

# PROJECT IDENTIFICATION FORM (PIF) PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

PART I PROJE

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## CT IDENTIFICATION

Project Title:	Building climate change resilience in the fisheries sector in Malawi			
Country(ies):	Malawi	GEF Project ID:1	5328	
GEF Agency(ies):	FAO	GEF Agency Project ID:	620333	
Other Executing Partner(s):	Department of Fisheries	Submission Date:	January 23, 2014	
GEF Focal Area (s):	Climate Change	Project Duration (months):	36	
Name of parent program (if applicable):  For SFM/REDD+  For SGP  For PPP	N/A	Agency Fee (\$):	518,700	

## A. FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co- Financing (\$)
CCA - I	LDCF	2,530,000	2,640,000
CCA - 2	LDCF	2,930,000	1,840,000
Total project costs		5,460,000	4,480,000

#### B. PROJECT FRAMEWORK

Project Objective: To improve Lake Malawi and coastal area community resilience to climate change through the development of an early warning system, and sustainable fisheries and aquaculture, in order to ensure food and livelihood security.

Project Component	Grant Type <sup>3</sup>	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co- financing (\$)
Component 1: Mainstreaming climate change adaptation into fisheries sector policies and capacity building of key fisheries actors	TA	Outcome 1.1: Critical knowledge on climate risk and vulnerability in the fisheries sector incorporated into fisheries sector policies and national development priorities  Outcome 1.2: Strengthened capacities of at least 30 fisheries professionals and other national stakeholders to address climate risk in fisheries sector	I.1.1 National level assessment of climate change risks facing the fisheries sector  I.1.2 Detailed vulnerability assessment of small scale fishermen and fish farmers along the south- east arm of Lake Malawi and Lake Malombe  I.1.3 Relevant sector and national plans and policies, and programmes incorporate fisheries and aquaculture climate risks and adaptation responses.  I.2.1 A technical CC & fisheries task team operational as think tank.	LDCF	800,000	1,400,000

<sup>&</sup>lt;sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>3</sup> TA includes capacity building and research and development.

<sup>2</sup> Refer to the reference attached on the Focal Area Results Framework and LDCF/SCCF Framework when completing table A.

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			1.2.2 Capacity development plan implemented, training at least 30 fisheries and aquaculture professionals in climate change preparedness and resilience building	To the state of th		
Component 2: Building local level adaptive capacities	ТА	Outcome 2.1: Climate change resilience in three pilot fishing communities strengthened, enabling at least 1,500 households to pursue climate resilient livelihoods through improved fisheries production (inland fisheries and aquaculture)	2.1.1 Local level community based fisheries and aquaculture management and climate adaptation plans developed and implemented by 3 pilot fishing communities	LDCF	300,000	400,000
	INV		2.1.2 1,500 households implement climate-resilient food security measures focusing on Chambo restoration and aquaculture development, particularly considering needs of women and women-led households		1,300,000	700,000
			2.1.3 Best practices scaled-up to, an additional 200 fishing communities along Lake Malawi and Lake Malombe. through an innovative up-scaling and peer learning mechanism.			
Component 3: Climate monitoring and early warning system in pilot areas on Lake Malawi on Lake Malombe	TA	Outcome 3.1: Capacity to respond to extreme weather events at community level strengthened through availability of timely climate risk information.	3.1.1 Multi-stakeholder platform to coordinate EWS in Lake Malawi and especially to address fisheries sector needs convened.  3.1.2 Existing stations on Lake Malawi rehabilitated	LDCF	2,400,000	1,200,000
			and relevant additionally needed stations (rainfall, climate, hydrological) for gathering EWS data established; regular data collection and analysis taking place; complementary to other ongoing EWS work in Malawi.			
			3.1.3 Public EWS dissemination and application strategy developed with stakeholders on Lake Malawi and tested with at least 5 pilot fishing communities at local scale	and the second		
		n version de la constant de la const	3.1.4 EWS lessons learnt from Lake Malawi integrated into national institutional setting and	- market	7 7 7	

			plans for national scale roll-out in place			
Component 4: M&E and adaptation learning	TA	Outcome 4.1: Project implementation based on results based management and documentation and sharing of best practices and lessons learnt	4.1.1 M&E system operating and used for adaptive project management  4.1.2 Lessons learnt documented and shared through project dissemnation plan and existing National Climate Change Programme (CCP) mechansims  4.1.3 Midterm and final evaluations conducted.	LDCF	400,000	500,000
			Sub-Total		5,200,000	4,200,000
		Project r	nanagement Cost (PMC) <sup>4</sup>		260,000	280,000
			Total project costs4		5,460,000	4,480,000

#### C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	DoF	In-Kind	1,600,000
National Government	DPP	In-Kind	440,000
National Government	DCCMS	In-Kind	340,000
	University of Minnesota	Grant	420,000
GEF Agency	FAO	Grant	1,340,000
<u> </u>		In-Kind	340,000
Total Co-financing			4,480,000

# D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA(S) AND COUNTRY<sup>1</sup>

GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	Grant Amount (\$) (a)	Agency Fee (\$)	Total (\$) c=a+b
FAO	LDCF	Climate Change	Malawi	5,460,000	518,700	5,978,700
Total Grant	l Resources			5,460,000	518,700	5,978,700

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table <sup>2</sup> Indicate fees related to this project.

## E. PROJECT PREPARATION GRANT (PPG)<sup>5</sup>

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

Amount Agency Fee Requested (\$) for PPG (\$)<sup>6</sup>

No PPG required

(Upto) \$50k for projects up to & including \$1 million

(Upto) \$100k for projects up to & including \$3 million

(Upto)\$150k for projects up to & including \$6 million

120,000

11,400

• (Upto) \$200k for projects up to & including \$ 10 million

(Upto) \$300k for projects above \$ 10 million

FAO will request USD 120,000 in PPG resources, with an agency fee of USD 11,400 as detailed below.

