



Mid-Term Review of FAO-GEF Project

GCP /MLW/053/LDF

GEF ID: 5328

Building Climate Change Resilience in the Fisheries Sector in Malawi

Final Report

MTR conducted in August 2021

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED
NATIONS**

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MTR team

Mafaniso Hara (International and lead consultant)

Welton Phalira (National consultant)

FAO GEF staff

Mr. Austin Bondo, MTR Manager

Ydidiya Abera and Genevieve Braun (FAO GEF CU staff focal points for the MTR)

Acronyms and Abbreviations

ADC	Area Development Committees
AEDC	Agriculture Extension Development Coordinator
BH	Budget Holder
BVC	Beach Village Committee
CBNA	Capacity Building Needs Assessment
CCA	Climate Change Adaptation
COVID	Coronavirus Disease
CPF	Country Planning Framework
CPUE	Catch per Unit Effort
CTA	Chief Technical Advisor
DAEANR	Director of Agriculture, Environmental Affairs and Natural Resources
DCCMS	Department of Climate Change and Meteorological Services
DOF	Department of Fisheries
EAFM	Ecosystem Approach to Fisheries Management
ESMP	Environmental and Social Management Plan
FA	Fisheries Association
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus Group Discussion
FIRM	Building Climate Change Resilience in the Fisheries Sector in Malawi
FiSH	Fisheries Integration of Society and Habitats
FLO	Funding Liaison Officer
FSTAP	Fisheries and Aquaculture Scientific and Technical Advisory Panel
GCU	GEF Coordination Unit
GEF	Global Environment Facility
HACT	Harmonized Approach to Cash Transfer
HQ	Headquarters
IUU	Illegal, Unreported and Unregulated
LEAD	Leadership for Environment and Development
LoA	Letter of Agreement
LTO	Lead Technical Officer
LUANAR	Lilongwe University of Agriculture and Natural Resources
M-CLIMES	Saving Lives and Protecting Agriculture – Based Livelihoods in Malawi: Scaling Up the Use of Modernized Climate Information and Early Warning System
M&E	Monitoring and Evaluation
MOA	Ministry of Agriculture
MTR	Mid-Term Review
NAIP	National Agriculture Implementation Plan
NAP	National Agriculture Policy
NAPA	National Adaptation Programmes of Action
NCCMP	National Climate Change Management Policy
NDC	Nationally Determined Contribution
NFAF	National Fisheries and Aquaculture Forum
NMTPF	National Medium-Term Priority Framework
OA	Operational Advance
PIR	Project Implementation Report
PMU	Project Management Unit
PPR	Project Progress Report

PTC	Project Technical Committee
PTF	Project Task Force
ProDoc	Project Document
PROSPER	Building Agricultural Resilience in Malawi
PSC	Project Steering Committee
RA	Responsible Approach
REFRESH	Restoring Fisheries for Sustainable Livelihoods in Lake Malawi Program
SDG	Sustainable Development Goal
SFAD-WDP	Sustainable Fisheries, Aquaculture Development and Watershed Development Project
Sub FA	Sub-Fisheries Association
TA	Traditional Authority
TCP	Technical Cooperation Project
ToC	Theory of Change
UNDAF	United Nations Development Assistance Framework
UoF	University of Florida
UN	United Nations
VAC	Village Agriculture Committee
VDRA	Vulnerability and Disaster Risk Assessment
VMS	Vessel Monitoring System
VNRMC	Village Natural Resources Management Committee

Executive Summary

Introduction

1. The MTR for the project “Building Climate Change Resilience in the Fisheries Sector in Malawi” (GCP/MLW/053/LDF) (FiRM) sought to identify problems and constraints, and to formulate appropriate recommendations for corrective actions. It is also intended to serve as a learning and accountability tool for the Project Team. The MTR covered the period January 1, 2017 up until June 30 2021 (in some instances information for July to September 2021, the period under which the MTR was undertaken, has been included) and reviews all the four components of the project, namely:
 - a) Component 1: Strengthening access to information and knowledge regarding climate change and its implications
 - b) Component 2: Creating a favorable enabling environment of policies, plans, regulatory instruments and capacities for the promotion of climate change resilience among fishing communities
 - c) Component 3: Strengthening capacities at local level to increase the resilience of fishing communities to climate change
 - d) Component 4: Monitoring and Evaluation, and adaptation learning
2. The MTR used six evaluation criteria: effectiveness, efficiency, relevance, sustainability and impact, factors affecting performance and cross-cutting dimensions in accordance with FAO-Global Environment Facility (GEF) guidelines for conducting MTRs for GEF funded projects. The MTR used review and analysis of project reports, GEF and FAO guidelines, direct observations, GIS and remote sensing and interviews (individual, key informant and focus group). The categories of interviewees included: FiRM project personnel and FAO regional and headquarters personnel; national project partners; district project partners (e.g. Fisheries, Agriculture, Forestry) and community project beneficiaries.
3. The geographic implementation area of the project is Lake Malombe and Upper Shire River in Mangochi District. The MTR was undertaken between June and September 2021. Due to COVID-19 travel restrictions, the International Consultant was not able to travel to Malawi for the assignment. As such most of the MTR data requirements were addressed through online meetings and literature review, but some information from community beneficiaries was collected by a National Consultant through field visits.

Main findings

4. The main findings are presented under the six evaluation criteria as required by the MTR Guide as follows: Relevance; Effectiveness; Efficiency; Sustainability; Factors affecting performance; and Cross-cutting dimensions, in accordance with FAO-GEF guidelines for conducting MTRs for GEF funded projects

Relevance

5. The project is relevant as it seeks to address climate related vulnerability, fishery and land resources degradation, and livelihood challenges affecting the Lake Malombe and Upper Shire River fishing communities.
6. The need and urgency to addressing these concerns are expressed in global and regional development frameworks including the Sustainable Development Goals (SDGs) and the Africa Agenda 2063.

7. The project's objective and outcomes are aligned with national policies and planning frameworks for agriculture development, climate change, environment, natural resources and disaster risk management including the National Adaptation Programmes of Action (NAPA) of 2006, the Nationally Determined Contributions (NDCs) of 2021, and the United Nations Development Assistance Framework (UNDAF) in Malawi (2012-2015).
8. It is also coherent with the three GEF Focal Area Objectives for climate change adaptation (CCA1, CCA2 and CCA3); and with FAO Strategic Objectives and higher goals particularly the National Medium-Term Priority Framework (NMTPF) 2010-2015, and Outcomes 1, 2 and 3 of the FAO Country Planning Framework (CPF) for the period 2020-2023 that promote the provision of an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare which is the object of the FiRM Project.
9. Further, the Project is complementing past and ongoing interventions by FAO and the Department of Fisheries (DOF) particularly those in support of the Ecosystem-based Approach to Fisheries Management (EAFM), and Aquaculture, and is complementing similar interventions by other stakeholders nationally and in the Lake Malombe catchment.
10. Notwithstanding, there are other interventions in the project area that are pursuing similar objectives but have weak linkages with FiRM. These offer the opportunity for collaboration, partnership and co-financing.
11. The Project's design, particularly advancement of the EAFM approach, capacity building and piloting of catchment level interventions for upscaling at the district and national levels is generally appropriate to delivering the expected outcome. In addition, communication, gender equity and cross-cutting issues/aspects were well integrated in the design through provision of dedicated specialists based at the PMU to spearhead mainstreaming of these aspects in project activities. However, environmental and social safeguards requirements surrounding restocking of Malombe fishery were not adequately considered in the design.
12. The dual scope of the project to address both national and sub-national (catchment level) natural resources and climate change management requirements was also appropriate on the assumption that, apart from direct support towards national development or revision/updating, catchment level interventions would generate lessons for upscaling and out scaling in other parts of the country. Notwithstanding, the projects aspiration to mainstream climate change management considerations in national level policies in agriculture, climate change, disaster risk management and related policies and strategies; undertake country-wide fish habitat restoration interventions; and restoring the Lake Malombe fishery was overly ambitious and hence not practically achievable within the allocated budget and schedule. In addition, supporting communities with alternative livelihood options such as climate-proofed aquaculture and agro-based production is plausible only if the value chains for these products are also enhanced but this remains a weak area in the project design.

13. The MTR rating for Relevance is Satisfactory (S).

Effectiveness

14. Effectiveness measures the extent to which the intervention achieved, or is expected to achieve, its objectives and results, including any differential results across groups.
15. Achievement of project outputs has been mixed with **some progress realized as follows:**
 - a. Identified gaps relating to the provision and adoption of climate of community level Early Warning Systems for climate related disasters that have disastrous consequences on farmers and the fisher folk, and identification of alternative livelihood and integrated watershed management interventions for the Kulungwi River catchment (Output 1.1.1).

- b. Institutional development of DOF with physical assets (vehicles, Vessel Monitoring System (VMS), offices and houses) that have been used to resuscitate local fisheries governance institutions resulting in increased local community participation in fisheries management, particularly through engagement monitoring/patrol operations (Output 2.2.2).
 - c. Piloting of cage culture commenced with 3 out of 5 cages partially stocked and BVC members and village heads trained in good cage culture management practices (Output 3.3.4).
 - d. Revived BVC co-management structures through training in the EAFM approach, facilitating fresh elections and linking them with other key co- management stakeholders like chiefs, fishers gear owners and Area Development Committees (ADCs) (Output 3.1.1).
 - e. Formulated annual adaptive EAFM management plans that include financing mechanisms for fisheries co-management although the financing is often not guaranteed (Output 3.1.1).
16. However, delivery of a number of outputs has been delayed while other outputs have been cancelled or need further review before implementation. Slow progress on outputs has been observed as follows:
- a. Failure to identify a service provider to identify ecological parameters for determining management and resilience options in and around Lake Malombe hence, the Project is using proxy indicators for measurement of ecological parameters (Output 1.1.2).
 - b. Unresolved determination on establishment of a forum with an integrated vision for incorporating results of climate change and fisheries monitoring systems Output 2.1.1) since the option of creating a “Think tank on climate change in the fisheries and aquaculture sector” was dropped and alternative options such as the Fisheries and Aquaculture Scientific and Technical Advisory Panel (FSTAP), the annual National Fisheries and Aquaculture Forum (NFAF) and the Technical Committee on Climate Change and Disaster Risk Management have been proposed.
 - c. Climate-proofed pond culture had stalled due to delayed supply of fingerlings of fingerlings emanating from supplier incapability to supply (output 3.4.1). The fingerlings were only supplied in November 2021 during the MTR.
17. The Project’s **progress towards outcomes has also been mixed** as summarized in the “progress-towards-results” table in Appendix 6. Moderately satisfactory progress is observed towards achievement of Outcome 2.2: Strengthened capacities and awareness of fisheries professionals and other relevant stakeholders to address climate resilience building in fisheries sector, Outcome 3.1 Adaptive co-management and resource governance systems in support of climate-resilient capture fisheries and Outcome 3.3: Aquaculture is climate-proofed and able to contribute to diverse and resilient livelihood strategies of the most vulnerable sectors of the population. some progress relates to the following:
- a. There has been improved understanding of EAFM among fisheries professionals, which is a demonstration of the first step towards application of this tool in climate resilience building in the fisheries sector (Outcome 2.2).
 - b. There is improved perception of representation in co-management structures (BVCs, Sub-Fisheries Associations (Sub FAs), and Fisheries Associations (FAs) by all the major stakeholder groups (Fishers, processors, farmers, gear owners, traders, boat builders and net menders), which is the first step in increased trust in the governance institutions that would culminate in collective support for climate-resilient development demonstrated through increased compliance with applicable norms and legislation for

closed season and gear restriction, and the setting aside of fish breeding grounds or sanctuaries among other interventions (outcome 3.1).

- c. Limited progress has been observed towards achievement of outcomes as follows:
- No evidence towards mainstreaming of climate change resilience into key national level policy and planning instruments of relevance to fisheries and fishing communities as emphasis of delivery has been on catchment level institutions (outcome 2.1).
 - There no evidence of improvement in compliance with illegal gears restriction in Lake Malombe and Upper Shire River was expected to increase from 27% at baseline to 40% at MTR and 80% at project closure (Outcome 3.1)
 - Although pond rehabilitation had been done, and feed supplied in 2019, the supply of fingerlings had been delayed until November 2021 thereby limiting the contribution of aquaculture to diverse and resilient livelihood strategies of the most vulnerable sectors of the population (Outcome 3.4).
 - Delayed restoration of fish stocks and habitats through the Ecosystem Approach to Fisheries Management as the fishery is showing signs of retrogression (reduced proportion of high value species (chambo) in catches (80% decline from baseline), and emerging illegal and destructive gears (Kandwindwi) that has a Catch per Unit Effort (CPUE) that is 42 times higher than that of legal gillnets). The proportion of kasawala (immature chambo i.e. less than 15 cm) in monitored stocks in Lake Malombe has also declined from a baseline 2% by weight to less than 1% (0.85%) by weight against a projected 20% increase by Mid Term, and 50% increase by end of project (Outcome 3.2). There has been a 7% increase of kasawala in the in the monitored stocks on the Upper Shire River.
 - No evidence of application of results-based management approaches and imbedding of lessons learned and good practices in current and future interventions (Outcome 4.1). Although 4 PIRs and 8 PPRs have been produced, these have mainly been produced and used by the PMU as there has been no annual review of goals, strategies, and assessment plan with project partners that would have offered the avenue for reflection on progress and lessons for learning.

18. The MTR was unable to assess progress towards achievement of the following outcomes due to limited data:

- a. A draft lake-wide management work plan was prepared by the three sub-FAs at a workshop 26-28 October 2021. It is expected that following validation, by-laws will be reviewed and revised to support the work plan. The work plan and bylaws are expected to strengthen decision-making, planning and regulation around fisheries management and climate resilience in the project area. However, there is no demonstrated increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures (Outcome 1.1).
- b. No validated increase in the proportion of farm households practicing good farm management into a diverse portfolio of climate change resilience measures from the original 312 (36%) determined at baseline due to limited data (Outcome 3.4).

19. As a result of so many activities that have not yet started or are lagging behind, effectiveness at mid-term stage is rated as being **Moderately Unsatisfactory (MU)**.

Efficiency

20. Efficiency measures the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
21. The total budget allocation for the FiRM Project is US\$5,460,000. Resources were well allocated to impact activities, particularly Component 3 that seeks to strengthen capacities at local level to increase the resilience of fishing communities to climate change (43% of the budget) and component 2 that aims at creating a favorable enabling environment of policies, plans, regulatory instruments and capacities for the promotion of climate change resilience among fishing communities (29%). However, utilization has been distorted due to scheduling challenges caused by COVID-19, and delayed start of project implementation. Resultantly, a relatively larger proportion of the resources has been spent on salaries than on impact activities. As of August, 2021, resource utilization was estimated at 57.6% with the least expenditure observed under training (32.3%) and travel (17.3%) despite being allocated the most resources. Consultants took the largest share (approx. 40%) of the total expenditure, and there is an over-expenditure of approx. 8% on professional salaries emanating from annual increases. This is quite significant considering that the project is still ongoing and more salaries will be required to finance staff emoluments in the remaining project schedule. During the pandemic, field operations had stalled but project staff had to draw their salaries from the project causing this disproportionate spending.
22. Secondly, the project schedule is 5 yrs. (01 Jan. 2017 to 31 Dec. 2021). However, project start had been delayed for approximately two years and this also delayed the delivery of the capability (in all the outcomes), rendering the outcomes unattainable within the planned schedule. Additional to coronavirus, project execution has further been obstructed by systemic delays in resource disbursement from FAO representation in Malawi (Lilongwe) to the Project Management Unit (Mangochi), and protracted procurement of goods and services (e.g. patrol vessel (>3.5 yrs.); Lilongwe University of Agriculture and Natural Resources (LUANAR) Contract (>2 Yrs.), and University of Florida (UoF) (>2 Yrs.).

23. The efficiency of the project is rated Moderately Unsatisfactory (MU).

Sustainability

24. Sustainability refers to the probability of project-derived results and impacts continuing after project ends and in the long term. At mid-term, the MTR should examine whether the signs of sustainability are evident and/or whether measures for ensuring sustainability are being put in place. The MTR examined four aspects of sustainability: sociopolitical, financial, institutional and governance, and environmental.
25. Most interventions being undertaken are not financially demanding as they relate to and concern activities that are already being undertaken by the mother institutions. For example, climate information by Department of Climate Change and Meteorological Services (DCCMS); and capacity development in EAFM and adaptive co-management by DoF. Malawi is a relatively stable and peaceful country politically, and consequently the risk of socio-political upheaval is minimal. The project activities under this intervention are generally of low environmental risk. The outputs are mainly in relation to revitalizing and strengthening of Beach Village Committees (BVCs) and Fishers Associations (FAs), and fostering behavioral change among fishing and farming communities in order to effect recovery and resilience of fisheries and associated livelihoods. The Project Identification Form (PIF) did not identify any potential social and environmental risks that could have prevented the project objectives from being achieved. Although most of the key risk conditions evaluated at project formulation remain the same, one major unforeseen external risk factor to emerge has been the coronavirus pandemic which

broke out in early 2020 right in the middle of project implementation and has continued in subsequent waves. The pandemic has had a huge disruptive impact particularly because of the lockdowns, social distancing and working from home required to reduce virus transmission. As a result, training and capacity development, which is one of the key activities under the project, has had to be largely suspended. High levels of poverty and high dependency on natural resources for food security and livelihoods also pose a big risk to behavioral change towards sustainable utilization of fisheries. Financial sustainability of activities will also depend on whether the Department of Fisheries, and partner departments, can get increased funding provision from the Treasury, if they are to maintain the appropriate level of intensity of fisheries and catchment governance activities and maintenance of equipment.

