIXE) US$29.3 million. The international finance and private sector finance source is expected to be confirmed as co-financing for this project during the PPG phase. The amount of investment mobilized expected from international finance and private sector finance source currently estimated at $11,068,000 and $ Norwegian Agency for Development Cooperation for capacity building and policy support investment to the blue economy.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Juan Carlos Mendoza Casadiegos				juancarlos.mendoza@ifad.org
GEF Agency Coordinator	Janie Rioux				j.rioux@ifad.org

Project Coordinator	Paxina Chileshe				p.chileshe@ifad.org
Project Coordinator	Jaana Keitaanranta				j.keitaanranta@ifad.org

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

Name	Position	Ministry	Date (MM/DD/YYYY)
Mr Eduardo Baixo	Head of Department of Mitigation and Low Carbon Development	Ministry of Land and Environment	9/19/2023

ANNEX C: PROJECT LOCATION

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

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 28-06-2023

Geographic targeting province and districts

Province	Districts
Cabo Delgado	Pemba (-12.9741 latitudes and 40.5178 longitudes) Metuge (-12.5800 latitudes and 40.3850 longitudes.) Quis sanga (-12.5125 latitudes and 40.6114 longitudes.) and Mocambo da Praia (-11.3475 latitude and 40.3544 longitude)
Ampulla	Membra (-14.7995 latitude and 40.5311 longitude.), Ilha de Moçambique (-15.0367 latitude and 40.7335 longitude.), Mossoró(15.1922 latitude and 40.4556 longitude.), Amoche (-16.2281 latitude and 39.9086 longitude.), MoMA (-16.8647 latitude and 38.4902 longitude)
Zambezi	Debane (14.9500 lattide and 36.1417 longitudini.), Cinde (-17.3667 lattide and 36.1333 longitudini.), Moce ela (), Magana da Costa e Queimante (-17.8786 latitude and 36.8886 longitude)
Sofia	Beira (-19.8203 latitude and 34.8646 longitudinal.), Muaná (19.1113 latitude and 36.8913 longitude.), Búzio e Machinha (-19.8044 latitude and 34.8436 longitude)
Inhumane	Governo (), Incasserò (-21.4280 latitude and 35.3482 longitude.)e Vilankulo (-22.0051 latitude and 35.3149 longitude)

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

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

Title

Annex D-Mozambique PROPEIXE-ESS Screen and rating-rev-17Nov23

PROPEIXE secap_environmental_and_social_worksheet 26_09_2023 (1)

PROPEIXE secap_climate_worksheet_ 26_09_2023 (1)

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	Significant Objective 1	Significant Objective 1	Significant Objective 1

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing Models	Transform policy and regulatory environments		

	-Strengthen institutional capacity and decision-making -Convene multi-stakeholder alliances -Demonstrate innovative approaches		
Stakeholders	Beneficiaries Local Communities Civil Society (CBO, Academia)	Information Dissemination Partnership Consultation Participation	
Capacity, Knowledge and Research	Capacity Development Knowledge Generation and Exchange Learning		
Gender Equality	Gender Mainstreaming Gender results areas	Beneficiaries Women groups Sex-disaggregated indicators Gender-sensitive indicators Access and control over natural resources Participation and leadership Access to benefits and services Capacity development Awareness raising Knowledge generation	
Focal Area/Theme	Biodiversity Land Degradation Climate Change	Protected Areas and Landscapes Mainstreaming Biomes	Productive Landscapes Productive Seascapes Agriculture and Agrobiodiversity Fisheries mangroves Rivers

			Wetlands
			Tropical Dry Forests
			Grasslands
		Sustainable Land Management	Restoration and Rehabilitation of Degraded Lands
			Ecosystem Approach
			Integrated and Cross-sectoral approach
			Community-Based NRM
			Sustainable Livelihoods
			Income Generating Activities
			Sustainable Agriculture
			Sustainable Pasture Management
			Improved Soil and Water Management Techniques
			Drought Mitigation/Early Warning
			Land Productivity
			Land Cover and Land cover change
			Carbon stocks above or below ground
		LDN	
			Least Developed Countries
			Climate Resilience
			Climate information
			Ecosystem-based Adaptation
			Mainstreaming Adaptation
		Climate Change Adaptation	Community-based Adaptation
			Livelihoods

			Agriculture, Forestry, and other Land Use NDC
		Climate Change Mitigation UNFCCC	
Rio Marker	Climate Change Adaptation 1		