<sup>4</sup> To be calculated as percent of subtotal

<sup>&</sup>lt;sup>5</sup> On exceptional basis, PPG amount may differ upon detailed discussion and justification with the

<sup>&</sup>lt;sup>6</sup> PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

# PPG AMOUNT REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY

Type of Trust Funds	GEF Agency	Focal Area	Country Name/ Global	PPG (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
LDCF	FAO	CCA	Malawi	120,000	11,400	131,400
Total Grant	Resources			120,000	11,400	131,400

# PART II: PROJECT JUSTIFICATION<sup>7</sup>

#### A. PROJECT OVERVIEW

#### A.1.1. The global environmental problems, root causes and barriers that need to be addressed

Climate trends and future projection. Malawi is experiencing a variety of climatic hazards, which include intense rainfall, floods, seasonal droughts, multi-year droughts, dry spells, cold spells, strong winds, thunderstorms, landslides, hailstorms, mudslides and heat waves, among many others. The increasing prevalence of the recurrent floods and droughts is of major concern to the Government of Malawi because of their far-reaching consequences on food, water, health and energy. National disasters have been declared every few years in the southern drainage of Lake Malawi, i.e. the Shire Valley. For example, over the last decades the Shire Valley has experienced some of the worst droughts (1991/92) and floods (2000/01) in living memory. These resulted in low agricultural output, hence hunger, malnutrition and loss of human and animal life, disruption of electricity, and many other socio-economic and industrial activities.

Future projections indicate that the mean annual temperature is likely to increase by 1.1 to 3.0°C by the 2060s, and 1.5 to 5.0°C by the 2090s. Projections indicate substantial increases in the frequency of days and nights that are considered 'hot' in the current climate. All projections indicate decreases in the frequency of days and nights that are considered 'cold' in the current climate.

Overview of the fisheries sector. In Malawi, the fisheries sector contributes approximately 4 % to national GDP, and is a significant source of job creation, directly employing about 60,000 fishermen, and indirectly about 350,000 people who are involved in fish processing, fish marketing, net making, boat building and engine repair. Fisheries play an important role in ensuring food security for rural population, with the poorest of the poor depending on fisheries resources for food and livelihood support.

Commercially valuable fish species in shallow inshore waters are considered to be fully or over exploited and no further increase in yield from these fisheries can be expected without changes in fishery management. There have been considerable changes in the fisheries in the past years and over-fishing of wild resources is becoming extremely prevalent. The development of cage culture in Lake Malawi and greater emphasis on small scale aquaculture in villages for nutrition and small scale commercial aquaculture operations is starting in many parts of the country. With Lake Malawi being considered a global biodiversity hotspot for wild fish, overuse and loss of diversity can become serious threats to the industry and resources in the longer-term.

Chambo, one of the most popular fish species for local consumption, has been overexploited, and populations have crashed – possibly exacerbated by climate change impacts on the habitat and natural reproduction. Attempts are being made in Malawi, e.g. through DoF, to successfully develop innovative aquaculture systems that could be furthered at the community level. Such aquaculture practices would serve to support food security, but may also rebuild fish stocks.

Vulnerabilities of the fisheries sector. Inland fisheries and ecosystems are vulnerable to climate change impacts and numerous aspects of fish life cycles, habitat suitability, species specific biological and ecological reactions to temperature changes can significantly impact the performance of this economic sector, and biodiversity.

Climate change is modifying the distribution of fresh water species. In general warm and cold water species are being displaced and they are experiencing changes in size and productivity of their habitats. Temperature changes also affect fish physiological processes, resulting in both positive and negative effects on fisheries and aquaculture. Seasonality of particular biological processes such as reproduction, food webs, diseases and invasiveness of species are affected. Overexploited fisheries resources may not be able to cope with the additional impacts. What this means for the Lake Malawi ecosystem and the fisheries and aquaculture sector is currently not well known — and certainly not sufficiently integrated into national approaches in the fisheries sector.

An additional threat especially to local communities living along the shores of rivers and lakes in Malawi is the risk of flooding, which can destroy housing, fisheries investments including cages, and even take lives. No

<sup>&</sup>lt;sup>7</sup> Part II should not be longer than 5 pages

early warning systems are currently in place that would warn fishers and local inhabitants of severe river and lake level rises and storm impacts in Malawi.

#### A.1.2 Baseline and co-financing projects

National Fisheries and Aquaculture policy. The Government of Malawi, recognizing the contribution of fisheries resources to food security as well as their over-exploitation, developed this policy whose goal is to maximize the sustainable yield from the national waters of Malawi and to improve the efficiency of exploitation, processing and marketing of fish products, promote investment in the fishing industry, rural fish farming units and exploit all opportunities to expand existing and develop new and aquatic resources. A few projects have been implemented in support of this policy, for example, "Artisinal fisheries development project" developed in 2002 and funded by the African Development Bank. None of the projects addressed climate change and variability issues.

The initial National Policy for Fisheries and Aquaculture was drafted in 2000. Recently, the ACP (Africa, Caribbean and Pacific) Fish II Programme in Malawi supported a detailed and participatory review of the instrument. The institutional framework has changed and significant new technologies and approaches emerged in the last decade such as the development of cage culture as a fast growing venture and fish quality as a key feature in fish production and marketing. All these new developments are now reflected in the updated National Policy on Fisheries and Aquaculture. Additionally, the Southern Africa Development Community (SADC) Protocol on Fisheries includes an action plan which is fully considered in the revised policy. The SADC Protocol on Fisheries highlights issues on management of shared resources, marketing, governance and cooperation among different actors.

Directorate of Fisheries Regular Programme. The Department of Fisheries (DoF) of the Ministry of Agriculture and Food Security (MAFS) is mandated to protect and conserve the national fish heritage of Malawi through appropriate research and application of appropriate control mechanisms. A Fisheries Research Unit (FRU) was established in 1962 and is based in Monkey Bay. Its main goal is to provide information necessary for sustainable exploitation, management, conservation of biodiversity and investment in the fisheries sector through appropriate biological, technological, sociological and environmental research programmes. The DoF implements a number of activities relating to *inter alia* research, management and law enforcement.

DoF has been implementing a community-based approach to co-management of fisheries resources. Specific community-support interventions are being implemented including on the management of resources, harvest processing and access to markets — covering a full production chain of the sector for artisanal fisheries. Aquaculture development is promoted as an additional form of fisheries resources management in support of food security. DoF activities at the implementation level focus on engaging with local fishing communities in enhancing long term productivity of the sector and implementing an ecosystem approach. District fisheries officers are employed and work closely with local communities. However, climate change risks and vulnerabilities — also recognized as a threat to the ongoing activities — are not yet being addressed systematically.

DoF's programme is the baseline for the proposed components 1 and 2 activities. (Cofinancing in the amount of \$1,380,000 will be provided by DoF and the Department of Policy and Planning will contribute approximately \$440,000).