26. On the basis of the current state of key conditions for sustainability of activities after the project ends, sustainability is rated as being **Moderately likely (ML)**.

Factors affecting performance

27. The MTR reviewed the key factors (both positive and negative) that have influenced performance and delivery of the project. These are: (i) project design; (ii) project execution and readiness; (iii) project implementation and oversight; (iv) financial management and co-financing; (v) project partnerships and stakeholder engagement; (vi) communication, awareness-raising and knowledge management, and (vii) M&E.

Project design

28. Most of the project activities (for example training of BVCs, watershed management and aquaculture) are being undertaken in Lake Malombe and the Upper Shire River area in Mangochi District, with the findings to be scaled to the rest of Lake Malawi. Other activities, for example the training of Department of Fisheries staff, provision of the Vehicle Monitoring System (VMS) for commercial and semi-commercial trawlers and the 'Save the Chambo Campaign' extend to the rest of Lake Malawi. The PMU is based at the Mangochi District Fisheries Office, which has ensured that it is placed in the area where most of the activities are being executed.

Project execution and readiness

29. The achievement of project outputs and outcomes for the project has mainly been constrained by delays in project start. While the official start project start date was set as January 2017, the project was launched at Lake Malombe in November 2018 following recruitment of the Chief Technical Adviser (CTA) and other members of the PMU. Immediately thereafter, early 2020, the covid-19 pandemic severely disrupted the activities.

Financial management and co-financing

30. There have been no instances of mismanagement or misuse of project funds. However, there have been delays and slow rates of disbursement of project funding for implementation and delays in procurement due to FAO's rigorous financial management regime; and problems of disbursement of resources and coordination of activities with district level partners.
31. Co-financing had largely materialized. Co-financing is also happening informally with Restoring Fisheries for Sustainable Livelihoods in Lake Malawi Program (REFRESH), successor project to Fisheries Integration of Society and Habitats Project (FiSH)/PACT Project), AfDB-financed

Sustainable Fisheries, Aquaculture Development and Watershed Development Project (SFAD-WD) and Leadership for Environment and Development (LEAD).

Project implementation and oversight

32. Project oversight by FAO as the GEF Agency has been adequate through the various FAO staff involved in the project and the PTF. Oversight by PSC has been limited, partly due to covid-19. The PSC has met only three times – the last meeting was held on 11th December 2020), which is about once a year instead of twice a year as mandated. Even then, the PSC has provided advice and recommendations to the PMU, for example the establishment of the Project Technical Committee (PTC) and recruitment of a dedicated communications officer

Project partnerships and stakeholder engagement

33. Engagement with DoF and other fisheries sector units has been very progressive in nature. However, there has been limited engagement of other project partners in decision-making and implementation (e.g. little engagement with REFRESH). contract with LUANAR and Letter of Agreement (LoA) with UoF had been severely delayed. The LoA with Monkey Fisheries Research Unit for data collection system is unlikely to materialize due to fiduciary risk. District partners (Agriculture and Forestry) are disgruntled over delays in and low resource allocation.

Communication, awareness-raising and knowledge management

34. A visibility and communication strategy has been developed but partially executed. Training sessions have been used to communicate the EAFM and other project concepts. Progress reports have been produced, but these have mostly been shared internally. Project signposts have been installed in project locations. Communication and visibility, knowledge management and knowledge products are still minimal or passive due to impasse between PMU and Communications team in Lilongwe regarding responsibility for implementation of project activities on the ground.

M&E

35. Baseline survey to develop project indicators was conducted. But this was partial and was delayed (only conducted in April 2020 for selected indicators). Also, there has been limited use of Monitoring and evaluation (M&E) in tracking progress, and for accountability;

36. Factors affecting performance is rated at **Moderately Unsatisfactory (MU)** at the mid-term stage

Cross-cutting dimensions

37. The project is supporting men and women equally with a special focus on elevating the status and participation of women in the fisheries sector (e.g. all-women groups are being supported and women have been elected to local level governance institutions – Beach Village Committees (BVCs) and Fisheries Associations (FAs)). Delays in delivery of some of the activities, for example the delivery of fingerlings for stocking ponds had subjected some beneficiaries including women to unprecedented anxiety caused by unfulfilled expectations. The fingerlings were only supplied in November 2021 during the MTR.

38. Project is rated as having low environmental risk. An Environmental Management and Monitoring Plan for pilot cage aquaculture was developed and is being implemented. Restocking will require institution of additional Environmental and Social Safeguard

(biosecurity risk management measures. The MTR notes that draft biosecurity National biosecurity standards for fish hatcheries have been drafted under Outcome 3.2 and are yet to be approved.

a) Progress, Challenges and Outcomes of Stakeholder involvement

39. The project is actively engaging and working with the various sections of the Department of Fisheries. For example, the cage culture and limnology activities are being implemented by Senga Bay Fisheries Research; the National Aquaculture Centre is collaborating on aquaculture and the development of biosecurity guidelines; and the Fisheries Protection Unit is being funded by the project for its enforcement activities in the project area. The project is working with the DoF to develop protocols and legislation for the VMS. Fisheries staff, including those from other stations, are also benefiting from the project's training and Capacity Development activities.
40. The project has been working with other projects as Building Agricultural Resilience in Malawi (PROSPER) and REFRESH. PROSPER is a project which is building resilience and adaptation to climate change, and is also working in the Kulungwi River area on Farmer Field Schools. There is a need though to develop closer collaboration REFRESH project, which is undertaking activities on the Southeast Arm around intensification of law enforcement.
41. Some of the key outputs, for example EAFM training is being undertaken by LUANAR. The UoF has a LoA for the development of a protocol for stock enhancement using the 'Responsible Approach (RA). For both LUANAR and UoF their project inputs had suffered systemic delays in the processing of their contract and LoA respectively. LUANAR could only start the training in March 2021 while the team from UoF was finally expected to come to Malawi in November 2021.
42. The Key district level partners are the Departments of Agriculture and Forestry who are collaborating with the project on the Kulungwi River Watershed Management and agro-forestry component. The challenges around this collaboration are related to the problems of delays surrounding OAs and also the misunderstanding and dissatisfaction about the amount of resources for their activities.

b) Progress on gender-responsive measures, indicators and intermediate results

43. Although the project is supporting both men and women, it has put special attention on elevating the status of and empowerment of women at all levels of the fisheries value chain, in particular fish processing and trading. For example, the Project has taken a positive discriminatory stance towards improving women's access to and control of ownership of means of production (though only two more women have been registered as having fishing equipment in Lake Malombe during the project period bring the total to four) and processing technologies. Secondly, more women and youth have been elected onto BVCs and sub-FAs, with 45% (a 2% increase) of BVC members being women and 41.4% being youth (18 to 35 years old) following the re-elections conducted by the project. This means that there has been an increase in the participation of women in decision-making. This also means that 45% and 41.4% of the BVC trainees are women and youth respectively. Out of the 33 Sub-FA members, 11 (33%) are women compared to 4 out of 15 (26%) previously. Previously, women could not contest for Fisheries Association positions since the minimum criteria for consideration for election into the association was for the candidate to be a BVC chairperson, a position that could not be offered to women. This criterion has been removed and also, more women are being elected as chairpersons of BVCs. In order to continue on this positive trajectory, the

project and the DoF should inculcate a culture of gender equity practices in fishing communities, beyond increased representation in the decision-making bodies.

c) Knowledge activities/products

44. The project had collaboratively developed a visibility and communication strategy at the start of the project. This set out the key principles that would guide management of communication in terms of what the key messages should be, how to facilitate the sharing of messages, what the channels of communication should be (e.g. radio) and the tactics/tools to be used for communication. In addition, the strategy took into account cultural and gender factors in the crafting of the messages. The goal of the communication strategy is stated as being “to ensure strong project ownership by the communities and Government of Malawi officials and to raise awareness of project activities with a view to disseminating lessons learned for an eventual scaling-up action across the country”.
45. The arrangement for communication has been that the project has been using the communications unit at FAO Malawi in Lilongwe, instead of having its own dedicated Communications Officer. The FAO Communications unit works across different projects, which means that its time and attention are spread over a large portfolio of projects. Even then, the Unit has been to the FiRM project area several times to collect material and develop communications products. The problem has been the misunderstanding in terms of who is responsible for communications activities on the ground once these have been developed and transferred to the PMU in Mangochi, given that members of the PMU have their own portfolios to work on.
46. One of the major activities that require communications expertise is the ‘Save the Chambo Campaign’, which is supposed to be run by the DoF with funding from the project (through a LoA) and communications support from the FAO team. The major challenge for the FAO communications team providing the support for the campaign has been the red tape and approval systems involved even though they have been working with the Department of Fisheries Extension/communications officer at the Department’s headquarters.

Conclusions

Conclusion 1- Relevance

47. The project is relevant as it seeks to address climate related vulnerability, fishery and land resources degradation, and livelihood challenges affecting the Lake Malombe and Upper Shire River fishing communities.
48. The need and urgency to addressing these concerns are expressed in global and regional development frameworks including the Sustainable Development Goals (SDGs) and the Africa Agenda 2063.
49. The project’s objective and outcomes are aligned with national policies and planning frameworks for agriculture development, climate change, environment, natural resources and disaster risk management including the National Adaptation Programmes of Action (NAPA) of 2006, the Nationally Determined Contributions of 2021, and the United Nations Development Assistance Framework (UNDAF) in Malawi (2012-2015).
50. It is also coherent with the three GEF Focal Area Objectives for climate change adaptation (CCA1, CCA2 and CCA3); and with FAO Strategic Objectives and higher goals particularly the National Medium-Term Priority Framework (NMTPF) 2010-2015, and Outcomes 1, 2 and 3 of the FAO Country Planning Framework (CPF) for the period 2020-2023 that promote the

provision of an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare which is the object of the FiRM Project.

51. Further, the Project is complementing past and ongoing interventions by FAO and the Department of Fisheries (DOF) particularly those in support of the Ecosystem-based Approach to Fisheries Management (EAFM), and Aquaculture, and is complementing similar interventions by others stakeholders nationally and in the Lake Malombe catchment.
52. Notwithstanding, there are other interventions in the project area that are pursuing similar objectives but have weak linkages with FiRM. These offer the opportunity for collaboration, partnership and co-financing.
53. The Project's design, particularly advancement of the EAFM approach, capacity building and piloting of catchment level interventions for upscaling at the district and national levels is generally appropriate to delivering the expected outcome. In addition, communication, gender equity and cross-cutting issues/aspects were well integrated in the design through provision of dedicated specialists based at the PMU to spearhead mainstreaming of these aspects in project activities. However, environmental and social safeguards requirements surrounding restocking of Malombe fishery were not adequately considered in the design.
54. The dual scope of the project to address both national and sub-national (catchment level) natural resources and climate change management requirements was also appropriate on the assumption that, apart from direct support towards national development or revision/updating, catchment level interventions would generate lessons for upscaling and out scaling in other parts of the country. Notwithstanding, the projects aspiration to mainstream climate change management considerations in national level policies in agriculture, climate change, disaster risk management and related policies and strategies; undertake country-wide fish habitat restoration interventions; and restoring the Lake Malombe fishery was overly ambitious and hence not practically achievable within the allocated budget and schedule. In addition, supporting communities with alternative livelihood options such as climate-proofed aquaculture and agro-based production is plausible only if the value chains for these products are also enhanced but this remains a weak area in the project design.

Conclusion 2 – Effectiveness

55. Effectiveness measures the extent to which the intervention achieved, or is expected to achieve, its objectives and results, including any differential results across groups.
56. Achievement of project outputs has been mixed with some progress observed in relation to Identification of the extent of vulnerability of the impact areas to climate and disaster risk and identification of adaptation options (Output 1.1.1); institutional development of DOF with physical assets resulting in increased local community participation fisheries monitoring/patrol operations (Output 2.2.2); pilot cage culture, though partially, and training of BVC members and village heads in cage culture management practices (Output 3.3.4); revival of BVC co-management structures and linking them with other co-management institutions (Output 3.1.1); and Formulation of annual adaptive EAFM management plans (Output 3.1.1).
57. However, challenges have been experienced in the identification of ecological parameters for determining management and resilience options (Output 1.1.2), establishment of a forum disseminating climate resilience data and lessons generated by the project (Output 2.1.1); and climate-proofing pond aquaculture where supply of fingerlings was only done in November 2021 (output 3.4.1).
58. The Project's progress towards outcomes has also been mixed with some progress observed as regards improving the understanding of EAFM among fisheries professionals as a step towards climate resilience building in the fisheries sector (Outcome 2.2); and improved

- perception of representation in co-management structures by major stakeholder groups as a step towards adaptive co-management and improved resource governance ((outcome 3.1).
59. However, limited progress has been observed towards mainstreaming of climate change resilience into key national level policy and planning instruments of relevance to fisheries and fishing communities (outcome 2.1); improvement of compliance with illegal gears restriction (Outcome 3.1); fish stocks and habitats restoration through the Ecosystem Approach to Fisheries Management (Outcome 3.2); livelihoods diversification and resilience-building through aquaculture and other interventions (Outcome 3.4); and application of results-based management approaches and imbedding of lessons learned and good practices in current and future interventions (Outcome 4.1).
 60. The MTR was unable to assess progress relating to changes in the proportion of key institutions that are using relevant information for resilience (decision-making, planning and regulation) (Outcome 1.1); and extent of household level adoption of climate change resilience measures (Outcome 3.4) due to limited data.
 61. The major obstacles to achievement of outputs and progress towards outcomes have been delays caused by late start of the project due to delayed recruitment of PMU personnel; Covid-19 work related restrictions; restrictive disbursement procedures; and protracted procurement. In addition, aquaculture development has been adversely affected by the service provider's incapability to deliver fingerlings as per contract. Further, low achievement on national level targets has been caused by the PMUs limited focus on national level expectations and commitments as per the project document.

Conclusion 3 – Efficiency

62. The delivery of this intervention has been inefficient with high expenditure in administrative budget lines and low expenditure on high impact activities, with limited delivery on outputs and slow progress towards the achievement of outcomes. This is attributed to delays in execution caused by late start of the project due to delayed recruitment of PMU personnel, Covid-19 work related restrictions, restrictive disbursement procedures, and protracted procurement procedures.

Conclusion 4 - Factors affecting performance

63. The location of the PMU has facilitated effective implementation of the project. It has also provided for good interaction with the District Council (which oversees District Development) and district level project partners. However, a number of factors have negatively affected project performance including: The delayed start of the project by almost two years; slow pace, delays and size of the Operational Advances for project implementation; delays in procurement; lower and uncompetitive incentives and allowances for participation of communities and government staff in training and other project activities compared to other projects targeting the same communities; and poor implementation of the communications strategy. Most of all, the coronavirus has had a huge impact on training and other activities as these had to be suspended at the height of project implementation.

Conclusion 5- Sustainability of Project Results

64. Most of the activities that are being executed by the project should be easily integrated by the Department of Fisheries and the other departments undertaking EAFM activities in partnership with the Department of Fisheries, as they are mostly related to activities that are already being undertaken by the Departments routinely. The risk is that the project does not deliver the

required capacity development and embed the habits and behaviors into communities to the extent that the Departments will need to continue with these activities at levels and intensities that will require additional budgetary provisions from the Treasury in order to sustain the project results. The operation and maintenance of equipment, such as the patrol vessel, the VMS system, etc. will certainly require additional budget provisions.

65. Like the rest of the world, Malawi's economy has been greatly impacted by the coronavirus pandemic. The loss of jobs in the formal economy means that there is likely to be increased reliance on natural resources for livelihoods and food security. This could mean that there is a risk of losing whatever gains are made by the project in trying to reduce fishing effort and change fisher behavior towards sustainable fishing methods and patterns.

Conclusion 6 – Cross-cuttings dimensions

66. The project has made headway in implementing measures for greater inclusion of women in BVCs and FAs, including ensuring that they occupy positions where they can influence decisions within such bodies rather than mere tokenism. Also, the provision of co-funding for improved fish processing technologies is empowering women to improve earnings from their post-harvest activities. The challenge is maintaining these gains after the project. There is a need therefore to find ways ensuring the effective participation of women in fisheries decision-making bodies and in all other fisheries value chain activities, including ownership of fishing equipment. This will also require changing the men's mind-sets toward respecting gender equality.