Department of Climate Change and Meteorology Services (DCCMS) programme. DCCMS is in the process of establishing and improving existing climate monitoring and early warning systems in collaboration with other government institutions, e.g. focusing on Flood Forecasting and Warning System for the lower Shire, in collaboration with the Water Department, establishing Early Warning System for Food Security in collaboration with the Ministry of Agriculture and Food Security, piloting a Tropical Cyclone Monitoring and Early Warning System in collaboration with the Commission for Disaster Preparedness, Relief and Rehabilitation and finally integrating with a regional Drought Monitoring and Early Warning System in collaboration with the SADC Drought Monitoring Center. Although the NAPA specifies joint interventions of the DCCMS and the DoF to pilot and establish early warning systems for local fishermen in the Lake Malawi and other areas in Malawi, to date no support activities are being implemented.

Additionally, there are some ongoing research activities on the lake, e.g. understanding the paleoclimate in the region. The University of Minnesota is implementing a dedicated research project relating to EWS in some areas of the lake. The Department of Water Affairs monitors river run-off and lake levels, however no specific linkages to early warning systems for local fishermen and local communities are in place. Recently, a suite of climate risk related EWS related projects have been identified, e.g. the FEWS Net support to the Food Security sector, however, currently these initiatives are not linked to and absorbed within the DoF and the fisheries sector.

Proposed activities under component 3 will build on these. DCCMS will provide approximately \$340,000 in co-financing to component 3, whereas the University of Minnesota will provide approximately \$420,000.

National programme for managing climate change in Malawi. The Government of Malawi, through the Ministry of Development Planning and Cooperation and the Ministry of Natural Resources, Energy and Environment, and with support from partners (NORWAY, UNDP, DFID, SPAIN, FAO), is in the process of formulating this programme. The goal of the formulation phase is "to develop an evidence-based strategic framework, national program and funded Phase I implementation plan for managing response to climate change in Malawi." FAO is providing technical support for the execution of this formulation phase. Components of this include: climate change risk and adaptation assessments which focuses on a production of a climate atlas, a set of land cover and land use diagnostic products, crop yield and crop suitability projections; and design of adaptation and mitigation interventions. These should lead to an endorsement strategic framework and national program on climate change, a funded 5-year phase implementation plan and an agreed set of institutional arrangement for managing response to climate change in the country. The proposed project is timely in that it will create on-the-ground evidence on vulnerability and adaptation in the fisheries sector, and ensure that fisheries adaptation issues are incorporated into the programme. At the moment emphasis is more on the crop production sector. This programme is part of the baseline for component 1. Indicative co-financing for this from FAO is \$860,000 for component 1.

An annual DoF budget of \$220,000 and an FAO contribution of \$320,000 provide co-financing for component 4 monitoring and evaluation, and adaptation learning through investment in staffing, office maintenance and liaison.

FAO Technical Cooperation Programme project, Implementation of the National Adaptation Plan of Action (NAPA) in the Fisheries Sector of Lake Malawi Basin (2014-2015) (co-financing \$500,000) this proposed project will address elements of the NAPA priority project 5, "Improving climate monitoring to enhance Malawi's early warning capability and decision making and sustainable utilization of Lake Malawi and lakeshore areas resources", and NAPA priority project 1, "Improving community resilience to climate change through the development of sustainable rural livelihoods" with a focus on fisheries resources. It is additional funding leveraged from FAO addressing technical priorities related to the LDCF project. The project will bring in relevant partners from Lake Victoria projects on early warning systems, the World Meteorological Organization and the WorldFish Center as appropriate to underpin research and knowledge components and contributes \$500,000 in co-financing. On Lake Victoria, a suite of relevant projects are currently under implementation that generate relevant information for this specific project and an innovative expertise exchange will supported through the FAO TCP.

The Catholic Development Commission in Malawi (CADECOM). CADECOM is working through eight Catholic dioceses in Malawi to create awareness and empower disadvantaged men, women and the youth to undertake responsible development. Programmes include the following thematic areas relevant to the LDCF project:

- Agriculture, nutrition and food security
- Water, sanitation and hygiene
- Capacity building/training for transformation
- Disaster risk reduction
- Disaster preparedness, relief and rehabilitation
- Mainstreaming of HIV/AIDS and gender in all projects
- Natural resource management
- Access to markets and income generating activities
- Youth development and economic empowerment
- Climate change adaptation and mitigation
- Lobbying and advocacy

Its activities are in line with several national and international policy documents and agreements including, but not limited to: Millennium Development Goals, Malawi Growth and Development Strategy II (MGDS II), Malawi's National Food and Nutrition Security Policy, National Adaptation Programs of Action as well as national and international gender and human rights documents.

Lake Malawi Basin Programme. The Programme reflects a long-term commitment to sustainable rural livelihoods development in Malawi and is composed of three Malawian member based organisations: Farmers Union of Malawi, National Smallholder Farmers' Association of Malawi and Malawi Union of Savings and Credit Co-operatives and a Sweden. The programme brings together key and professional competencies in the areas of farmer organisational development and management, market oriented agricultural production, business development, rural financial services and natural resource management in order to ensure that "Rural livelihoods have been improved by transforming subsistence and emergent smallholders in agriculture and fisheries into business oriented enterprises". There is programme subcomponent on Agriculture, Fisheries & Adaptation to Climate Change that has an objective of, "Improved livelihoods and incomes of rural households achieved by adapting to climate change in sustainable agriculture and fisheries based production".

Gaps in the baseline and barriers to adapting to impacts of climate change. Some of the gaps in the baseline have been mentioned above. So far there has been none or very little integration of climate change risks and adaptation in the fisheries sector policies, programmes and activities. The main barriers to adaptation include the following:

- 1) <u>Limited systematic analysis of the climate change related vulnerabilities in the fisheries sector in Malawi</u>. Scientifically, the understanding of how climate change and temperature profiles of Lake Malawi and other inland water systems in the area affect fish breeding and survival are not very well researched and understood. There has been no comprehensive sector assessment to provide a strong basis for decision-making in terms of building climate resilience in the sector.
- 2) <u>Absence of reliable information and knowledge about climate risks and vulnerabilities.</u> The lack of information poses a significant barrier to formulating and advocating appropriate climate resilient policy decisions in the sector.
- 3) <u>Limited integration of fisheries specific climate responses in national policies.</u> This gap has been revealed in the recently revised fisheries and aquaculture policy.
- 4) <u>Generally low management capacities in the fisheries sector.</u> The lack of capacity includes policy, technical as well as local management levels.
- 5) <u>Limited understanding of possible adaptive responses in the fisheries sector, specific to country circumstances in Malawi.</u> This is not unique to Malawi. In general, there has not been a lot of on-the-ground experience and demonstrated best adaptation practices in the fisheries sector. This is why the project will place emphasis on piloting and scaling-up best fisheries adaptation practices at community level.
- 6) <u>Dysfunctional information support systems</u>. This includes Early Warning support for fisheries dependent local fishing communities e.g. during storm and flood periods. At the moment, existing early warning systems do not provide information tailored to the needs of the fisheries sector and local fishermen. This is one of the particular needs that are well captured in the NAPA.

Building on or into the baseline programmes highlighted above, the LDCF funding will support the removal of the barriers through the implementation of additional activities described in the next section.

#### A.1.3 The proposed alternative scenario, with a brief description of expected outcomes and components

Overall, this proposed project would for the first time systematically address climate proofing of the fisheries sector in Malawi, contributing to the national Climate Change Programme (CCP) and coordination mechanism on climate change. It would further specifically bring together stakeholders and experiences to address NAPA priorities i.e. priority project 1 and 5. The approach of designing a fisheries focused project intervention as sectoral contribution to the overall CCP is strategic. A suite of specific project interventions has been identified through participatory planning with the Malawi CC Coordination mechanism and the CC and GEF National Steering Committees. The project will be designed as a case example of multi-donor and One-UN delivery to one national framework, clearly strengthening adaptive capacities of Malawi.

# Component 1: Mainstreaming climate change adaptation into fisheries sector policies and capacity building of key fisheries actors

Baseline: As mentioned in the previous section, this component will build on the DoF programme which includes policy review, research, and improvement of staff capacity. The CCP (at DPP) is facilitating a number of risk and vulnerability assessments to provide evidence for the development of the national climate change programme. Relevant multi-stakeholder platforms have been set up to facilitate research, and evidence-based policy discussions as well as decision-making at policy level. As mentioned in the previous section, the proposed project will inform the incorporation of fisheries adaptation into the national climate change programme as at this point the fisheries sector is not specifically targeted.

Additional activities: A national level assessment of climate change risks facing the fisheries sector shall be undertaken to inform the Department of Fisheries as well as the national CC coordination mechanism of Malawi of the potential severity of sector impacts. Further, such an assessment aims to inform future sector engagement in terms of climate change proofing the sector, specifically adding an adaptation increment to the ongoing ACP Fish II programme under implementation in Malawi. Working with projects already under implementation such as the ongoing regional research support facilitated by FAO, work of the World Bank and the WorldFish Centre, as well as the University of Minnesota (see baseline activities), the LDCF project is well positioned within the Government of Malawi to leverage the relevant capacities at the Government level to absorb and integrate the improved understanding and knowledge systems into climate resilient policy development and implementation.

A detailed vulnerability assessment of small scale fishermen along the Malawi side of Lake Malawi will be undertaken to form a strong knowledge foundation of the climate change vulnerabilities of local fishing communities and build an understanding of how to best address such vulnerabilities through a sector-wide and integrated approach in the long-term. A clear gender dimension to the vulnerability assessment will be addressed, assessing different vulnerabilities and adaptation needs. This assessment will also inform Component 2 of this project (pilot projects).

Proposals for amending existing sector policies and ensuring that they address the impending climate change risks will be developed based on the risk and vulnerability assessments. Proposals for future adaptation projects for the sector will be one key output of this component, assisting the fisheries sector in Malawi in strengthening long-term adaptive capacities. Some initial work undertaken with UNDP/UNEP support through the Malawi Poverty and Environment Initiative (PEI) will be furthered. The risk and vulnerability assessment will be accompanied by other knowledge products produced under component 3.

A technical CC & fisheries task team will be established as a think tank throughout the project intervention. This team will be responsible for establishing a high-level policy dialogue process for the sector that ensures uptake of policy recommendations into senior decision-making processes. It will serve as the focal group for the fisheries sector, coordinating and collaborating with other ongoing baseline interventions and relevant cooperation partners. Important ongoing research and knowledge interventions related to climate resilient fisheries thus will be better integrated into national systems.

Specific sector policies e.g. related to fishing practices, fish breeding, aquaculture and other envisaged adaptation actions will be analyzed for climate risk compatibility and proposals for improvement will be made, where such policies exist. Where such policies are currently absent they will be developed as part of this project component.

At least 30 fisheries professionals from the Ministry but also from the private sector, the University (Bunda college and other institutions), amongst others, will be targeted for specific professional training opportunities. A capacity building plan, which will be developed in more detail during the PPG phase, will be implemented amongst key fisheries technical staff, resource managers, academics, private industry and policy makers to ensure that climate change risk planning and adaptation responses will be systematically addressed in Malawi's development planning and budgeting in the future. A specific gender dimension will be integrated into the capacity development plan.

Outcome 1.1: Critical knowledge on climate risk and vulnerability in the fisheries sector, including aquaculture, incorporated into sector policies and national development priorities

Outcome 1.2: Strengthened capacities of at least 30 fisheries professionals and other national stakeholders to address climate risk in fisheries sector

#### Component 2: Building local level adaptive capacities

Baseline: DoF has been implementing a community-based approach to co-management of fisheries resources. Specific community-support interventions are being implemented by DoF, including on the management of resources, harvest processing and access to markets — covering a full production chain of the sector for artisanal fisheries. Aquaculture development is promoted as an additional form of fisheries resources management in support of food security. A private aquaculture company (Maldeco) is currently operating fish cages in the south east arm of Lake Malawi with land based facilities being developed nearby. DoF activities at the implementation level focus on engaging with local fishing communities in enhancing long term productivity of the sector and implementing an ecosystem approach. District fisheries officers are employed and work closely with local communities. However, climate change risks and vulnerabilities — also recognized as a threat to the ongoing activities — are not yet being addressed systematically.

Additional activities: The south eastern Arm of Lake Malawi (29 000 km²) and Lake Malombe (390 km²) have been identified as one of ten hotspot areas for fisheries management in Malawi. From initial consultations and based on prioritization by the Department of Fisheries this area is vulnerable to climate change impacts and forms a useful "learning" laboratory for demonstration activities on the ground. This geographical area is directly affected by threats ranging from overfishing to climate change that NAPA priority project 5 seeks to address.