Recommendations

67. The following are the recommendations, the rationale for each recommendation and responsibility for action. These have been structured under the six evaluative criteria

Strategic relevance

68. A.1 Supporting communities with alternative livelihood options such as climate smart agriculture and other land-based climate smart interventions is plausible only if the value chains for these products are also enhanced. This is one element that is conspicuously missing in the project design. **Given the prevalent budget and schedule constraints, the Project should strengthen partnerships with institutions or projects that have similar objectives as those of FiRM such as REFRESH, PROSPER, Sustainable Fisheries, Aquaculture Development and Watershed Development Project (SFAD-WDP), Saving Lives and Protecting Agriculture – Based Livelihoods in Malawi: Scaling Up the Use of Modernized Climate Information and Early Warning System (M-CLIMES) and formalize co-financing arrangements (leveraged co-funding) with REFRESH. Co-financing should particularly aim at addressing the financing gaps relevant to but not adequately addressed through current programming – such as strengthening value chains for the fishery and sustainable the land-based income-generating activities.**

Responsibility: CTA/PMU by Mar. 2022

Effectiveness

69. B.1 The project has to deliver on its promise but the schedule has been constrained by delayed start, coronavirus pandemic, systematic logistical hurdles in operational disbursements and

protracted procurement procedures. As of August 2021, project had spent slightly over half (57.6%) of the resources allocated (proportionally it should have spent about 93% of the resources by August 2021). Given that the project is officially ending in December, 2021, a lot of resources may have to be returned to the donor. **The Project management should request for a no-cost extension to deliver the remaining outputs and outcomes. Relatedly, there is need for budget re-allocation to sustain the salaries of the PMU. A further periodization is required to implement high impact activities given this financial constraint.**

Responsibility: CTA/PMU by November 2021

70. B2 Sustainability and replication of the EAFM relies heavily on the uptake of improved knowledge, and governance arrangements and practices by the communities. However, this has to be tested within the project timeframe. **Expedite execution of the remaining EAFM activities to demonstrate and test effectiveness of the EAFM approach before project closure (e.g. sanctuaries, Kulungwi watershed management, VMS, etc.).**

Responsibility: CTA/PMU by June 2022

Efficiency

71. C.1 Support to and funding for Partnership activities has been hampered by delays in processing of LoAs and failure of some of the DoF units to pass the Harmonized Approach to Cash Transfer (HACT) assessments.
- **Expedite processing and execution of LoAs for activities such 'Save the Chambo Campaign' (under DoF)**
 - **Execute the data methodology/collection activity by Monkey Bay Research under DoF Headquarters LoA**

Responsibility: FAO/CTA by Dec. 2021

72. C.2 There has been low utilization of the training budget (only 32.3% of training and 17.3% of travel budget spent as of August 2021) due to suspension of training activities as a result of the Covid-19 pandemic. Online training is not possible since most potential trainees work and live in rural areas and thus do not have the appropriate equipment and connectivity for this mode of training. **Expedite physical (in-person) training sessions given that the rate and risk of infection to Covid-19 have come down sufficiently, and will presumably continue to do so as more people get vaccinated.**

Responsibility: CTA/PMU by Mar. 2022

Sustainability and catalysis/replication

73. D.1 Project has invested in key equipment and infrastructure (e.g. VMS, patrol vessel, truck, motorcycles staff houses and office renovations) for the DoF for improved governance of fisheries. **Prepare a practically implementable sustainability plan inclusive of legislation and financing mechanisms of VMS.**

Responsibility: DoF/CTA by June 2022

Factors affecting performance

74. E.1 Use of Operational Advances (OAs) for implementation of activities has severely impacted the delivery of project activities. **FAO should look into the use of LoA for implementation**

of activities. If this is not possible, then FAO should review the processing and modalities for use of OAs and make the system faster and more efficient.

Responsibility: FAO/CTA December 2021

75. E.2 District level coordination of project activities with partners and district authorities has been hampered slow transfer of resources and amount of the resources. **Develop, agree and sign a partnership strategy with its project partners for the remainder of the project. This should set out the role and responsibilities, what each partner will deliver, and with what resources.**

Responsibility: CTA/PMU by December 2021

76. E.3 Limited engagement of FAO Malawi Headquarters (HQ) to support project level Communication despite the high significance of communication to change fisher behavior towards sustainable fishing practices. **Recruit a dedicated communications officer to be part of the PMU.**

Responsibility: CTA/FAO by December 2021

Cross-cutting dimensions

77. F1 While the project is advancing gender mainstreaming in project activities, women's access to and control of ownership of means of production and processing in the fishery value chain is still low. **Expedite co-funding arrangements to support women's participation and advancement in the fishery value chain and other livelihood interventions.**

CTA/PMU by December 2021

- F.2 Artificial restocking of Lake Malombe could increase biosecurity risk including genetic contamination and emergence of diseases resulting in the collapse of the indigenous fish species. National biosecurity standards for fish hatcheries are drafted under Outcome 3.2. **Expedite finalization of biosafety standards and implementation of biosafety mitigation measures for Lake Malombe.**

DOF/CTA/PMU by January 2021

Lessons Learnt:

78. The project used baseline from the Technical Cooperation Project (TCP) project that was not compatible with the monitoring requirements of the FiRM project. Realizing this midway through implementation, the Project conducted a complementary baseline of limited scope that could not completely address the gaps. **Therefore, indicators for a project should be specific to the project and not 'borrowed' from another different project. Additionally, the baseline should be conducted at the start of the project (best practice is within three months of commencement of the project).**
79. There have been challenges around the participation of project partners in project activities, particularly from the Ministry of Agriculture and the Department of Forestry in the Kulungwi River Watershed Management due to lack of clarity on expectations and resource allocations. **Therefore, is imperative to clarify and address expectations in terms responsibilities, deliverables and resources allocations among partners for effective delivery of project outputs and outcomes.**

GEF Rating Table

Rec. No.	Rating	Summary Comments
A. STRATEGIC RELEVANCE		
A.1 Overall strategic relevance	S	The Project is overly aligned with agriculture, natural resource and climate change management and resilience frameworks globally, regionally and nationally. However, the national level expectations and commitments of the project have been neglected, which makes it less ambitious as originally designed.
A1.1 Alignment with GEF and FAO strategic Priorities	HS	<p>The Project is coherent with GEF Focal Area Objectives CCA1, CCA2 and CCA3 that propagate reducing vulnerability to climate change impacts, increasing adaptive capacity to respond to the impacts of climate change and the transfer and adoption of adaptation technology, respectively</p> <p>It is also aligned with FAO Strategic Objectives and higher goals particularly the National Medium-Term Priority Framework (NMTPF) 2010-2015, and Outcomes 1, 2 and 3 of the FAO Country Planning Framework (CPF) for the period 2020-2023 that promote the provision of an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare.</p>
A1.2 Relevance to national, regional and global priorities and beneficiary needs	HS	Project aligns with SDGs, Africa Agenda 2063, Malawi 2063, NDCs. Malawi Growth and Development Strategy (MGDS) III, NFAP, NCCMP, National Agriculture Policy (NAP), National Agriculture Implementation Plan (NAIP), NAPA, and National Forest Policy (NFP) given its overarching scope on addressing poverty reduction, climate resilience and the protection, restoration and promotion of sustainable use of terrestrial ecosystems (in this case, fisheries and land-based resources).
A1.3 Complementarity with existing interventions	MU	<p>FISH/PACT had activities in Lake Malombe that are very relevant to the Project. The successor REFRESH Project also has relevant activities in South-east arm of Lake Malawi. However, FIRM has limited integration of the previous activities and limited cooperation with REFRESH.</p> <p>Additionally, FiRM is advancing artificial restocking of Lake Malombe, which is</p>

Rec. No.	Rating	Summary Comments
		<p>contradictory to the recommendation made under the TCP Project.</p> <p>Some of FiRM's objectives are also similar with those of M-CLIMES (e.g. in climate information and EWS), PROSPER and LEAD. However, complementarity with these projects is limited.</p>
B. EFFECTIVENESS		
B1. Overall assessment of project results	MU	<p>Major cause to limited delivery is delayed processing and disbursement of project funds and procurement. Letters of Agreement initiated to speed up implementation but not implemented (e.g. with DoF) and Fiduciary risk is high for Fisheries Research Unit which was proposed for LoA (Revision of Data collection methods)</p>
B1.1 Delivery of project outputs	MU	<p>The project has had mixed progress on outputs but generally, most outputs have not been realized as expected at MTR. On average, delivery of outputs is below 50%.</p> <p>Some progress relates to:</p> <ul style="list-style-type: none"> ▪ Identification of gaps in community level Early Warning Systems and alternative measures, (Output 1.1.1); Institutional development of DOF resulting in resuscitation of local fisheries governance institutions (Output 2.2.2); Piloting of cage culture (3 out of 5 cages partially stocked) and training of BVC members and village heads in good cage culture management practices (Output 3.3.4). ▪ Revival of BVC co-management structures through training in EAFM, fresh elections and strengthening linkages with co-management stakeholders (chiefs, fishers gear owners and ADCs (Output 3.1.1). ▪ Formulation of annual adaptive EAFM management plans despite financing is often not guaranteed (Output 3.1.1). <p>However, delivery of a number of outputs has been delayed while other outputs have been cancelled or need further review before implementation.</p>

Rec. No.	Rating	Summary Comments
B1.2 Progress towards outcomes and project objectives		
Outcome 1.1: Enhanced access to information on climate trends, extreme events and resource status and management measures	MU	A draft lake-wide management workplan was prepared by the three sub-FAs at a workshop 26-28 October 2021. It is expected that following validation, by-laws will be reviewed and revised to support the workplan. The work plan and bylaws are expected to strengthen decision-making, planning and regulation around fisheries management and climate resilience in the project area. However, there is no demonstrated increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures (Outcome 1.1).
Outcome 2.1: Climate change resilience considerations mainstreamed into key policy instruments of relevance to fisheries and fishing communities	U	No evidence towards mainstreaming of climate change resilience into key national level policy and planning instruments of relevance to fisheries and fishing communities as emphasis of delivery has been on catchment level institutions.
Outcome 2.2: Strengthened capacities and awareness for promoting climate resilience in the fisheries sector	MS	There has been improved understanding of EAFM among fisheries professionals, which is a demonstration of the first step towards application of this tool in climate resilience building in the fisheries sector but more needs to be done to translate this understanding into action for resilience.
Outcome 3.1: Adaptive co-management and resource governance systems in support of climate-resilient capture fisheries	MS	<p>Mixed progress observed.</p> <p>There is improved perception of representation in co-management structures (BVCs, Sub FAs, and FAs) by all the major stakeholder groups (Fishers, processors, farmers, gear owners, traders, boat builders and net menders), which is the first step in increased trust in the governance institutions that would culminate in collective support for climate-resilient development demonstrated through increased compliance with applicable norms and legislation for closed season and gear restriction, and the setting aside of fish breeding grounds or sanctuaries among other interventions).</p> <p>However, there is no evidence of improvement in compliance with illegal gears restriction in Lake</p>

Rec. No.	Rating	Summary Comments
		Malombe and Upper Shire River was expected to increase from 27% at baseline to 40% at MTR and 80% at project closure.
Outcome 3.2 Fish stocks and habitats restored	U	There has been delayed restoration of fish stocks and habitats through the Ecosystem Approach to Fisheries Management as the fishery is showing signs of retrogression (reduced proportion of high value species (chambo) in catches (80% decline from baseline), and emerging illegal and destructive gears (Kandwindwi) that has a CPUE that is 42 times higher than that of legal gillnets). The proportion of kasawala (immature chambo i.e. less than 15 cm) in monitored stocks in Lake Malombe has also declined from a baseline 2% by weight to less than 1% (0.85%) by weight against a projected 20% increase by Mid Term, and 50% increase by end of project.
Outcome 3.3 Aquaculture is climate-proofed	MS	The stocking of cages has been slow (only 3 out of 5 cages stocked) but BVCs members are eager to learn and adopt the intervention in anticipation of upscaling and long-term benefits of the pilot activities. Although pond rehabilitation has been done, and feed supplied in 2019, fingerlings had not been supplied until November 2021, thereby delaying the realization of climate-proofed aquaculture benefits. The delayed supply of fingerlings has further limited the contribution of aquaculture to creation of diverse and resilient livelihood strategies of the most vulnerable sectors of the population.
Outcome 3.4 Local people have access to diverse, pro-poor farming systems	UA	No validated increase in the proportion of farm households practicing good farm management into a diverse portfolio of climate change resilience measures from the original 312 (36%) determined at baseline due to limited data.
- Outcome 4.1 Project implementation is based on results-based management	U	Generally, the Project's M&E system and particularly, the progress tracking tool suffers from limited data due to any or a combination of the following factors: no baseline, no set target or no updates in over 30% of the outputs; and indicator related issues such as incompatibility of output against indicator, immeasurable indicator, or unspecific indicator in 9% of the outputs. Resultantly, there is limited application of results-

Rec. No.	Rating	Summary Comments
		based management approaches and imbedding of lessons learned and good practices in current and future interventions. Although 4 PIRs and 8 PPRs have been produced, these have mainly been produced and used by the PMU as there has been no annual review of goals, strategies, and assessment plan with project partners that would have offered the avenue for reflection on progress and lessons for learning
- Overall rating of progress towards achieving objectives/ outcomes	MU	Project has been mixed progress towards achieving objectives/ outcomes but mostly, progress has been limited in light of agreed commitments (indicators and targets).
B1.3 Likelihood of impact	Not Rated at MTR	
C. EFFICIENCY		
C.1 Efficiency	MU	There has been high expenditure in administrative budget lines and low expenditure on high impact activities, with limited delivery on outputs and slow progress towards the achievement of outcomes. This is attributed to delays in execution caused by late start of the project due to delayed recruitment of PMU personnel, Covid-19 work related restrictions, restrictive disbursement procedures, and protracted procurement procedures.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	Project has invested substantially in key equipment for improved governance of fisheries in Lake Malombe and SE arm of Lake Malawi e.g. patrol vessel, motor cycles, truck and training. Sustainability and replication of the EAFM relies heavily on the uptake by the communities of improved knowledge, and governance arrangements and practices. However, this has to be tested within the project timeframe. VMS is an important intervention under EAFM for effective recovery of the South East Lake Malawi and in effect Lake Malombe fisheries. However, arrangements for institutionalization and sustenance beyond the project duration are weak.
D1.1. Financial risks	ML	Most interventions advanced are less financially demanding if adequately delivered, as they are already practiced by the mother institutions (e.g. Climate information by DCCMS; capacity building in EAFM embedded in DoF); alternative livelihoods are at the core for partner institutions; policy and legal reforms are a key component of

Rec. No.	Rating	Summary Comments
		partner institutions. However, adoption of VMS, and all group-based aquaculture (including cage culture) may not be sustained due to DoF's financial challenges after the project.
D1.2. Sociopolitical risks	L	Malawi is a very stable and peaceful country politically and is likely to remain so in the foreseeable future. The risk of socio-political upheaval is minimal. External unforeseen risks such a drought (e.g. the Covid-19) are possible and do have potential for causing social problems at household and community levels
D1.3. Institutional and governance risks	MU	Success of EAFM requires strong institutional coordination among key institutions such as Fisheries, Agriculture and Forestry. This is currently not demonstrated; Lower level institutions particularly (BVCs, Fisheries Associations) will need strong nurturing – this aspect has generally been weak countrywide including in Lake Malombe the project area.
D1.4. Environmental risks	ML	Project activities are generally of low environmental risk. The environmental risks of cage culture and restocking will have to be analyzed before upscaling/implementation. If not done within the project, it is unlikely that this will be done after project closure.
D2. Catalysis and replication	MU ¹	Project interventions mostly in infancy; and benefits not yet realized and consolidated.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MS	The design and readiness of the project is moderately satisfactory with some elements suited and others less suited to deliver the expected outcomes. The framework elements such as advancement of the EAFM approach; capacity building of technical and local level governance institutions; piloting of catchment level interventions for upscaling at the district and national levels; integration of research and practical adaptation; and the emphasis on communication and adaptive management are all appropriate to delivery of the expected outcomes of this intervention. However, the project has over-ambitious targets particularly for national policies revision to integrate climate change resilience (outcome 2.1), and fish stocks and habitat restoration (Outcome 3.2) that are not practically achievable with the resources available

¹ This is for “Moderately Unsatisfactory

Rec. No.	Rating	Summary Comments
		and within the allocated timeframe. In addition, supply capacity and biosecurity risk management around fingerlings production for artificial restocking of Lake Malombe were not adequately conceptualized resulting in uncertainty mid-way through implementation.
E2. Quality of Project implementation		
E2.1 Quality of project implementation by FAO Budget Holder (BH), Lead Technical Officer (LTO), PTF, etc.)	MS	<p>Project oversight by FAO as the GEF Agency has been adequate. The support unit within FAO such as Project Task Force (PTF), and project implementation unit have adequately supported the project. Covid-19 curtailed international travel for the LTO to provide on-site technical support and backstopping.</p> <p>Delays in flow of project implementation finances and procurement has adversely impacted the rate of delivery. In addition, support to project communication needs has been inadequate, particularly the execution of communications activities on the ground based on the presumption that the PMU would undertake these while the PMU see this as responsibility of the Communications unit at FAO Lilongwe.</p>
E2.2 Project oversight (PSC, project working group, etc.)	MS	Oversight by the main national institution, the PSC has also been limited, reportedly due to covid-19. PSC has met three times over the project period by MTR (Last meeting on 11th December 2020) instead of twice a year. Whenever the PSC has met, it has provided guidance and advice to the PMU after getting the progress report
E3. Quality of project execution		
E3.1 Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	MU	<p>The skills compliment for the PMU appears adequate for delivery of outputs and outcomes except the lack of a dedicated Communications Officer.</p> <p>PMU slow pace of delivery of outputs reportedly due to protracted, slow and rigorous systems for obtaining and liquidating operational advances (including a cap of US\$5,000 on advances at a time).</p> <p>Partner performance has also been adversely affected by similar challenges (slow</p>

Rec. No.	Rating	Summary Comments
		disbursement), and limited amounts of resources for execution (e.g. agriculture and forestry).
E4. Financial management and co-financing	S	<p>No issues with mismanagement or misallocation of funds including Operational Advances (OAs) for implementation of activities.</p> <p>Co-financing has materialized at approx. 55.5%.</p>
E5. Project partnerships and stakeholder engagement	MS	<p>There has been strong engagement with Fisheries Department, but weak engagement of other partners such as Agriculture and Forestry, and the District Council</p> <p>There has been good engagement of LUANAR but weak with other Universities such as University of Malawi and MZUNI with which the Project intended to have LoAs.</p> <p>There has been weak engagement with other project undertaking complimentary activities (e.g. PROSPER, REFRESH)</p>
E6. Communication, knowledge management and knowledge products	MU	Although a “Visibility and Communication Strategy” has been developed, and a number and a range of knowledge products have been produced, the communication and outreach for the project has generally been passive with Project Office expecting action from FAO Communications Unit and vice versa. Additionally, visibility of the Project both in communities and at district level has been low.
E7. Overall quality of M&E	MU	Project has developed an M & E system and is capable of tracking progress on defined indicators. However, the data is mostly being used by the project internally rather than to inform decision-making and/or for engaging with project partners. Additionally, some of the indicators are not relevant to the reduced geographical scope of the project while others are not specific to effectively track progress.
E7.1 M&E design	MU	The project started without a proper baseline from which to develop indicators since the TCP that was supposed to provide the baseline only finished in 2018 well after the official start of the FiRM Project. Therefore, there was lack of alignment between the TCP end line values and FiRM baseline values. Additionally, the TCP Project did not in the end provide all the appropriate indicators for the FiRM Project

Rec. No.	Rating	Summary Comments
		necessitating the conduction of a partial baseline survey for FiRM in 2020.
E7.2 M&E plan implementation (including financial and human resources)	MS	<p>Dedicated personnel (Monitoring and Evaluation Specialist) is available to spearhead M and E planning and implementation. Financial resources were sufficient and effectively allocated but disbursement was often challenged due to financial management.</p> <p>Project has developed an M & E system and is capable of tracking progress on defined indicators especially at the Outcome level. The PIRs and PPRs though are only used internally by the project</p>
E8. Overall assessment of factors affecting performance	MU	<p>The Project budget was adequate, but access by the PMU and partners was limited due to FAO disbursement limitations and slow procurement processes. Additionally, achievement of project outputs and outcomes for the project has been constrained by delayed project start; and poor coordination of activities with district level partners. Project oversight by FAO, and the PSC has also been low.</p> <p>The Project's catchment level implementation focus diverted attention from national level expectations and commitments thereby limiting the delivery of national level outputs and outcomes.</p>
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	S	<p>Project has taken a positive stance towards improved women's access to and control of ownership of means of production and processing in the fishery. But so far, the actual increase in ownership of boats and nets by women is still insignificant compared to men (frame survey results over the period from 2017 – 2019 show an increase of women gear owners from 2 to 4).</p> <p>Project is actively improving participation of women in decision-making bodies and roles (e.g. membership in BVCs and sub-FAs).</p> <p>Project has extended co-financing of improved technologies for fish processing to women's groups.</p>
F2. Human rights issues	NA	

Rec. No.	Rating	Summary Comments
F3. Environmental and social safeguards	MS	Although most of the project interventions pose low environmental risks, and project has developed an Environmental and Social Management Plan (ESMP) and drafted national biosecurity guidelines for fingerling production, the proposed artificial restocking and cage culture may pose biosecurity risk of the wild fish species if the standards are not finalized and implemented.
Overall rating of project	MU	The overall rating of the outcomes of this project is moderately unsatisfactory (MU), based on performance on the criteria of relevance (S), effectiveness (MU) and efficiency (MU). Given that the project is satisfactorily relevant, the weight of the overall rating has mainly been determined from the efficiency and effectiveness ratings, both of which are moderately unsatisfactory.

1. Introduction

1.1 Purpose and scope of the Mid-Term Review (MTR)

80. This Mid-Term Review (MTR) is for the project “Building Climate Change Resilience in the Fisheries Sector in Malawi” (GCP/MLW/053/LDF). The MTR seeks to identify any problems and constraints and formulate appropriate recommendations for corrective actions for the effective implementation of the remaining part of the planned project intervention. The MTR serves both learning and accountability purposes for the project implementation team, the donor and recipient. The MTR reviews the relevance, effectiveness and impact, efficiency, sustainability, and factors that have affected the performance and delivery of the project to date as well as cross-cutting dimensions. Through operational and strategic recommendations, the MTR is intended to improve implementation for the remaining period of the project’s life. This MTR covers the period January 2017 (the official start date of the project) to June 30 2021 (in some instances, information for July to September 2021 has been included as this was the period during the MTR). The implementation area and target population for the intervention is Lake Malombe and the Upper Shire River in Mangochi District (Figure 1-1). The MTR covers all activities undertaken within the framework of the project as described in the project document (GCP/MLW/053/LDF).

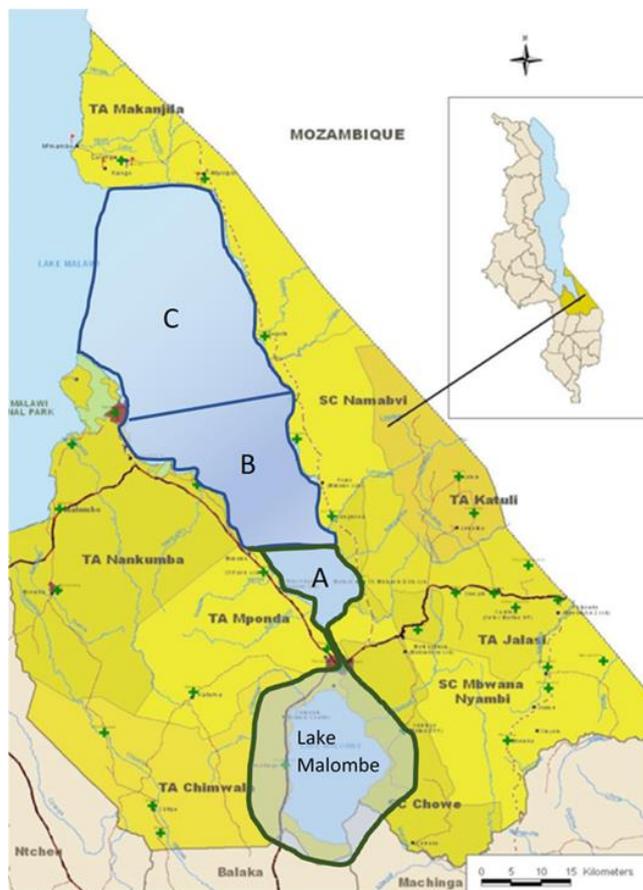


Figure 1-1 Map of Malawi showing Project Area (Lake Malombe and Lake Malawi Area A)

1.2 Objective of the MTR

81. In accordance with FAO- GEF Projects, the MTR has three core objectives as follows:

- To assess progress made towards achievement of a project's planned results in terms of its relevance, effectiveness and efficiency, sustainability and impact. Key questions include: "What results, intended and unintended, has the project achieved to date?" and "Is the project on track to achieve its planned results?"
- To identify any problems or challenges the project is encountering, understand the causes of any underperformance and leverage project strengths and good practices to overcome them. The MTR makes recommendations for corrective measures, if needed, to overcome challenges and ensure the expected deliverables and results are achieved by the end of the project. Key questions include: "What can be done to improve project delivery and to increase the likelihood of longer-term sustainability of project results?"
- To identify/highlight any success stories, key contributions, good practices and areas with the potential for upscaling and replication, and to promote knowledge-sharing and learning between FAO and project stakeholders, including the identification of lessons to improve future project formulation and implementation.

82. The main MTR questions for this MTR are presented in Box 1 hereafter.

Box 1. Main MTR Questions

1. **Approach/design (relevance)** - adequacy of the project design in supporting the activities and expected outcomes
 - a) To what extent are the project outcomes congruent with the operational program strategies, country and regional priorities and FAO Country Programming Framework?
 - b) Is the project design appropriate for delivering the expected outcomes?
 - c) To what extent are the project's objectives and components clear and, practical and feasible within the timeframe?
2. **Results (effectiveness)**: extent to which the project objectives been achieved
 - a) To what extent is the project on track towards achieving the planned results under each of the outputs?
 - b) What key factors (internal and external) are influencing the achievement / non achievement of the objectives?
 - c) What has been the effect of COVID-19 in the delivery of the project results, both at the strategic and community level, and what is likely to be the long term impact of COVID-19 in the achievement of the results under the action?
 - d) What are key factors (internal and external) influencing the achievement / non achievement of the objectives? Have there been any unintended positive or negative effects of the project activities?
 - e) The project was initially drafted with a National scope, but was subsequently focused to sub-district level implementation. How is the geographical approach of the project consistent with the main objectives?
 - f) A Vessel Monitoring System (VMS) for commercial fishing on Lake Malawi was supported by Technical Cooperation Programme (CP/MLW/3504), including the first two years of implementation. FiRM seeks to support the VMS for an additional year given the fisheries governance linkage between Lake Malombe and the SE Arm

of Lake Malawi. To what extent does this require adjustments to the project design?
How feasible is the proposal?

- g) What capacity does the project have to sufficiently address communication and visibility needs of the project given that the budgeted (part-time) role of Communication and Outreach Specialist was subsumed by the Communication Unit of FAOMW?
3. **Efficiency:** extent to which the project management arrangements are appropriate, efficient and clear?
- a) To what extent has the project built on existing agreements, initiatives, data sources, and synergies, complementarities with other projects, project components, and partnerships, and avoid duplication of similar activities of other groups?
 - b) Were project activities timely implemented, was the project cost-effective, and were there sufficient management procedures to affect efficiency?
 - c) Was the M&E system adequate and appropriate, and was M & E data used to improve project performance?
 - d) To what extent have the project's management, administrative and oversight arrangements contributed to the efficient achievement of the project results? How effective has the materialization of co-financing been?
 - e) How effectively has project management dealt with the challenges facing the project and adapted to overcome difficulties and improve delivery?
 - f) How can the delivery be improved over the remainder of the project - what changes are needed?
4. **Sustainability of Project Results:** Will the project results likely remain or continue to be useful after the completion of the project?
- a) What are, if any, the socio-political, financial, institutional and governance, and environmental risks to sustainability?
 - b) What evidence exists indicating the feasibility of replication or catalysis of project results, the likelihood that project activities will continue following project closure? What is the likelihood that the VMS will be financially supported by the government budget upon closure of FiRM? What is the likelihood of EAFM approach continuing beyond FiRM? How has the project prepared (built capacities of) the different stakeholders for this to continue?
 - c) What does the project need to do to increase the sustainability of its results?
5. **Factors affecting performance** – project delivery challenges, major factors influencing the achievement or non-achievement of project results, and proposed changes for improved delivery
- a) **Project design and readiness:** Is the project's causal logic (set out in its Theory of Change) robust, coherent and clear? To what extent are the project's objectives and components clear, practical and feasible within the timeframe (especially given the delays in starting the project)? Is the project design appropriate for delivering the expected outcomes?
 - b) **Project execution and management:** What have been the main challenges in relation to the management and administration of the project? To what extent have FAO-Malawi, Fisheries Department and Ministry of Agriculture performed their

roles and responsibilities as executing partners in managing and administering the project? Are all the administrative (including contractual) procedures operating well? Are staffing arrangements adequate to deliver the project in the remaining timeframe? Are there any unforeseen issues (positive or negative) that are affecting project implementation and progress towards outcomes and objectives that need to be considered? What changes to project administration and management are needed to improve delivery in the second half of the project?

- c) **Risk identification and management:** How well have risks been identified and managed (both at the project design phase and later)? Have all potentially negative social, economic and environmental impacts of the project been identified and is the mitigation strategy adequate? What actions have been taken to mitigate risk factors?
- d) **Financial management and co-financing:** What have been the financial management challenges of the project to date? Are the budgets/financial planning adequate to complete the project and deliver the expected results? Are financial resources well managed and accountable? To what extent has co-financing materialized as expected? Has there been any additional co-financing leveraged during project implementation and how has this contributed to the project's objectives?
- e) **Project oversight, implementation role:** Is the project governance and supervision model comprehensive, clear and effective? How effective is the coordination and decision-making among the Project Steering Committee (PSC) and Project Task Force? To what extent has FAO delivered oversight and supervision and backstopping (technical, administrative and operational) during the project design and implementation phases?
- f) **Monitoring and Evaluation (M&E):**
- **M&E – design:** How well is the project M&E framework designed? How could the M&E design be improved? How has stakeholder engagement and gender assessment been integrated into the M&E system? Is the M&E plan practical and sufficient to track progress towards achieving project objectives?
 - **M&E implementation:** To what extent is the project M&E system operational and contributing to provide systematic information on the project outcomes and outputs target? To what extent has the project engaged stakeholders in the design and implementation of monitoring? How can the M&E system be improved? To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achievement of outcomes and ensure sustainability?
 - **Partnerships and stakeholder engagement:** How has FAO collaborated with partners and to what extent does the project develop new partnerships or

enhance existing ones? Has the partnership strategy been appropriate and effective? To what extent are stakeholders engaged in the project? How, if at all, has FAO contributed to improving organizational policies, strategies and programmes? What linkages, if any, exist between the capacities developed among diverse types of beneficiaries?

- **Communication, awareness raising and knowledge management:** How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience? How can this be improved? How visible has the project been to partners and stakeholders – what is their general opinion of the profile of the project to date? How is the project assessing, documenting and sharing its results, lessons learned and experiences?
- **Cross-cutting Dimensions**
 - **Equity/Gender:** To what extent were the gender considerations accounted for in designing and implementing the project?
 - **Environmental:** To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?

1.3 Intended users

83. The intended users of the MTR include the project Budget Holder (BH), the GEF Coordination Unit (GCU) focal point who provided technical backstopping for the MTR process, the LTO, the FLO, the FAO project team at national and district level, the Project Management Unit (PMU), the Project Steering Committee (PSC), the Project Task Force (PTF) and the grant recipient and executing partner (the Department of Fisheries in Ministry of Agriculture, Irrigation and Water Development). Other intended users of the MTR are key stakeholders such as in-kind co-financiers of the project, district authority entities (in particular the District Council, which oversees district development), relevant government partner departments (e.g. Agriculture and Forestry), collaborating Projects (e.g. FISH/PACT - REFRESH, FAO TCP, PROSPER) and Universities (e.g. LUANAR, MZUNI and University of Malawi, Chancellor College).

1.4 Methodology

1.4.1 Overall methodological approaches

84. The MTR was conducted following the methodology set out in the MTR Terms of Reference (ToR), adhering to the UNEG Norms & Standards² and in line with the FAO-GEF MTR Guidance Document and annexes which provide methodological guidelines, templates and practices. The MTR adopted a consultative and transparent approach with internal and external stakeholders kept informed throughout the MTR process. Triangulation of evidence and information gathered from interviews, project documents (e.g. progress implementation reports, baseline

² <http://www.uneval.org/document/detail/21>

document, minutes of meetings, etc.), independent documents (e.g. GEF guidelines on gender) underpinned the validation, analysis, conclusions and recommendations of the MTR report.

1.4.2 Data collection and data sources

1.4.2.1 Data collection methods, tools

85. The guiding questions for the interviews are included in the appended MTR Matrix (Appendix 4 and summarized in Box 1). Data for answering the MTR questions (effectiveness, efficiency and sustainability) was collected through key informant interviews (KIIs), desk reviews, observation and institutional surveys.

1.4.2.2 Data sources

86. The BH/RM provided the MTR team with a set of key project-related background documents - the MTR "project information package"- soon after the contracts for the assignment were signed. These were grouped into 'Project documents (e.g. Project Implementation reports and minutes of the PSC), Independent documents (mainly GEF guidelines) and Technical documents (e.g. Baselines, M&E reports and project Technical Reports) as required by the FAO-GEF MTR Guide and annexes. These had been invaluable as sources of information and guidance on how to conduct the assignment and format of the MTR report in accordance with the FAO-GEF MTR Guide and annexes (FAO-GEF, 2020).

87. A second key source of information were interviews with stakeholder groups such as the PMU and FAO staff responsible for the project (Project Implementation Unit). Key informant interviews were also conducted with some members of the PSC, the Chief Technical Adviser, The Budget Holder (the FAO Resident Representative), members of the FAO Malawi as the implementing agency, the LTO, the FLO, focus group discussions with the PMU and interviews with individual members of the PMU, the PTF, GEF Operational Focal Point for Malawi, the Director of Fisheries, and district project partners (Department of Forestry and the Ministry of Agriculture). Interviews were also conducted with a sample of Beach Village Committees, Village Agricultures Committees (VACs), Village Natural Resources Management Committees (VNRMCs) and fish farming groups at the project site in Mangochi (Appendix 3).