As a number of stakeholders including Catholic Development Commission in Malawi (CADECOM), the Lake Malawi Basin programme, private industry and other NGOs are undertaking baseline activities relevant to the project, it is seen to be a strategic pilot area. The relative ease of accessibility to the site from major towns in Malawi (e.g. Lilongwe, Blantyre, Zomba) is an additional advantage. The area is next to the Lake Malawi National Park (LMNP) which was in 1984 designated by United Nations as World Heritage Site due to its high fish species diversity and has received funding from GEF Small Grant Programme for environmental education.

Key activities under this component address priority actions stemming from the NAPA as well as lessons learned from the Lake Chilwa pilot and other relevant CCA projects in Malawi and in comparable systems.

A suite of tangible local level demonstration activities focusing on building climate change resilience amongst a range of stakeholders and sectors will be implemented, taking gender aspects and needs into consideration. Local level female fishermen and female led households depending on the fish resources will be especially considered and supported through the interventions. The fisheries-focused activities will build on and be completed by already existing identified options and experiences from the CCP/AAP (Africa Adaptation Programme), in particular.

A detailed design of these local level interventions will be developed during the PPG phase. Interventions will focus on investments relating to aquaculture and fish stock rehabilitation, as well as technical assistance supporting improved fisheries resources management.

Key activities include: i) developing adequate aquaculture zoning maps to properly distribute aquaculture farms (ponds, cages) taking into account main climate change related risks; ii) implement pilot aquaculture demonstration farms as alternative livelihood for fishermen, iii) implementing aquaculture management practices that are more resilient, for example ensuring fish farming densities that will not stress the fish, implementing on-farm simple monitoring systems of temperature and water transparency, implementing a biosecurity system in order to shield farms from the spread of diseases that may be triggered by climate change, and designing farming structures that are more resilient to extreme climatic events such storms and floods. The development of a local integrated management system is also essential and this will be done using the tools offered by an ecosystem approach to aquaculture. Additionally implementing fish farming hatcheries specially for Chambo, that are resilient and biosecurity tight and establishing protocols for risk assessment before releasing seed will be key.

Capture fisheries demonstration activities will consider for example, fishing practices based on local monitoring of stocks condition, improved safety of boats and development of local indicators of changing climatic conditions (e.g. recording fish mortalities and other simple environmental variables).

At least three local fishing communities in the south eastern Lake Malawi and Lake Malombe area will be targeted and adaptive capacities will be built. Based on climate vulnerability information and baseline activities, the following Traditional Authorities (TA) have been pre-identified for the project intervention: TA Mponda on upper Shire and east part of Lake Malawi, TA Chimwala, TA Malombe, TA Nankumba and additionally sub-TA Namavi. The area also has high prevalence of HIV AIDS (21%) as a result of various activities including fishing and tourism which has promoted the prostitution industry. Further the area has diverse ethnic groups including Yaos, Ngonis, Tongas, Lomwes, Tumbukas and Lomwes and which are also found in other parts of Malawi, making results from interventions applicable to most parts of the country.

The communities will also be able to benefit from early warning information provided through the CCMD, and further developed EWS pilot projects developed under Component 3. At least two private sector enterprises will be targeted by the project to increase their knowledge of climate risks. The project will assist them in formulating relevant climate change resilient policies and help them to act on them. The DoF will develop and test a local approach to climate change proofing among small scale and local level fisheries, and aquaculture along Lake Malawi and Lake Malombe. Tangible results in terms of applying an ecosystem-based approach to fisheries and aquaculture in the Lake Malawi and Lake Malombe area will be generated, and resource conservation results will be visible through improved fish stocks, especially of Chambo thus improving overall CC resilience.

Outcome 2.1: Climate change resilience in three pilot fishing communities strengthened, enabling at least 1,500 households to pursue climate resilient livelihoods through improved fisheries production (inland fisheries and aquaculture)

#### Component 3: Climate monitoring and early warning system in pilot areas on Lake Malawi

Baseline: As mentioned, DCCMS is in the process of establishing and improving existing climate monitoring and early warning systems in collaboration with other government institutions, e.g. focusing on Flood Forecasting and Warning System for the lower Shire. The NAPA specifies joint interventions of the DCCMS and the DoF to pilot and establish early warning systems for local fishermen in the Lake Malawi and other areas in Malawi – and to date no support activities are being implemented.

Additional activities: Based on NAPA priority project 5, with the objective "to establish a climate monitoring and early warning system on Lake Malawi and lakeshore areas for timely provision of accurate information for pre-disaster preparedness to rural fishing and farming communities and to promote short and long-term adaptation livelihood skills to riparian communities in the face of dwindling fish catches", a learning experience will be supported that lays the foundation for developing and rolling out an up-scaling plan for lake-wide implementation.

A functional EWS system will be established, working closely with the UNDP facilitated GEF project on EWS in Malawi (see below). Focusing on areas critical to establishing a EWS relevant to local fishing communities along the shores of the Lake Malawi system (including Lake Malombe), formerly existing hydrological and climate stations will be rehabilitated, and new ones located in strategic areas. A systematic design to establishing a reliable network of stations will be supported. Importantly, the relevant entities in the DCCMS, Water Affairs and DoF will be positioned to improve their capacities to be able to process the relevant data and translate into practical and community-relevant EWS information. Currently the University of Minnesota is collecting data related to EWS primarily from a limnological perspective in the northern areas of the lake, and there are plans to extend this research to southern areas.

A detailed design, based on technical feasibility and local needs, will be developed as part of the PPG phase. By learning tangible lessons from a community-based monitoring system to be piloted under this component in areas identified under component 2 and experiences from the Lake Victoria area (FAO and WMO) a comprehensive up-scaling plan will be developed. A detailed communication, outreach and dissemination strategy for EWS information to the local fishing communities will be part of the adaptation alternative.

Outcome 3.1: Capacity to respond to extreme weather events at community level strengthened through availability of timely climate risk information.

#### Component 4: M&E and adaptation learning

Instead of just establishing a project M&E system, a longer lasting integrated system directly relevant to the country M&E will be developed and implemented. The National Climate Change Programme (CCP) has a specific outreach and information sharing component. This project will support the established framework through furthering the communication and outreach activities through CCP. Lessons learnt will be made widely available and shared through relevant technical and policy-level decision making debates and fora (e.g. through the National Climate Change Committee), as well as newsletters, the established CCP website and other fora. The National Steering Committee on Climate Change as well as the National Technical Committee on Climate change under the CCP will be part of the coordination mechanism of the project.