1.4.3 Stakeholder engagement

88. A detailed matrix (provided as part of the TORs for the MTR) of stakeholders that had been proposed to engaged for the MTR in terms of their roles in the project, reasons for their inclusion/exclusion in the MTR, priority to the MTR (based on the stakeholder matrix provided in the ToR document as the sampling frame) is in the appended ToRs document (Appendix 1). These were categorized into: active stakeholders with direct responsibility for the project (e.g. FAO and GEF); Active stakeholders with authority to make decisions on the project (e.g. members of the PMU); secondary stakeholders (only indirectly or temporarily affected); Stakeholders at the grassroots level who benefit directly and indirectly from the project (gender disaggregated where possible); and other interest groups that are not participating directly in the intervention (e.g. development agencies working in the area, civil society organizations).

89. A detailed table of all stakeholders actually interviewed, their organizations and positions has been included as Appendix 3. This list was developed from the stakeholder table that was

provided in the ToRs for the MTR (Appendix 1). In total 104 people were interviewed. Of these 44 were women.

90. To assess stakeholder commitment to co-financing and capacity development, the MTR relied on desk reviews and individual key informant interviews. To review co-financing, the MTR team relied on the validation of the initial estimates, drawing from data and information made available and collected during the project implementation and the amount of co-financing that has materialized as at mid-term review. An updated table on co-financing is included as appendix 7. Capacity development, drawing from the FAO corporate approach to capacity development, was defined as improved skills and knowledge that contribute to enhanced organizational effectiveness.
91. Analysis of gender mainstreaming in the project was undertaken through desk reviews, and key informant interviews, drawing heavily from the recent GEF guidance on advancing gender equality in GEF projects.

1.4.4 Composition of the MTR team

92. The MTR team was composed of an international consultant (Professor Mafaniso Hara) and a national consultant (Mr. Welton Phalira). **Mafaniso Hara** is a professor of Natural Resource Governance at the Institute for Poverty, Land and Agrarian Studies (PLAAS), University of the Western Cape. He has over thirty-five years' experience in fisheries and natural resource governance, rural development and project management and administration. **Welton Phalira** is a development expert with qualifications in environmental sciences, natural resources management, climate change, disaster risk management, international cooperation and development, and project management and evaluation. He has over 20 years work experience in environment and natural resources management and over 10 years in programme and projects management, reviews and evaluations.

1.5 Limitations

93. Unfortunately, due to constraints imposed by the COVID-19 pandemic on international travel for FAO staff and consultants and the observed rise in cases in Malawi and Southern Africa, the International Consultant could not travel to Malawi for the MTR mission. Therefore, the international consultant undertook the whole assignment from his base in Cape Town, South Africa using virtual, email and telephonic technologies for interviews and information gathering. Additionally, face-to-face interviews in Malawi by the national consultant were restricted and field visits were minimal. Despite this, the National Consultant made a field visit to the Project site and interviewed representatives of key stakeholders including the PMU, district council project partners, community groups implementing agriculture, fisheries and natural resources management interventions. As such, all field areas were fairly represented.
94. However, where necessary, face-to-face interviews were conducted with selected representatives of community members (one-on-one with key informants). In that case, COVID-19 guidelines such as wearing of face masks and social distancing were strictly adhered to. The vast majority of the interviews though took place by phone or using platforms such as Skype, Zoom and Teams.

2. Project background and context

95. The fishing industry is an important sector in Malawi's national economy, especially in the rural areas in the vicinity of aquatic systems with fish resources, which provide livelihoods, income and food and nutrition security. Malawi's fisheries sector is estimated to contribute around 4% to GDP (FAO, 2014)³. Fishing is estimated to provide direct employment to 64,000 small-scale fishers and another 500,000 people along the value chain (boat building, net mending, processing and trading, etc.), including women (Department of Fisheries (DoF), 2018). According to the National Statistical Office, the national average number of people per household is 5. Thus, an estimated 2.8 million people (approximately 15.6% of the total population) depend on the fishing industry for their livelihoods and economic needs (Hara and Njaya, 2021). Fish contributes 70% of the animal protein in the diets of Malawians and 40% to protein supply (Government of Malawi (GoM), 2018), which represents one of the highest dependencies on fish for animal protein in Southern Africa. This is particularly the case for poorer Malawians, for whom fish may be the only regularly available source of animal protein. However, the per capita fish supply had fallen from 14 kg in the 1970s to about 5.7 kg per person per year by 2011, a 60% decline (FAO, 1992; 2012), mainly due to population growth and high demand against declining or stagnant production.
96. Because of the high demand, poverty and unemployment in rural areas, Malawi's fish resources face severe pressures, which has major implications for livelihoods, sustainability and food security. The fisheries resources in Lake Malawi, particularly in the South-East arm of the lake, have been under severe pressure and have largely been over-exploited for many years. Similar heavy pressure has been exerted on fisheries in Lake Malombe, the project's target area, since the 1980s when production from the Lake was at its highest with estimated landings of over 12,000 annually, representing approximately 17% of Malawi's total production. Since then, the fishery had experienced a rapid decline from about 12,000 tons in 1988 to around 3,700 tons in 1999, mainly as a result of heavy fishing effort (fishing effort increased more than three times from 472,425 net sets in 1983 to 1,368,993 in 1995), resulting in a sharp fall in Catch per Unit Effort (CPUE). This average of between 3000 and 4000 tons annual catch has been the norm since then, with the result that the lake now contributes an average of only 2 to 5% of the total national fish production.
97. The "Building Climate Change Resilience in the Fisheries Sector in Malawi" (GCP/MLW/053/LDF - FiRM) project is promoting an integrated package of resilience strategies, expected to build upon the coping strategies already applied by local communities (FAO, 2021). The project objective is to improve the resilience of fishing communities around Lake Malombe to climate change. The Executing Partner is the Department of Fisheries in the Ministry of Agriculture, Irrigation and Water Development. The resilience strategies promoted through the project respond to a number of strategic considerations, in addition to the nature of the climate change stresses themselves (Ibid):
- Under a "business as usual" scenario (BAU), capture fisheries on Lake Malombe are already in a state of collapse, due to overfishing resulting primarily from high prevalence and use of inappropriate fishing gears. Climate change threatens to accentuate and accelerate the existing processes of decline, while increasing some pre-existing stresses (such as lake level variations) from manageable to critical levels. There is therefore a need for "no regrets" actions to correct the drivers of this decline, while at the same time introducing additional measures to counter the additional stresses

³ A recent report by the Pact FISH project (FISH, 2018) valued the sector's contribution to GDP at 7.2%.

imposed by climate change and to improve the resilience of fisheries and livelihoods to climatic shocks.

- The actors with least ability to adapt to climate change through switching livelihood support options are the poorest. Those with greater access to economic resources, who currently own most of the factors of production in the form of fishing boats and fishing gear, are considered to have a relatively high capability to adapt by investing their capital in alternative businesses. There is therefore a need to ensure that adaptation strategies are formulated in such a way as to maximize benefits for the poor, both through improvements to their own production systems and through the generation of employment opportunities and other economic multiplier effects as a result of improvements to production systems managed by the less poor.
- Aquaculture has some potential to contribute to the income and food needs of local stakeholders. There are already a number of aquaculture ponds in the project area. A number of factors, however, including poorly developed value chains, limited technical and organizational capacities, high capital requirements and the risk of price fluctuations due to the availability of fish from the wild fisheries of Lakes Malombe and Malawi, limit the potential of aquaculture as a reliable alternative livelihood strategy capable of generating significant resilience benefits for the poor. These constraints are beyond the scope of this project alone to address effectively. The project's aim is therefore not to increase the scale of aquaculture in the area, but rather to focus on supporting the "climate-proofing" of aquaculture and on integrating it into diverse and resilient farming/livelihood systems, accessible to the poor.

98. Taking into account these considerations, the FiRM project aims to create a situation in which:

- *Capture fisheries on Lake Malombe are restored and "climate-proofed"*, allowing them to generate livelihood benefits for local people in the form of income and food security, despite the BAU stresses of overfishing and the added stresses to ecosystems and livelihoods that are expected as a result of climate change;
- *Local people (especially the poor) have access to resilience options* for meeting income and food security needs, in order to buffer their livelihoods against the potential impacts of climate change and BAU pressures on their existing livelihood support strategies.
- A Vessel Monitoring System (VMS) for commercial fishing on Lake Malawi was supported by TCP/MLW/3504, including the first two years of implementation. *FiRM was expected to support the VMS for an additional, third year.* The justification for this activity was based on the ecological (including fisheries governance) linkage between Lake Malombe and the SE Arm of Lake Malawi

99. The project objectives are structured under four components, namely:

- **Component 1:** Strengthening access to information and knowledge regarding climate change and its implications
- **Component 2:** Creating a favorable enabling environment of policies, plans, regulatory instruments and capacities for the promotion of climate change resilience among fishing communities
- **Component 3:** Strengthening capacities at local level to increase the resilience of fishing communities to climate change
- **Component 4:** Monitoring and Evaluation, and Adaptation learning

100. Launched in January 2017 and scheduled to finish in December 2021 (a 5-year project period), the total project budget is USD 17 580 000, with a GEF contribution of USD 5 460 000

(31.06%). As of June 2021, delivery on the GEF budget was at USD 3,380,000 ((57.6% of the GEF budget). According to the July 1 2020 to June 30 2021 GEF Project Implementation Report, \$6 728 276 (55.51%) of the pledged \$12,120,000 in-kind co-financing had materialized by 30 June 2021. Although the project was scheduled to start in January 2017, implementation only started in November 2018 with the launch of the project in Mangochi on 27th November 2018, an almost two-year delay.

101. Although the project has made progress towards achieving its objectives, implementation has been hampered by operational issues, in particular the release and liquidation of operational advances, and rigorous and often slow procurement processes. In addition, 2020 and 2021 had/have seen huge disruption to project activities wrought by the Covid-19 pandemic.

3. Theory of change

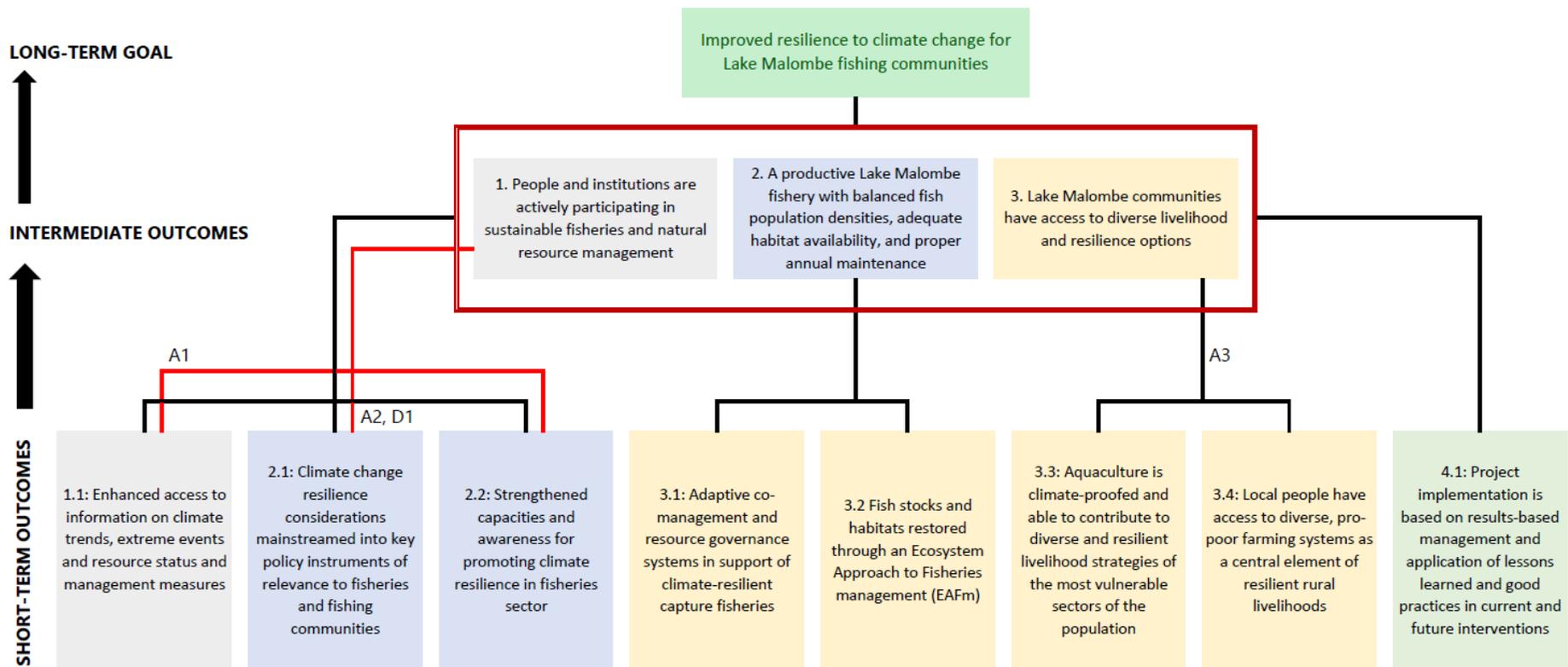
102. Using a Theory of Change (TOC) model, this section illustrates how each of the eight outcomes of FiRM Project will contribute to the long-term objective of improving the resilience of fishing communities around Lake Malombe to climate change demonstrated by a 20% increase in disposable income and an Increase in the proportion of households (HH) with acceptable Food Consumption Scores (FCS) from 56% to 85% in targeted areas. This will be achieved through development of effective interventions and incentives for joint management with greater community cooperation that will ultimately strengthen adaptation capacity and improve management of fishery resources. The TOC also shows how the resulting project impacts can be sustained, replicated and scaled up to contribute to climate-resilient development in Malawi. Each of the short-term outcomes is made up of a series of activities⁴ responding to the identified barriers, gaps and challenges identified during the formulation of the project. Each short-term outcome leads to intermediary outcomes (project impact) and ultimately, to the expected contribution of the project to the long-term goal. Additionally, the project will promote the Ecosystem Approach to Fisheries Management (EAFM) that offers a practical and effective means to manage fisheries more holistically. It represents a move away from fisheries management that focuses on target species, towards systems and decision-making processes that balance environmental, human and social well-being within improved governance frameworks. The theory is diagrammatically presented as Figure 3-1.

103. **Outcome 1.1:** encompasses the generation, organization and dissemination of data and information on climate change, and strengthening mechanisms for disaster risk identification and early warning, and monitoring of fisheries and ecological resources. Gathering, organizing and communicating knowledge will motivate better ecosystem management and reduced Illegal, Unreported and Unregulated (IUU) fishing. This would be demonstrated by (a) an increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures from 33% at baseline to 75% by the end of the project; and (b) An increase in the proportion of decision-making, planning and regulatory instruments in the project area, related to climate change resilience in fishing communities that are based on reliable information. Equipped with relevant and reliable information, people and institutions will actively participate in sustainable fisheries and natural resource management interventions. In addition, the data and information generated from the project would be shared nationally through various forums including the project-based PSC, the annual National Fisheries and Aquaculture Forum (NFAF) and the National Climate Change and Disaster Risk Management Technical Committee (NCC&DRM),

⁴ Too numerous to be included in the diagram

which is the legislative institution for deliberation of climate change and disaster risk management matters that require national resolve. At the district level, data and information will be shared through the District Executive Committee, which is the coordinating body for all technical functions at the Local Government Authority (LGA) level.

104. **Outcome 2.1** seeks to mainstream climate change resilience into key policy and planning instruments of relevance to fisheries and fishing communities, particularly the National Climate Change Management Policy, the Disaster Risk Management Policy, the Malawi Growth and Development Strategy (MGDS III) and the National Adaptation Programmes of Action that was considered to be predominantly agriculture-oriented and the Agriculture Sector-Wide Approach (ASWAp). The mainstreaming is envisaged to strengthen institutional understanding of climate change threats to fisheries and incentive the development of effective strategies and regulatory instruments to support adaptation. This will also increase the proportion of people and institutions that are actively participating in sustainable fisheries and natural resource management and hence contributing to climate resilience in Lake Malombe and surrounding ecosystems.



Key to Assumptions (A) & Drivers (D)

A1. If Lake Malombe communities are aware and knowledgeable about the impacts of climate change, they will actively participate in climate resilience interventions

A2. Climate change not effectively mainstreamed in agriculture, climate change and natural resource policy documents

A3. Communities would have the ability to invest in aquaculture (Communities have fish farmer mentality)

D1. Project is national and therefore should contribute to national policy

Figure 3-1. Proposed Theory of Change for GCP/MLW/053/LDF

105. Given that the intervention has a special geographical focus, this outcome further entails mainstreaming climate change considerations into the District Development Planning System (DDPS), the District Environment Action Plans (DEAPS) and other similar plans and strategies at the and sub district levels. The main channels of communication would be technical advisories, manuals and policy briefs. Additionally, capacity building in the EAFM, which is a pivotal tool for addressing capacity and knowledge needs of the project, is expected to have impacts at national level, especially because of targeted EAFM 'LEAD' training events for relevant decision makers. As a comprehensive approach, in addition to capture fisheries and aquaculture, EAFM will also address land/water resources governance and management requirements.
106. **Outcome 2.2:** focuses on strengthening physical capacities of the fisheries sector and other Environment and Natural Resources Management (ENRM) institutions to effectively spearhead climate change adaptation interventions. In addition, it seeks to increase awareness of personnel of these institutions to spearhead fisheries restoration interventions particularly in Lake Malombe and the Southeastern arm of Lake Malawi.
107. Capacity building supported by the project will take various forms, from format trainings to on-the-job training through participation in project activities, local and national workshops and training events, as well as specific training workshops abroad for key staff, based on requests from DOF. FiRM Project will be based at and cooperate closely with Mangochi District Fisheries Office, which will present a golden opportunity for a two-way transfer of knowledge and skills between the project experts and DOF. Sustainability will be ensured through DOF HQ's contributing to, and active participation in workshops and trainings, while also providing normative support.
108. FiRM will also engage with key DOF entities, including Malawi College of Fisheries and the Monkey Bay Fisheries Research Station, both located in Mangochi to cultivate their interest in and enhance their capability in EAFM. FiRM will also work closely with Senga Bay Fisheries Research Station on selected aspects (cage aquaculture, limnology) and National Aquaculture Centre (biosecurity, certification etc.). Other government and academic institutions will be engaged, to build their capacities for ease of sustaining the various interventions propagated by the project.
109. While there is a need for a national review of fisheries data collection, analysis and formulation of appropriate control recommendations, FiRM Project is primarily concerned with data relating to Mangochi District. However, it will support nationwide Behavioral Change Communication (BCC) interventions such as the "Save the Chambo Campaign" given the adverse effect of IUU in Lake Malawi on the Lake Malombe Fishery. In addition, opportunities for cooperation with other projects and institutions to address the national level data analysis and communication requirements will be explored. Reliable data and information will improve planning and support the piloting of actions for climate adaptation, and strengthening of co-management. These efforts will result in an increase in the proportion (%) of targeted institutions applying evidence-based planning in support of resilience measures in Lake Malombe catchment from 15% to 50% by the end of the project.
110. Capacity building is a cross-cutting aspect that will (a) incentivize people and institutions to actively participating in sustainable fisheries and natural resource management; (b) support governance measures resulting in a productive Lake Malombe fishery with balanced fish population densities, adequate habitat availability, and proper annual maintenance; and (c) Increase people's access to diverse livelihood and resilience options.
111. **Outcome 3.1** is advancing adaptive co-management and resource governance systems in support of climate-resilient capture fisheries. This entails facilitating the establishment of multi-stakeholder co-management structures that will develop and execute participatory fisheries and natural resource management norms, regulations and plans. It also seeks to promote

transparency and accountability in resource governance structures, particularly Beach Village Committees (BVCs).

112. Therefore, BVC's will be supported to re-organize and form oversight institutions such as sub-Fisher Associations at Traditional Authority level (there are three T/As around Lake Malombe). Training workshops will be conducted at each BVC to develop EAFM plans that will ultimately be integrated in the Mangochi District Development Plan.
113. **At the national level**, the Malawi Fisheries Act of 1997 is under review since several years. Meanwhile implementation of the existing Act has evolved, including interpretation of fines, which is not easily accessible to new Magistrates and Prosecutors. Therefore, the need to train these entities in practicing the law as it applies to the fishery has been identified as a priority and training is being carried out by REFRESH. This complements the efforts and increases sustainability of the capacity building interventions propagated by FiRM Project through this outcome.
114. Another aspect to advancing adaptive co-management and resource governance is through enhancing vessel monitoring. The TCP/MLW/3504 project, financed by FAO to prepare baseline information for GCP /MLW/053/LDF, included the procurement of a Vessel Monitoring System (VMS) for commercial stern and pair trawlers on Lake Malawi. A two-year contract with the service provider, AST⁵ was signed in March 2018. The project will provide support to the VMS, including purchasing of a vessel and additional tracking devices for improved monitoring of commercial fishing in the SE Arm of Lake Malawi, which is linked to Lake Malombe fishery via the Upper Shire River. A hand-over agreement will be signed with DOF to manage the system upon project completion. The lessons learnt from this intervention shall be applied in other water bodies, particularly Lake Malawi.
115. The governance, transparency and accountability promotion, and fishing monitoring interventions will increase stakeholder (Fishers, processors, farmers, gear owners, traders, boat builders and net menders) satisfaction with, and trust in co-management structures; increase fisher's compliance with fishing closed season and gear restriction and incentive people to set aside sanctuaries (no-take areas) for fish breeding. This is premised on the understanding that fishing communities will become less vulnerable to climate change if risks are identified and adaptation options communicated to them. Supporting increased participation in co-management processes will increase local community ownership and capacity to anticipate and adapt to climatic hazards; controlling IUU and improving support to deter illegal fishing.
116. **Outcome 3.2** aims at restoring fish stocks and habitats through propagation of the Ecosystem Approach to Fisheries management (EAFM) approach. This includes training fisheries and natural resources managers in the EAFM Concept. The EAFM training uses an effective participatory planning process to identify issues and formulate management vision and objectives. However, once the management plan has been agreed, managers are often faced with the need to select among competing and alternative approaches to achieve the objectives. Therefore, the project will support a manager's toolbox for EAFM implementation in inland fisheries. This will involve selected experts on inland fisheries and will aim to be used to guide management authorities of small-scale inland fisheries. Equipped with knowledge and skills in the EAFM concept, the managers will effectively facilitate and coordinate a restoration programme for Lake Malombe and other designated areas.
117. Given the complexity of this intervention and the limited local capability in EAFM, the Project will engage the services of an international consultant to conduct a comprehensive fisheries system analysis of Lake Malombe that will, among other objectives, ascertain the potential for fisheries enhancement to contribute to sustainable development of the Lake Malombe fishery, and support the design of specific fisheries enhancement activities (pilot

⁵ (<https://www.theastgroup.com/uk/solutions/remote-asset-tracking-monitoring-control/ivms/>)

restocking of Lake Malombe with tilapia spp. and/or natural/artificial structures for habitat enhancement and/or prevention of destructive fishing, e.g. artificial reefs, expanded fish sanctuaries etc.). Enhancement actions coupled with capacity building interventions around the EAFM will potentially expedite restoration of Lake Malombe fisheries. It is envisaged to boost the revival of the fishery that will be sustained through a strong governance system where traditional leaders will actively collaborate with leaders of fisheries and natural resource governance institutions, fishers and traders to curb illegal, unreported and unregulated activities (IUU). Most importantly, pilot-scale activities coupled with local EAFM planning processes will provide a practical application of capacity-building activities and provide incentives to strengthen co-management. This will be demonstrated by an increase in the representation of higher value species (chambo) in sampled catches from 6.8% by weight to 10.2%; increased Catch Per Unit of Effort (CPUE), and increased proportion of kasawala (immature chambo i.e. less than 15 cm) in sampled stocks – ultimately resulting in a productive Lake Malombe fishery with balanced fish population densities, adequate habitat availability, and proper annual maintenance. Lessons from this intervention will be shared through FSTAP and the other forums stated under outcome 1.1 above.

118. **Outcome 3.3** encompass the development and execution of an aquaculture resilience plan focusing on Increasing knowledge and skills in climate change adaptation, and generating lessons for upscaling and out scaling. The project will pilot cage culture operation and support on-going aquaculture operations particularly in areas at least 50 km radius away from Lake Malombe). The cage culture shall be piloted in designated secure locations such as near the District Fisheries Office in Mangochi Boma and will engage local community members in the management. Trials will assess economic viability and potential problems that need to be addressed. Given a favorable assessment, the project will produce a manual and recommendations for further development of cage culture in the river area. In anticipation of expanding aquaculture operations and potential restocking of water bodies in Malawi, FiRM will spearhead the development of appropriate protocols and regulations for biosecurity for fish hatcheries, to ensure the production of pathogen free fingerlings. These interventions will make aquaculture more resilient to climate change and the reduced risks will make it a more attractive livelihood and economic option for fish production.

119. **Outcome 3.4** strives to increase people's access to diverse, pro-poor farming systems as a central element of resilient rural livelihoods. This will be achieved through propagation of participatory learning, extension programmes and demonstrations on catchment area (integrated watershed) management, fish processing methods, and climate smart agriculture, among other strategies. The project will support field level interventions in one selected micro watershed following an assessment engaging district council representatives, local leaders and community members thereby increasing the proportion of farm households that are practicing good farm management into diverse portfolio of climate change resilience measures

120. It is assumed that communities will be willing to freely participate in the catchment management interventions since the support is meant to enhance their livelihoods. In addition, extension personnel in agriculture, land resources conservation and forestry will be willing to provide non-discriminatory technical support towards such interventions given that they are in support of their objectives despite that in many cases, the most vulnerable populations reside in remote (hard-to-reach) areas. The outcome is premised on the theory that agricultural activities can be made more productive and resilient to climate change by improved land husbandry practices that reduce watershed degradation and associated negative impacts on the aquatic environment. The training in the EAFM will help communities to understand and appreciate the water-land, and social and ecological linkages to effectively sustain the interventions with the support of respective government institutions such as the ministries or

departments responsible for agriculture, forestry, fisheries and land resources, which are also key partners in the project.

121. **Outcome 4.1:** propagates learning as a core ingredient to improving project delivery and the attainment of project outcomes and goals. It constitutes the establishment and operationalization of a robust monitoring, evaluation and reporting system capable of generating and storing data that is relevant and easily retrievable and sharable for decision-making on project and related matters.
122. The effective implementation of the project requires the development and execution of a project monitoring and evaluation system, including internal measurement of project indicators on a regular basis as prescribed in the results framework, as well as external evaluations at project mid-term and end. Also, mechanisms for effective management and communication of knowledge, information and lessons learned will be essential for maximizing the acceptance of the project among key stakeholders, and the realization of the potential for scaling up its impacts. Through the EAFM approach training and practical guidance to stakeholders, the project will build the capacity of fisheries and natural resource sector stakeholders and demonstrate good practices in data management for project management success.

4. Key findings and MTR questions

4.1 Relevance

123. Relevance measures the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institutional needs, policies, and priorities, and continue to do so if circumstances change.

4.1.1 Alignment with regional and sub-regional environmental and development priorities

124. Globally, the FiRM Project aligns with the Sustainable Development Goals (SDGs) particularly Goal 1. End poverty in all its forms everywhere; Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 5: Achieve gender equality and empower all women and girls; Goal 6. Ensure availability and sustainable management of water and sanitation for all; Goal 13. Take urgent action to combat climate change and its impacts; and Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
125. At the regional level, the Project aligns with the Africa Agenda 2063 particularly aspiration 1: "A prosperous Africa based on inclusive growth and sustainable development". By 2063, Africa aspires to be a prosperous continent, with the means and resources to drive its own development, with sustainable and long-term stewardship of its resources and where "modern agriculture for increased production, productivity and value addition contributes to farmer and national prosperity and Africa's collective food security; and Africa's unique natural endowments, its environment and ecosystems, including its wildlife and wild lands are healthy, valued and protected, with climate resilient economies and communities (Africa Union Commission, 2015).

4.1.2 Alignment with national environmental and development priorities

126. Nationally, the Project aligns with national environment, climate change and development priorities as provided for in the Malawi 2063, the Malawi Growth and Development Strategy (MGDS) III, the National Climate Change Management Policy (2016), the National Climate Change Investment plan (2013), the National Fisheries and Aquaculture Policy (2016), the National Agriculture Policy (2016), the National Agriculture Investment Plan (2018) and, the National Forestry Policy (2016), among others. For example, the Malawi vision 2063 particularly Pillar 1: Agricultural Productivity and Commercialization calls upon Malawians to go **“Beyond focusing on crops that guarantee food security, emphasis shall be on strategic crops, livestock and fisheries that will yield high-income in the local, regional and international markets”** (GoM, 2020).
127. At its preparation, the Project was aligned with the National Adaptation Programmes of Action (NAPA) of 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. Additionally, Malawi submitted its updated Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC) in July 2021. The NDC articulates areas of priority for climate change management through both mitigation and adaptation measures needed to address challenges of climate change. The updated NDC advances effective and efficient EWS, smart agriculture, livestock and fisheries, and climate-proofed infrastructures among the priority climate change adaptation actions necessary for increasing the resilience of the most vulnerable Malawians (GoM, 2021). Among these, the FiRM Project is advancing efficient EWS through outcome 1.1 (Enhanced information on climate trends, extreme events and resource status, is available and used for the formulation and implementation of effective and timely resilience and management measures), smart agriculture through outcome 3.4 (Local people have access to diverse, pro-poor farming systems as a central element of resilient rural livelihoods) and fisheries development, which is the overall focus for the Project.
128. At its preparation, the Project was also aligned with the United Nations Development Assistance Framework (UNDAF) in Malawi (2012-2015) that set out climate change as a key delivery area, and specific activities were mainstreamed through 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. The Project is still well aligned with the updated UNDAF 2019 – 2023 particularly Pillar 3 – Inclusive and Resilient Growth that propagates interventions for addressing climate change – both adapting to and recovering from its effects, and reducing further contributions through mitigation measures (United Nations Country Team, 2019).

4.1.3 Alignment with GEF Outcomes

129. The project aligns with all the three GEF outcomes for Climate Change Adaptation (CCA). It is aligned with GEF Focal Area Objective CCA1: “Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level” through its focus on enhancing access to information on climate trends, extreme events and resource status and management measures; mainstreaming climate change resilience considerations into key policy instruments of relevance to fisheries and fishing communities; and capacity strengthening and awareness-raising on Ecosystem Approach to Fisheries Management

(EAFM). It is aligned with GEF CCA2: “Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level” by advancing adaptive co-management and resource governance systems in support of climate-resilient capture fisheries; spearheading fish stocks and habitats restoration and climate-proofed aquaculture and agriculture, among other livelihood strategies. Linkage with CC3: “Promote transfer and adoption of adaptation technology” is mainly through piloting of environmentally friendly aquaculture technologies such as cage culture and energy-efficient fish processing technologies such as the Chitofu 3-In-1 (Monkey Bay Fisheries Research Station, 2021).

4.1.4 Alignment with FAO Strategic Objectives and higher goals

130. At its development, the FiRM Project was aligned with the National Medium-Term Priority Framework (NMTPF) 2010-2015 particularly Priority outcome 3: “Sustainable land and water management”. The Project is advancing this objective by spearheading sustainable land and water management and options for resilience to climate-induced shocks using the EAFM approach. FAO has renewed its commitment to supporting the Government of Malawi’s development agenda through an updated Country Planning Framework (CPF) for the period 2020-2023. The development objective of the updated FAO CPF (2020-203) is to provide an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare that manifests in improved household food and nutrition security and sustainable livelihoods. It also seeks to improve the governance of natural resources, environment and ecosystems thereby reducing the risk of natural disasters and improving the resilience of communities to impacts of climate change and climate variation (FAO, 2020).
1. FiRM Project aligns with FAO CPF Outcome 1 (Rights holders in Malawi access more accountable and effective institutions at the central and decentralized levels that use quality disaggregated data, offer integrated service delivery and promote civic engagement, respect for human rights and rule of law). This outcome advances the strengthening of policy and strategy formulation, harmonization and implementation monitoring at national and district level, thereby aligning with FiRM outcome 2.1 (Climate change resilience considerations integrated into policy and planning decisions of relevance to fisheries and fishing communities at Lake Malombe and beyond). The CPF also seeks to strengthen capacity (enhancing performance) in the agricultural sector to respond to emerging needs. It particularly seeks to develop capacity of relevant government departments and support collection, management and dissemination of information and statistics for decision making in agriculture, forestry and fisheries that is aligned with FiRM’s outcome 1.1 (Enhanced use of information on climate trends, extreme events, resource status for management measures at Lake Malombe);
 2. The Project seeks to strengthen capacities at local level to increase the resilience of fishing communities to climate change through adaptive co-management and resource governance (outcome 3.1), fish stocks and habitats restoration (outcome 3.2) and climate proofed aquaculture for diverse and resilient livelihoods (outcome 3,3) that align with FAO CPF Outcome 2 (Malawi has more productive, sustainable and diversified agriculture, value chains and market access). Four outputs of the CPF namely (a) Increased proportion of food secure households at national and district levels; (b) Strengthened inclusive value chains (livestock, fisheries and aquaculture, forestry and crops); (c) Increased income stability, diversification and household asset base; and (d) Access to good quality seeds enhanced, are also advanced through component 3 of FiRM Project.
 3. Outcome 3 of the FAO CPF propagates sustainable access to land by all, sustainable management and utilization of natural resources and responsible use of agro-chemicals in the

agricultural production systems. The FiRM Project is advancing the “Sustainable management and use of environment and natural resources” aspect through outcome 3.1 (adaptive co-management and resource governance), and outcome 3.2 (fish stocks and habitat restoration).