Outcome 4.1: Project implementation based on results based management and documentation and sharing of best practices and lessons learnt

#### A.1.4 Global benefits (GEFTF, NPTF) and adaptation benefits (LDCF/SCCF)

Adaptation benefits. These include: (i) knowledge on climate risk and vulnerability in the fisheries sector built and incorporated into fisheries sector policies and national development priorities; (ii) strengthened capacity of at least 30 stakeholders to address climate risks in the fisheries sector; (iii) target fishing communities are aware of adverse impacts of climate change, and at least 1500 households are adopting climate resilient livelihoods based on improved fisheries production; (iv) local scale EWS covering 5 pilot fishing communities. Precise indicators and targets (including AMAT indicators) will be defined during project preparation.

**Specific social and gender benefits.** In Malawi more than 4 % of the population depends on the fisheries sector alone for their daily incomes and subsistence, with a much larger proportion using fisheries as a complementary source of livelihood. Food security is highly dependent on fisheries resources, and a majority of Malawians depend on protein from fish for food security and nutrition. This LDCF project will strengthen the management of inland fisheries as well as ensure that inland capture fisheries and aquaculture are made more sustainable and resilient to the impacts of climate change resources through specific activities in key areas where rural communities are highly dependent on fish.

Twenty-five percent of Malawian households are led by women, many of them depending on fisheries for income and food security. This intended project will include gender sensitive planning and interventions, and specific activities in this regard are mainstreamed throughout the project design (e.g. gender specific vulnerability assessment and capacity development planning, and gender sensitive and balanced pilot interventions). Such a gender focused approach does not only help empower gender balanced development in the sector, critical for long-term climate resilience, but will generate important adaptation learning which can be further integrated and addressed through the national CCP in Malawi in the future.

#### A.1.5 Innovativeness, sustainability and potential for scaling up.

The project is innovative in that it addresses Climate Change adaptation issues for an inland water body in Africa. Sustainability will be ensured through working with and building the capacity of stakeholders and institutions at local, provincial and national level.

Project activities will be scaled up through integration with the national development programmes run by NGO's, government and partner agencies. Promoting safe and responsible fishing and aquaculture in the private sector in the project areas will enable the activities to be up-scaled and continued in other areas of Lake Malawi and the country's other wetlands. By taking a food security focus, integration of climate resilient fisheries investments in the future will broaden food security opportunities in Malawi. A natural resource that traditionally used to be a significant contributor to diets will be promoted to find more prominent inclusion in national food security policies in the future. Focusing on technical capacity support at this stage is a critical foundation for future up-scaling of the work.

Private sector involvement in the project formulation and implementation will be a critical ingredient to reaching sustainability goals. The project will engage with private sector fisheries enterprises through particularly, although not only, components 1 and 2 of the project.

# A.2 Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and other as relevant) and describe how they will be engaged in project preparation.

Key stakeholders	Engagement during project preparation	Roles during project implementation
Department of Fisheries (DoF) (in the Ministry of Agriculture and Food Security)	Lead agency; support full PPG process	Executing agency House project team Facilitate policy integration through sector representation at national CC coordination mechanism Link to existing/ongoing activities such as WorldFish Centre supported Lake Chilwa Climate change Adaptation Project, Presidential Initiative on Aquaculture Programme and Agricultural Sector Wide Approach Baseline support at pilot sites
Department of Climate Change and Meteorology Services (DCCMS)	Provide technical inputs especially to developing the Meteorological aspects of Component 3	Technical collaboration on EWS elements (Components 2 and 3) Capacity support through project (e.g. financing of hard ware, modelling support) Partner in local level EWS; needs response from community level EWS planning Capacity enhancement through international collaborations (e.g. lake Victoria best practice on local level EWS)
Three local fishing communities in south east Lake Malawi and Lake Malombe area	To be identified as part of PPG; if possible agree to pilot sites during inception of PPH phase so that initial scoping visits to the final three project sites can be undertaken	Serve as pilot activity partners Benefit from adaptation learning Gender sensitive planning and intervention implementation Become national champions for CC action In Malawi Beneficiaries of component 2, in particular
National Planning Department (DPP) (housing the National CC coordination mechanism)	Active stakeholder and participants during PPG phase	Provide national CC coordination hub; facilitate sector contribution into national planning framework Support mainstreaming of CC fisheries sector needs into national planning and budgeting processes Provide/ broker relevant capacity support Find national and international funding support for proposal coming from component 3
Environmental Affairs Department	Active stakeholder and participants during PPG phase	Provide technical and political leadership and support esp. in role of UNFCCC Focal Point Integration of sector findings into national CC context On-site collaborations  Stakeholder of capacity building plan
National CC Steering Committee	Active stakeholder and participants during PPG phase	Serve as project steering committee Benefit from capacity support e.g. from support to capacity building activities, funding support for regular meetings etc.
National GEF Steering Committee	Active stakeholder and participants during PPG phase	Support effective project implementation; provide and facilitate political support Benefit from adaptation learning contributions
Other line ministries (e.g. Department of Marine	Active stakeholder and participants during PPG phase	Adaptation learning Joint implementation of activities as

Engineering, Department of Tourism, Ministry of Agriculture and Food Security, Department of Parks and Wildlife)		appropriate An application of an Ecosystem Approach requires multi-stakeholder and –sector engagement
Bunda College and Mzuzu University, other think tanks	Active stakeholder and participants during PPG phase; possibly support expertise	Provide technical inputs Potentially joint project execution of specific activities Capacity development support
NGOs, CBOs	Coordination Unit for the Rehabilitation of the Environment (CURE); Wildlife and Environmental Society of Malawi (WESM) and Total Land Care (TLC) Active stakeholder and participants during PPG phase	Potentially pilot activity engagement Specific expertise e.g. on gender Mobilization of local communities if appropriate Project implementation support Adaptation learning
Private sector	Maldeco Fisheries and other specific partners to be identified; Active stakeholder and participants during PPG phase	Potentially pilot activity engagement with aquaculture and Chambo re-stocking Adaptation learning Climate risk proofing business Engagement on CC resilient sector policies
International expertise e.g. WMO-FAO Lake Victoria EW project, World Fish Centre	Active stakeholder and participants during PPG phase; possibly support expertise	Technical support inputs Capacity support activities Adaptation learning sharing Building of collaborations
University of Minnesota	Active stakeholder and participants during PPG phase; possibly support expertise	Technical support inputs

# A.3 Risks. Indicate risks, including climate change risks, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (Table format acceptable).