4.1.5 Complementarity with existing interventions

131. The project is premised on previous interventions and complements ongoing interventions by FAO and other institutions in the agriculture, fisheries, climate change and natural resource management sectors. FAO has been supporting development of aquaculture in Malawi since 2009, particularly through Technical Cooperation Projects (TCPs). Previous interventions include TCP on the transfer of breeding technology of catfish; and TCP to support work on curbing post-harvest losses of the fishes from Lake Malawi. Additionally, FAO supported the Department of Fisheries (DoF) to develop the Ecosystem Approach to Fisheries and Aquaculture (EAFA) strategy and plan for the South-East Arm of Lake Malawi and Lake Malombe. FAO further advises the Government of Malawi and the Ministry of Agriculture on food security priorities (ongoing).
132. The FiRM Project also builds upon the USAID/Malawi-financed Fisheries Integration of Society and Habitats Project (FISH) Project which was implemented for five years over the period from 2014 to 2019 with the overall goal to achieve “increased social, ecological and economic resilience of freshwater ecosystems and people who depend on them” in the four freshwater ecosystems of Lakes Malawi, Malombe, Chiuta and Chilwa, working closely with the districts of Mangochi, Balaka, Machinga and Zomba and Department of Fisheries. Since 2019, FISH has been replaced by the Restoring Fisheries for Sustainable Livelihoods in Lake Malawi Program (REFRESH) that seeks to conserve the freshwater biodiversity of Lake Malawi by restoring natural fisheries productivity in the lakeshore districts of Karonga, Rumphu, Likoma, Nkhata Bay, Nkhotakota, Salima, Dedza and Mangochi (Pact, 2021). However, there has been limited exploration of shared activities reportedly due to disruption of operations caused by COVID-19. FISH was a source of co-financing and had contributed approx. 75% of its commitment at its closure but REFRESH has not officially committed to co-financing.
133. The following projects were also operational and relevant to the Project but had weak links with FiRM at the time of MTR (and had not committed to co-financing):
 - Sustainable Fisheries, Aquaculture Development and Watershed Development Project (SFAD-WDP) (2017 – 2022) that has 4 components namely (i) Sustainable Capture Fisheries and Watershed Management; (ii) Aquaculture Development; (iii) Fish Value Chain Strengthening and (iv) Project Management, Coordination, Monitoring and Evaluation (African Development Bank Group, 2020).
 - PROSPER (Dec. 2018- March 2023). A multi-stakeholder resilience programme supporting the Government of Malawi to reduce extreme poverty and end the recurrent cycle of crises and humanitarian assistance, financed by UKAID under the BRACC (Building Resilience and Adapting to Climate Change (Connelly & Kohnstamm, 2020).
 - Saving Lives and Protecting Agriculture – Based Livelihoods in Malawi: Scaling Up the Use of Modernized Climate Information and Early Warning System (M – CLIMES) (2017 – 2023). A six-year GEF-financed Government of Malawi project that is developing and disseminating tailored warnings and advisories for fishing communities of Mangochi, Salima, Nkhata Bay and Nkhotakota around Lake Malawi (UNDP, 2017).

4.1.6 Appropriateness of Project Design for delivering the expected outcomes

134. The Project's design, particularly advancement of the EAFM approach, capacity building and piloting of catchment level interventions for upscaling at the district and national levels is generally appropriate to delivering the expected outcomes except for a few shortfalls. Appropriate elements include the Ecosystem Approach to Fisheries Management (EAFM), which is a plausible approach to managing the water-land nexus issues affecting the catchment areas. Secondly, the emphasis on capacity development on both physical and social aspects including through awareness and training programmes for technical personnel, governance institutions and community members is appropriate to increasing knowledge and changing people's attitudes and practices towards desired behavior in resource management. Thirdly, the integration of research and practical adaptation measures is particularly important as it allows for validation of theories through field-level testing in real situations. Fourth, continuous research on social and ecological aspects allows for iterations with input from beneficiaries thereby increasing adoption, ownership and sustainability of approaches and technologies. Further, the integration of communication as a core component is appropriate given that attaining the desired societal transformation calls for concerted and rigorous communication to increase knowledge and awareness, and incentivize positive perception of, and action on the desired action.
135. In addition, communication, gender equity and cross-cutting issues/aspects were well integrated in the design through recruitment of dedicated specialists based at the PMU to spearhead mainstreaming of these aspects in project activities. However, the management of environmental and social safeguards surrounding restocking in Malombe was not adequately considered in the design. Given the complexity of this undertaking, the project would require prior Environment and Social Impact Assessment (ESIA) approval but this requirement was not effectively integrated in the design.
136. The dual scope of the project to address both national and sub-national (catchment level) natural resources and climate change management requirements was also appropriate on the assumption that, apart from direct support towards national policy development or revision/updating, catchment level interventions would generate lessons for upscaling and out scaling in other parts of the country.

4.1.7 Clarity, practicality and feasibility of the project's objectives and components within the Project's timeframe

137. The projects aspiration to mainstream climate change management considerations in national level policies in agriculture, climate change, disaster risk management and related policies and strategies; undertake country-wide fish habitat restoration interventions (e.g. increasing no take area to 6,000 hectares); and restoring the Lake Malombe fishery with the allocated resource envelope and within the project time-frame (based on the indicators and targets suggested in the project document (Appendix 6) was overly ambitious and hence not practically achievable. The feasibility of artificial restocking is questioned by other stakeholders within the fisheries sector given that previous studies under the FAO-financed TCP project on aquaculture development which found that restocking of Lake Malombe is not feasible, arguing that natural regeneration is the most feasible and cost-effective approach coupled with improved governance. However, FIRM Project is advancing artificial restoration which is contrary to previous recommendations. This may create divergent views and limit the participation of key stakeholders if not adequately addressed.
138. Supporting communities with alternative livelihood options such as climate-proofed aquaculture and other land-based climate smart interventions is plausible only if the value

chains for these products are also enhanced but this is one element that is conspicuously missing in the project design.

4.2 Effectiveness

139. Effectiveness measures the extent to which the intervention achieved, or is expected to achieve, its objectives and results, including any differential results across groups

4.2.1 Achievement of project outputs

140. The project has mixed progress on outputs. Notable progress relates to activities on baselining, capacity building of the Fisheries Department, technical personnel and beneficiaries, and establishment/revival of governance institutions or structures.

141. The Project has conducted detailed Vulnerability and Disaster Risk Assessments (VDRA) of Communities around Lake Malombe (BVCs) that has revealed inadequate provision and adoption of community level early warning systems for climate related disasters with disastrous consequences particularly on farmers and fisher folk (Output 1.1.1). The VDRA has been the basis for planning around the EAFM approach ensuring integration of flood and drought mitigation measures, and identification of alternative livelihood and integrated watershed management interventions for the Kulungwi River catchment.

142. The project has effectively improved the capacity of DoF to deliver on its objectives related to propagating sustainable and resilient fisheries approaches and interventions. The Project has procured and repaired vehicles and vessels, renovated DOF offices and houses, and provided several other items particularly to the Department of Fisheries (Output 2.2.2). With these resources, the DOF has revived local fisheries management authorities resulting in improved participation in fisheries management and monitoring/patrol operations, the benefits of which will accrue with time if the interventions are sustained.

143. The purchase order for the patrol vessel was issued on 29th July 2021 and the vessel is currently under construction, expected to be delivered in Malawi in November 2021.

144. The other capacity development outputs are particularly aligned with building resilience to aquaculture and inland fisheries in Lake Malombe and the Southeast arm of Lake Malawi as reflected in outcome 3. Notable outputs include training of 17 (9M, 8F) community members in cage assembly and installation aimed at creating a locally based community of practice in fish cage development, training of 15 (10M, 5F) community leaders (BVC members and village heads) in best cage culture management practices, and training 7 (6M, 1F) Fisheries Extension Workers (5 from District Fisheries Office; 2 from Malawi College of Fisheries) in best cage culture management practices (Output 3.3.4). BVC co-management structures have been revived through fresh elections and training. Elections have been conducted for Sub Fisheries Association (Sub-FA) members and linking them with other key co- management stakeholders like chiefs, fishers gear owners and other community-based key committees like ADCs (Output 3.1.1).

145. Transect walks through all 33 BVC and 1 RVC were conducted, problems were identified by all participants, current map versus desired future maps for each BVC were drawn, trend analysis from 1970 to 2020 was conducted and models were drawn on flip charts, activities to overcome challenges were identified. All BVCs have formulated annual adaptive EAFM management plans that include financing mechanisms for fisheries co-management although the financing is often not guaranteed (Output 3.1.1).

146. However, delivery of a number of outputs has been delayed while other outputs have been aborted or need review. For example, the Project has so far not been able to identify a service provider to identify ecological parameters for determining management and resilience options

in and around Lake Malombe hence, the Project is using proxy indicators for measurement of ecological parameters (Output 1.1.2). The plan to institute a “Think tank” on Climate Change in the fisheries and aquaculture sector has been dropped because stakeholders in the fisheries sector have resolved that a separate ‘Think Tank’ would constitute a duplication of effort given that the Fisheries and Aquaculture Scientific and Technical Advisory Panel (FSTAP) already performs a similar function. Subsequently, the FSTAP has requested DOF to expand its terms of reference (ToRs) to include discussions around climate change in fisheries. Upon DOF approval, the FSTAP mandate will thus encompass FiRM’s Objective. Relatedly, the PSC advised the Project to use the annual National Fisheries and Aquaculture Forum (NFAF) for discussions around climate related matters. However, the NFAF has not met since the start of Covid-19. In addition, the Government of Malawi has the Technical Committee on Climate Change and Disaster Risk Management, which is the legislative institution for deliberation of climate change and disaster risk management matters that require national resolve.

147. Generally, capacity development outputs for personnel in key institutions (Output 2.2.1), and those related with ecosystem restoration programmes (output 3.2.2) and restocking for Lake Malombe (output 3.2.3) have also been delayed, reportedly due to COVID-19 and protracted procurement processes. In Addition to COVID-19 and protracted procurement, aquaculture development outputs have not been achieved due to low capacity of the approved service provider to deliver on agreed procurement (Output 3.3.1). Cage culture has commenced with 3 out of 5 cages partially stocked (Figure 4-2) but pond fish farmers had been waiting for supply of fingerlings (for over 2 years)⁶.

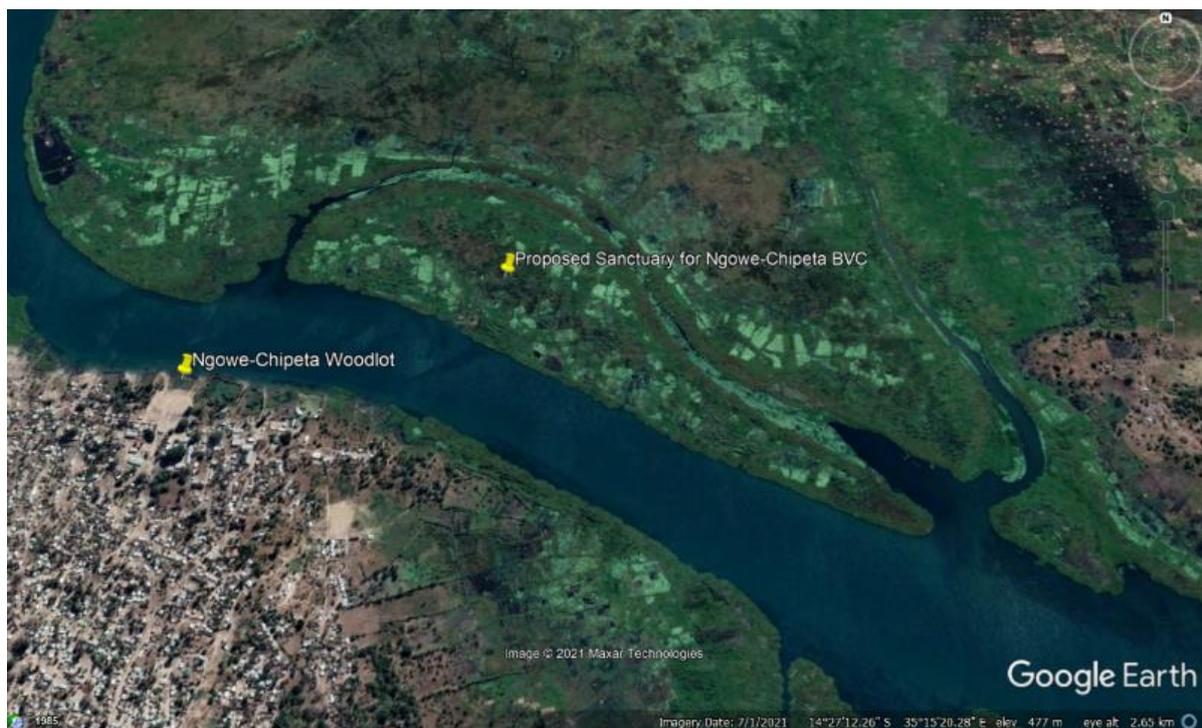


Figure 4-1. Proposed fish sanctuary for Ngowe-Chipeta BVC, Upper Shire River, TA Mponda, Mangochi

⁶ The fingerlings were finally delivered in November 2021.

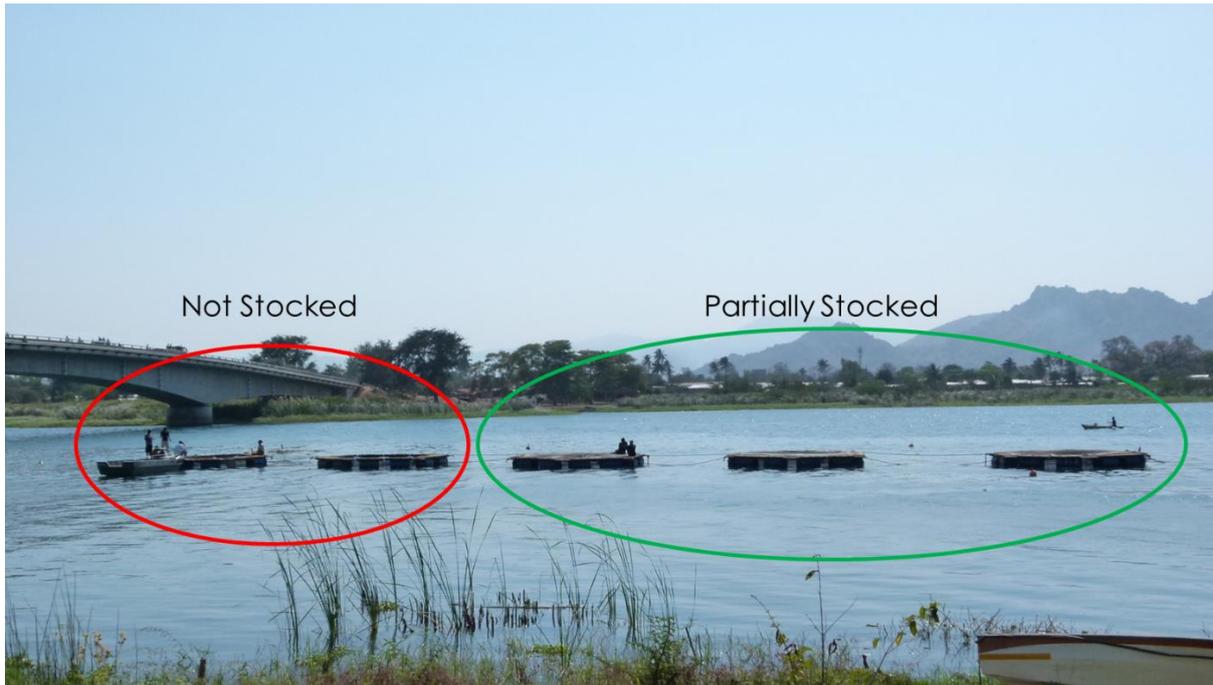


Figure 4-2. Madina BVC Pilot Cage Culture, Upper Shire

4.2.2 Progress towards project outcomes

148. The Project’s progress towards outcomes is mixed as summarized in the “progress-towards-results” table in Appendix 6. Moderately satisfactory progress is observed towards achievement of Outcome 2.2: Strengthened capacities and awareness of fisheries professionals and other relevant stakeholders to address climate resilience building in fisheries sector, Outcome 3.1 Adaptive co-management and resource governance systems in support of climate-resilient capture fisheries and Outcome 3.3: Aquaculture is climate-proofed and able to contribute to diverse and resilient livelihood strategies of the most vulnerable sectors of the population.

149. The project seeks to strengthen the capacities and awareness of fisheries professionals and other relevant stakeholders to address climate resilience building in the fisheries sector (**Outcome 2.2**). This would be demonstrated by an increase in the proportion (%) of targeted institutions applying increased knowledge and awareness in support of resilience measures from 15% at baseline to 25% at MTR. According to the Project, the achievement at MTR is estimated at 20% (to be updated through a survey) but this could not be validated by the MTR due to limited data (both baseline and updated data at MTR). Nevertheless, there is noticeable understanding of EAFM among fisheries professionals, which is a demonstration of the first step towards the desired state, which is application. Given that the training/awareness activities were delayed, and in some cases postponed due to covid-19, it has been extremely challenging for these professionals to apply their knowledge and skills in resilience interventions. Most of the activities on which such knowledge would be applied, such as the facilitation of fisheries governance and management interventions, have also been delayed. A second indicator for strengthened capacity and awareness is “recurrent budget (commonly known as Other Recurrent Transaction (ORT)) assigned to and executed by the District Fisheries Office (DFO)”, which was envisaged to increase from US\$20,798 in 2017/2018 to at least US\$25,997.5 by MTR. According to Mangochi District Council cost centre-wise report, the ORT spent by the DFO at MTR was \$24,515, representing an increase of approx. 18% from the baseline. According to the

DFO, this increase in the ORT spending over the years is insignificant considering that the cost of operation and maintenance requirements has also increased over the period. The average monthly ORT allocation and spending over the past year (2020 – 2021) was estimated to be MWK1,6 million (Approx. US\$2,000), which is far from adequate. The MTR notes that (a) The ORT is not a good indicator for monitoring progress in climate resilience building in the fisheries sector because it is not directly provided for capacity building of Fisheries Sector professionals to address climate change.