Risk	Level of risk	Mitigation strategy
Insufficient fisheries sector stakeholder capacities to absorb CC action needs	L	The support for this project in itself is a awareness raising and capacity support initiative. Careful planning of implementation arrangements and project activities will address this risk.
Limited capacity in DoF to implement project	М	A dedicated project technical support mechanism will be designed to ensure effective project execution.
Lack of political will	L	By linking this project to the newly established national CC coordination mechanisms in the Planning Department and by addressing explicit NAPA priorities maximum alignment with national priorities is given. The participatory identification of the project focus through NAPA and engagement of key stakeholder during the PIF preparation should have laid a strong political commitment foundation for this project.
Low pilot level capacities	М .	Dedicated local level support is planned and must be further designed in a participatory manner during the PPG to ensure a feasible design for pilot activities.
Climate related disasters	M	A severe flood event could potentially affect the intended local partners which could lead to unavailability to partner in the implementation of project activities. The project will be designed to reduce vulnerability to extreme events and it is anticipated that local level project interventions would provide tangible benefits to the project stakeholders.

#### A.4 Coordination. Outline the coordination with other relevant GEF financed and other initiatives.

Coordination of other related GEF projects in particular is foreseen. Projects currently under implementation or in the preparation pipeline will be reviewed during the PPG phase.

Key initiatives that the project will coordinate with include:

- 1) Climate Smart Agriculture: Capturing the Synergies between Mitigation, adaptation and food security (01 Jan 2012 31 Dec 2014). The project with the European Commission and FAO aims to build the capacity of three participating countries, including Malawi, to undertake and finance climate smart agriculture through: (i) building an evidence base for developing and implementing policies and investment for climate smart agriculture; (ii) formulation of country-owned strategic frameworks and investment proposals for climate smart agriculture; and (iii) building capacity for evidence-based planning, implementing and financing climate smart agriculture including training of agricultural and climate change policy-makers on issues of climate smart agriculture. The focus of this initiative is on the overall agriculture sector at policy and planning level and the proposed LDCF project will complement it by focusing specifically on fisheries and aquaculture, and implementation of adaptation measures at local level. The results from the LDCF project will contribute to the evidence-based planning and implementation of climate smart agriculture.
- 2) FAO Improving Food Security and Nutrition Policies and Programmes Outreach. A collaboration between the Ministry of Agriculture and Food Security (MoAFS) and the FAO; currently the second phase of this programme is underway. Farmers are involved in small scale irrigation, soil and water conservation, nutrition and health education and water and sanitation. The project is funded by Flanders International Cooperation Agency (FICA) and is being implemented mainly in Kasungu and Mzimba Districts, with national policy implications.
- 3) AfDB-GEF LDCF project "Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)". The goal of the CARLA project is to improve resilience to current climate variability and future climate change by developing and implementing adaptation strategies and measures that will improve agricultural production and rural livelihoods. Lessons learned in this on-going project which focuses on community level climate change adaptation will be particularly useful in the design and implementation of the proposed component 2.
- 4) WB-GEF multi-focal area "Shire Natural Ecosystems Management Project". Cutting across the biodiversity, sustainable land management and climate change focal areas, this project aims to develop a strategic planning and development framework for the Shire River Basin and support targeted investments to improve land and water resources management, and associated ecological services and livelihoods in the Basin.
- 5) UNDP-GEF LDCF project "Climate Proofing local development gains in rural and urban areas of Machinga and Mangochi Districts Malawi". This project will utilize community based approaches to adaptation to mainstream climate change considerations into the baseline programmes (decentralization and agricultural subsidy programme), in order to increase resilience of local economic development in the Shire River basin.
- 6) UNDP-GEF LDCF project "Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change Malawi". The project aims to strengthen the capacity of the Department of Climate Change and Meteorological Services to monitor extreme weather and climate change, and for integrating sector-specific climate information into development plans and early warning systems. The proposed project will complement this UNDP LDCF project. While the UNDP project focuses on improving the capacity of the information provider to supply improved information efficiently, the proposed project will focus on building the capacity of users in the fisheries sector to translate the information and incorporate it into their specific decision making. The proposed project also aims to extend the EWS to the community level.
- 7) Two related projects on Lake Victoria EWS for fisheries. The GEF funded project will incorporate information and lessons learned from Lake Victoria into components on weather communication and early warning systems:
  - (i) World Bank Development Grant Facility (DGF) Project: "Support for the Weather and Climate Service delivery in the Lake Victoria Region: The purpose of this activity is to support development of a regional framework for weather and climate services, and the application of related products and services in support food aid, food security, health and lake transport safety for the Lake

Victoria Region and to pilot new and improved weather and climate products and applications in these sectors and evaluate their impact.

- (ii) World Meteorological Organization, Uganda private industry: MOBILE WEATHER ALERT Communicating weather warnings via mobile communications: This project builds upon work previously completed by the Weather Information for All (WIFA) project. WIFA was initially developed and coordinated by the Global Humanitarian Forum to address the lack of weather information in Sub-Saharan Africa at the community level utilising mobile phone technology and infrastructure.
- Programme-Building Capacity for Integrated and Comprehensive Approaches to Climate Change Adaptation in Malawi (AAP-Malawi). The Government of Malawi with support from its cooperating partners (Norway, DFID, UNDP and Japan) is implementing a comprehensive climate change formulation phase programme called the National Climate Change Programme which aims at mainstreaming and addressing climate change issues in the national development agenda. The Programme consists of two complementary projects, namely; the National Programme for Managing Climate Change in Malawi formulation phase (CCP) and the Africa Adaptation Programme-Building Capacity for Integrated and Comprehensive Approaches to Climate Change Adaptation in Malawi (AAP-Malawi). The overall objective of the Programme is to build a National Climate Change Response Framework and Strategy which will support national and local government institutions in delivering long term climate-resilient and sustainable development.
- 9) Lake Chilwa Basin Climate Change Program (LCBCCP) (2010-2015). The LCBCCP, implemented by WorldFish in partnership with Leadership for Environment and Development (LEAD), The Forestry Research Institute of Malawi and the University of Malawi and funded by the Norwegian Ministry of Foreign Affairs, is developing a range of Basin-wide climate change adaptation solutions that are being implemented in support of the country's CCP and NAPA so as to enhance the capacity of communities to adopt sustainable livelihood and natural resource management practices. The project has adopted an integrated management approach. This includes the conduct of various stakeholder fora, and collaboration with other NGOs, and projects such as World Vision International (WVI), Wildlife and Environmental Society of Malawi (WESM), Malawi Environmental Endowment Trust (MEET), Mulanje Mountain Conservation Trust (MMCT) and Wellness for Agriculture and Livelihoods Advancement (WALA), all of whom are implementing related activities in the Basin.

#### B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under the relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, Biennial Update Reports, etc.

Malawi ratified the UNFCCC in 1994 and submitted its NAPA in 2006. Specifically the project addresses NAPA priority 5 "Improving climate monitoring to enhance Malawi's early warning capability and decision making and sustainable utilization of Lake Malawi and lakeshore areas resources", but also NAPA priority 1 "Improving community resilience to climate change through the development of sustainable rural livelihoods" with a focus on fisheries resources

The United Nations Development Assistance Framework (UNDAF) in Malawi sets out climate change as a key delivery area, and specific activities are mainstreamed through the framework. UNDAF Key Priority 1: National policies, local and national institutions effectively support equitable and sustainable economic growth and food security by 2016, which includes a specific target 1.3 Targeted population in selected districts benefit from effective management of environment, natural resources, climate change and disaster risk by 2016. FAO is an identified key partner, under lead of UNDP. Whilst most of the food security actions have been conceived for the agricultural sector, it is clear that in Malawi the fisheries sector is of critical importance and must be included.

At the request of the Government, FAO has been supporting development of aquaculture in Malawi including supporting a consultative workshop which was held 12 to 14 August 2009 to assess status of aquaculture

development and promote coordination among various stakeholders engaged in the sub-sector in Malawi. Additional requests on aquaculture development have been addressed through a TCP where FAO recently supported the transfer of breeding technology of catfish. FAO has just been requested by the Department of Fisheries to support a TCP to curb post harvest losses of the fishes from Lake Malawi.

Malawi has developed a National Medium-Term Priority Framework (NMTPF) 2010-2015 that guides FAO project priorities and development in the country. The GEF project addresses Priority outcome 3: Sustainable land and water management. The sustainable management of natural resources will enhance the productivity of both food and cash commodities and increase sustainability of output per unit of resource, mainly land and water, while protecting the environment. FAO will therefore contribute towards sustainable land and water management, as well as towards the mitigation of weather variability and climatic change. Priority outputs for the NMTPF<sup>8</sup> will be *inter alia* programmes to meet the challenge of climate change in natural resources, the environment and the agricultural sector implemented through the promotion of farming, forestry, aquaculture and fishing system adaptation.

## B.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities

The project will contribute to two GEF LDCF/SCCF adaptation objectives: CCA-1: Reducing vulnerability to adverse impacts of climate change, including variability through mainstreaming adaptation into fisheries sector policies and demonstrating resilient fisheries management at local level; and CCA-2: Increasing adaptive capacity to respond to the impacts of climate change by strengthening climate monitoring and early warning capacity.

#### B.3 The GEF Agency's comparative advantage for implementing the project

FAO, with 191 member countries, is the United Nations agency with competency in all areas of fisheries and aquaculture. FAO has led global work on implementing the FAO Code of Conduct for Responsible Fisheries, an ecosystem approach to fisheries and aquaculture and has produced codes of practices and standards related to product safety and responsible trade, including guidelines for the ecolabelling of fish and fishery products. The Organization is currently engaged in developing Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries through a global, participatory process.

FAO is contributing to bringing fisheries and aquaculture into the climate change discussions at national, regional and global level. This has included release of a Policy Brief on building adaptive capacity, an FAO Expert Workshop on Climate Change Implications for Fisheries and Aquaculture in 2008, and a global review of climate change implications for the sector in 2009. In 2009, FAO helped to form the Global Partnership for Climate, Fisheries and Aquaculture (PaCFA), a voluntary grouping of 23 international organizations and sector bodies sharing a common concern for climate change interaction with global waters and living resources and their social and economic consequences. With FAO support, the PaCFA has been raising awareness of issues relating to oceans, fisheries and aquaculture within the United Nations Framework Convention on Climate Change (UNFCCC) processes. FAO is currently engaged in a number of projects and activities around the world towards strengthening adaptation and mitigation of climate change in fisheries and aquaculture including through the project "Climate Change, Fisheries and Aquaculture: Understanding the Consequences as a Basis for Planning and Implementing Suitable Responses and Adaptation Strategies funded by the Government of Japan, the EAF-Nansen Project and the NEPAD Agency - FAO Fisheries Project, Furthermore, climate change is always an important consideration in planning and implementation of an ecosystem approach to fisheries and therefore enters into most of FAO's extensive normative and field-based programmes of work.

With respect to staff capacity, FAO has Representation in Malawi with a small administrative staff and technical officer, as well as a Country Emergency and Rehabilitation Coordination Unit. FAO Malawi is supported both technically and administratively by the Regional Office for Africa in Accra, the Sub-Regional Office for Southern Africa in Harare and by FAO Headquarters in Rome. There are fisheries specialists in these offices with solid knowledge of the Lake Malawi Basin. As for all projects, a multidisciplinary Project

<sup>&</sup>lt;sup>8</sup> The title of the NMTPF has been changed to Country Programming Framework

Task Force will be set up and draw on the range of technical expertise available throughout FAO to support the project, including from the regional and sub-regional fisheries officers, operational and other technical staff as required, as well as from the Fisheries and Aquaculture Department and other technical units, as necessary.

# PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Points endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

Name	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Dr' Aloyisius M. Kamperewera	Director and OFP	ENVIRONMENTAL AFFAIRS	12,18,2012

### B. GEF AGENCY(IES) CERTIFICATION

Agency Coordinator, Agency name	Signature	Date (MM/DD/Y YYY)	Project Contact Person	Telephone	Email Address
Gustavo Merino Director Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla (00153) Rome, Italy TCI-Director@fao.org	Gund	January 23, 2014	Devin Bartley Senior Fisherics Resources Officer		Devin Bartley@fac
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