150. The project seeks to institute adaptive co-management and resource governance systems that are supportive of climate-resilient development (**outcome 3.1**). The chosen indicators were (a) Number and types of stakeholders considering that they are satisfactorily represented in co-management structures; (b) Proportion (%) of fishers complying with fishing closed season and gear restriction; and (c) Area excluded from fishing (area set aside for sanctuaries). Project records show that at baseline, 30% of all major stakeholder groups (Fishers, processors, farmers, gear owners, traders, boat builders and net menders) felt that they were satisfactorily represented in co-management structures, namely BVCs, Sub FAs, and FAs. This figure was to be raised to 50% at MTR. According to the Project, 45% of major stakeholders confirmed to be satisfactorily represented in co-management structures through an opinion Survey. MTR spot-checks with BVCs validates this perception of progress based on narratives from community conversations. Compliance with illegal gears was expected to increase from 27% at baseline to 40% at MTR and 80% at project closure. The project reports compliance at 50% based on district inspectorate reports. **However, MTR's analysis of frame survey results show that there is no defined trend in the proportion of illegal gears in Lake Malombe and Upper Shire River over the project period.** The project baseline as regards "area excluded from fishing (area set aside for sanctuaries)" is recorded as 214ha of which, 134ha in existing Liwonde National Park, whereas the target at MTR was 3,000 ha, and ultimately doubling to 6,000 at project completion. These are national targets and hence not comparable to the baseline in the reduced geographical context. Notwithstanding, the project reports an increase of excluded area to 247.2ha, which corresponds to 0.59% of Lake Malombe. However, this increase is not attributable to the efforts of FiRM Projects because management plans for sanctuaries have not yet been developed.
151. Through **outcome 3.3** the project seeks to climate-proof aquaculture and enhance its contribution to diverse and resilient livelihood strategies of the most vulnerable sectors of the population. It was envisaged that by MTR, the number of aquaculture ponds with climate resilience measures in place would have increased from the original 10 to 15, and then doubled to 30 by end of the project. At MTR, the project reports that additional 18 ponds have been constructed increasing the total number of ponds in the project area to 28 (Appendix 6). However, the project selected 5 fish ponds for demonstration of climate proofing measures: pond improvement (increasing pond area to $\geq 200\text{m}^2$, raising pond dikes, increasing freeboard, installation of overflow pipes), use of certified bio-secure hatchery-bred fingerlings (preferably all-male tilapia), and use of commercial fish feed to enhance productivity and reduce yield gap. Although pond rehabilitation was done by 2019, fingerlings had only been supplied in November 2021 due to supply challenges and this has delayed the people's appreciation of aquaculture as an alternative source of livelihood.
152. Otherwise, progress towards project outcomes has generally been moderately unsatisfactory with particularly low achievement observed under Outcome 3.2. Fish stocks and habitats restored through Ecosystem Approach to Fisheries (EAF) management.
153. The project seeks to restore Fish stocks and habitats through the Ecosystem Approach to Fisheries Management (**Outcome 3.2**). The three selected indicators for this outcome are: representation of higher value species (chambo) in catches from Lake Malombe, Catch Per Unit

of Effort (CPUE), and proportion of kasawala (immature chambo i.e. less than 15 cm) in sampled stocks. Based on the records available, the MTR notes as follows: Representation of higher value species (chambo) in catches from Lake Malombe has declined by 80% from 6.8% by weight at baseline to 1.2 % by weight at MTR against a desired increase by 20% at MTR and an increase by 50% at project completion. The MTR further notes that the targets set were too ambitious, hence not realistic over the project period given the inherent fisheries governance challenges experienced in the area. The best the project could have achieved was stabilization of the high value catches by MTR and go for an upward (slowly rising) trend over the second half of the project period. The CPUE shows a complex perspective of progress with progress observed in some areas and emerging obstacles. For example, the CPUE for legal gillnets is 7 times higher in Lake Malombe and 11 times higher in Upper Shire River than was expected at mid-term. The CPUEs for Nkacha and Chambo seine, which are legal gears but destructive, have declined over the project period, which is a good thing for Lake Malombe and Upper Shire. The CPUE for mosquito nets, also an illegal gear, has remained constant. However, there has been an emergence of Kandwindwi, an illegal and extremely destructive gillnet, with a CPUE that is at least 42 times higher than that of legal gillnets, which is retrogressive to the fishery. The “Proportion of kasawala (immature chambo i.e. less than 15 cm) in monitored stocks” in Lake Malombe has declined from a baseline 2% by weight to less than 1% (0.85%) by weight at MTR – against a projected 20% increase by Mid Term, and 50% increase by end of project. Again, the Project’s expectation was overly ambitious given the fisheries management challenges experienced in the project area.

154. The project seeks to enhance availability and use of information on climate trends, extreme events and resource status for formulation and implementation of effective and timely resilience and management measures (**Outcome 1.1**). This would be demonstrated by (a) an increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures from 33% at baseline to 50% at mid-term; and (b) An increase in the proportion of decision-making, planning and regulatory instruments in the project area, related to climate change resilience in fishing communities that are based on reliable information. According to the baseline, there was “no significant incorporation of reliable information in regulatory instruments. The MTR notes that the targets for this outcome were set for a national level scope of intervention and the Project found it difficult to generate reliable baseline data for monitoring progress at the catchment level and opted for a review of the indicators upon MTR. Although the Project has set no specific mid-term targets, ultimately, the desire is to have all decision-making, planning and regulatory instruments in the project area that are related to climate change resilience in fishing communities be based on reliable information. Therefore, the Project facilitated the preparation of a draft lake-wide management work plan by the three sub-FAs at a workshop held from 26-28 October 2021. It is expected that following validation the work plan, by-laws will be reviewed and revised to support the work plan. The work plan and bylaws are expected to strengthen decision-making, planning and regulation around fisheries management and climate resilience in the project area. However, at MTR, there was no demonstrated increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures (Outcome 1.1). **The MTR was unable to assess this progress due to limited data.**

155. Through **outcome 2.1**, the project seeks to mainstream climate change resilience into key policy and planning instruments of relevance to fisheries and fishing communities, particularly the National Climate Change Management Policy, the Disaster Risk Management Policy[1], the Malawi Growth and Development Strategy (MGDS III) and the National Adaptation Programmes of Action that was considered to be predominantly agriculture-oriented and the

Agriculture Sector-Wide Approach (ASWAp) II that is focused on agriculture production and diversification, improvement of rural roads infrastructure and market access and institutional capacity development for National Agriculture Investment Plan (NAIP). The MTR notes that the outcome's focus was national but the Project focused the aspiration and delivery to the catchment level by recasting one of the indicators although the other indicator was left intact – again, making it impossible (and irrelevant) to track the progress. Therefore, using the recast indicator, the Project sought to increase the proportion of annual recurrent budgetary spending [2] by the district from US\$46,638.50 at the start of the project to at least US\$58,298.12 at Mid-Term (representing an increase of 25%). In this regard, the district ORT spending has increased to \$65,187 representing an increase of approx. 40%. **However, this indicator is not SMART and hence not appropriate because the ORT funds provided to the district (for the operations of the district as provided through the district council) are not specific to addressing climate change resilience mainstreaming.** These funds, generally considered inadequate by the councils, are mostly spent on operational activities such as travel, utilities, office supplies and expenses, acquisition of technical services, motor vehicle running expenses, routine maintenance of assets etc. The second indicator for mainstreaming is “proportion of key policy and planning instruments that adequately reflect climate change as related to fisheries resilience”. There is no baseline for this but the project sought to achieve 50% at mid-term and reaching 75% at project closure. **The MTR was unable to assess progress using this indicator due to limited data and complications associated with the limited focus on national level targets.** Although the policy and planning instruments originally referred to in the ProDoc (National Climate Change Management Policy (NCCMP), DRMP, MGDS, NAPA, ASWAp) have been revised to integrate climate change, the revision/updating was achieved through other interventions, and not the FiRM Project.

156. The Project seeks to improve local people's access to diverse, pro-poor farming systems as a central element of resilient rural livelihoods (**Outcome 3.4**). This would be reflected in the increased proportion of farm households practicing good farm management into a diverse portfolio of climate change resilience measures from the original 312 (36%) to 433 (50%) by MTR and up to 693 (80%) by the end of the Project. Evidently, the Project is supporting implementation of farm-based soil and water conservation measures in the Kulungwi River catchment (Figure -3) but **there is no quantification of progress as regards the proportion of farm families practicing good farm management into a diverse portfolio of climate change resilience measures.**

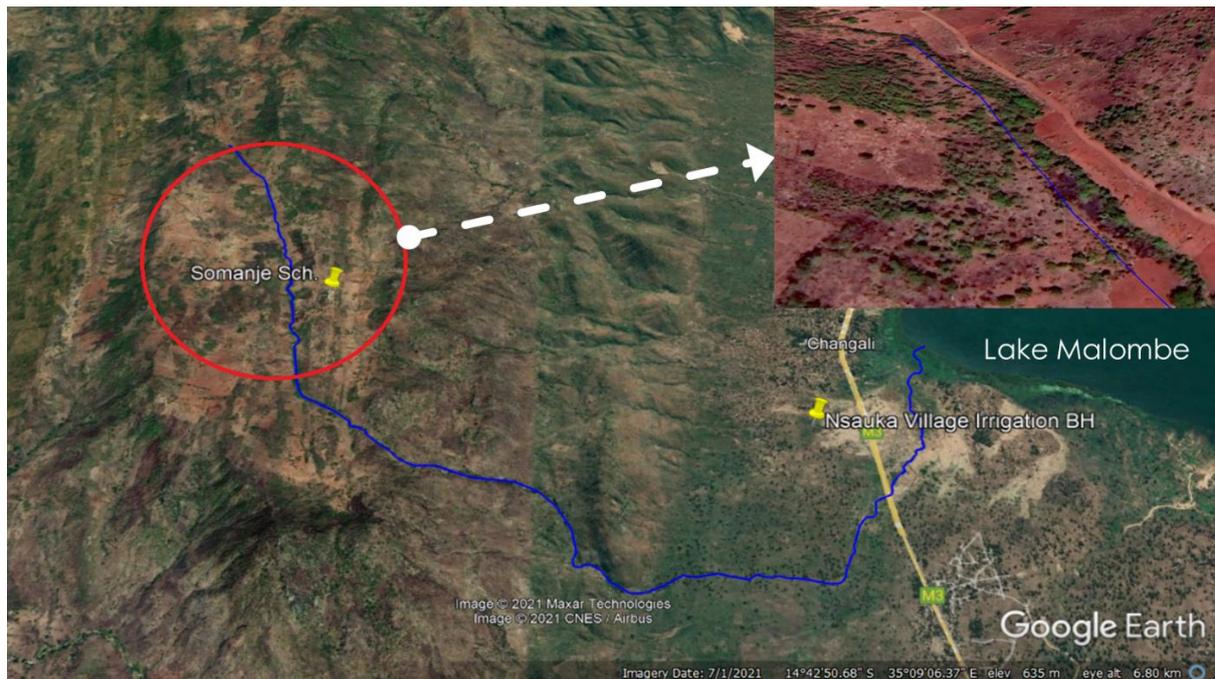


Figure 4-3. Kalungwi River Catchment depicting Somanje Project Site

157. While appreciating that adoption of watershed management outcomes can be slow, the initiatives propagated by the project (and associated approaches) are business as usual and the intervention area is less favored by Government extension workers due to poor access and lack of incentives (e.g. non-provision of per diem by the FiRM Project while other institutions provide this). These challenges exacerbate threats to achievement of this outcome. A satellite imagery of the Kulungwi river (watershed) (figure 4.3) and observation of land-use management practices in the Kulungwi catchment show significant land-use malpractices including tree-cutting for charcoal production, and riverbed cultivation. In addition, the area is often neglected by extension workers because it is far away from the district headquarters with limited accessibility. Other institutions have treated this area as being outside the district by providing night allowances for their personnel travelling there (in contravention with Government of Malawi and UN Guidelines and this has adversely affected the Project since it does not provide such incentives

158. The project seeks to apply results-based management approaches and apply lessons learned and good practices in current and future interventions (**Outcome 4.1**). According to the project, this would be demonstrated through the number and types of reports produced, specifically Project Implementation Reports (PIRs) produced annually and Project Progress Reports (PPRs) produced semi-annually. Although 4 PIRs and 8 PPRs have been produced, these have mainly been produced by the PMU as there has been no annual review of goals, strategies, and assessment plan with project partners. These reviews would have offered the Project the opportunity to reflect on progress and identify lessons for learning. The MTR finds that the aspect of adaptive management is missing. Generally, there has been limited scope for reviewing the original project parameters, core assumptions, action plan, assessment plan, operational plan, work plan, and budget and then updating or adapting these to reflect anything learned during the project period. Although the scope of the project implementation was adjusted to the Lake Malombe and Upper Shire River Catchment – no serious discussions and resolutions have been made on revision of indicators, risk management and adaptive strategies to cope with the challenges manifesting on the ground.

4.3 Efficiency

159. Efficiency measures the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.

4.3.1 Cost-effectiveness of the project

160. The project resources have not been spent as planned mainly due to scheduling challenges caused by COVID-19, and the start of project implementation was delayed. FiRM Project's total allocation is US\$5,460,000. Most (43%) of the resources are allocated to Component 3: Strengthening capacities at local level to increase the resilience of fishing communities to climate change and Component 2: Creating a favorable enabling environment of policies, plans, regulatory instruments and capacities for the promotion of climate change resilience among fishing communities (29%). Component 4: Monitoring and evaluation and adaptation learning had the least allocation (7%) followed by Component 4: Strengthening access to information and knowledge regarding climate change and its implications (16%). Additionally, 5% of the budget was allocated to Project Management Cost (Figure 4.4).

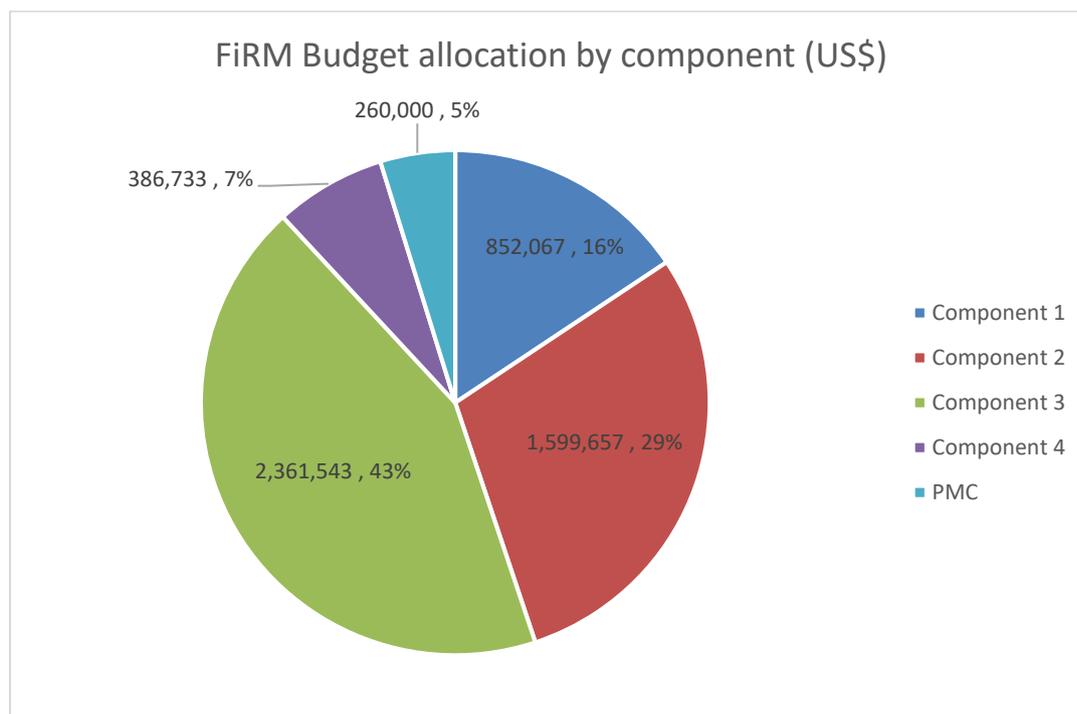


Figure 4-4. FiRM Project budget allocation

161. At the planning stage, the three major sources of expenditure were expected to be consultants, training and travel with the three combined amounting to 67% of the total budget. However, as of August, 2021, resource utilization was estimated at 57.6% with the least expenditure observed under training (32.3%) and travel (17.3%). Consultants took the largest share (approx. 40%) of the total expenditure, and there is an over-expenditure of approx. 8% on professional Salaries (Figure 4-5) emanating from annual increases. This is quite significant considering that the project is still ongoing and it poses the question of how salaries will be financed going forward. Obviously, sustaining the salaries will require a budget revision to

adjust and stay within the initial allocation. This creates the risk that funds may be reallocated from substantive activities to finance personal emoluments - ultimately reducing achievement of outputs and outcomes.

162. The low expenditure on training and travel is majorly attributed to the COVID-19 pandemic. As a way of preventing and containing the pandemic, the Government of Malawi in collaboration with the World Health Organization (WHO) instituted travel and public gathering restrictions that resulted in postponement of several planned meetings and travel under the project.

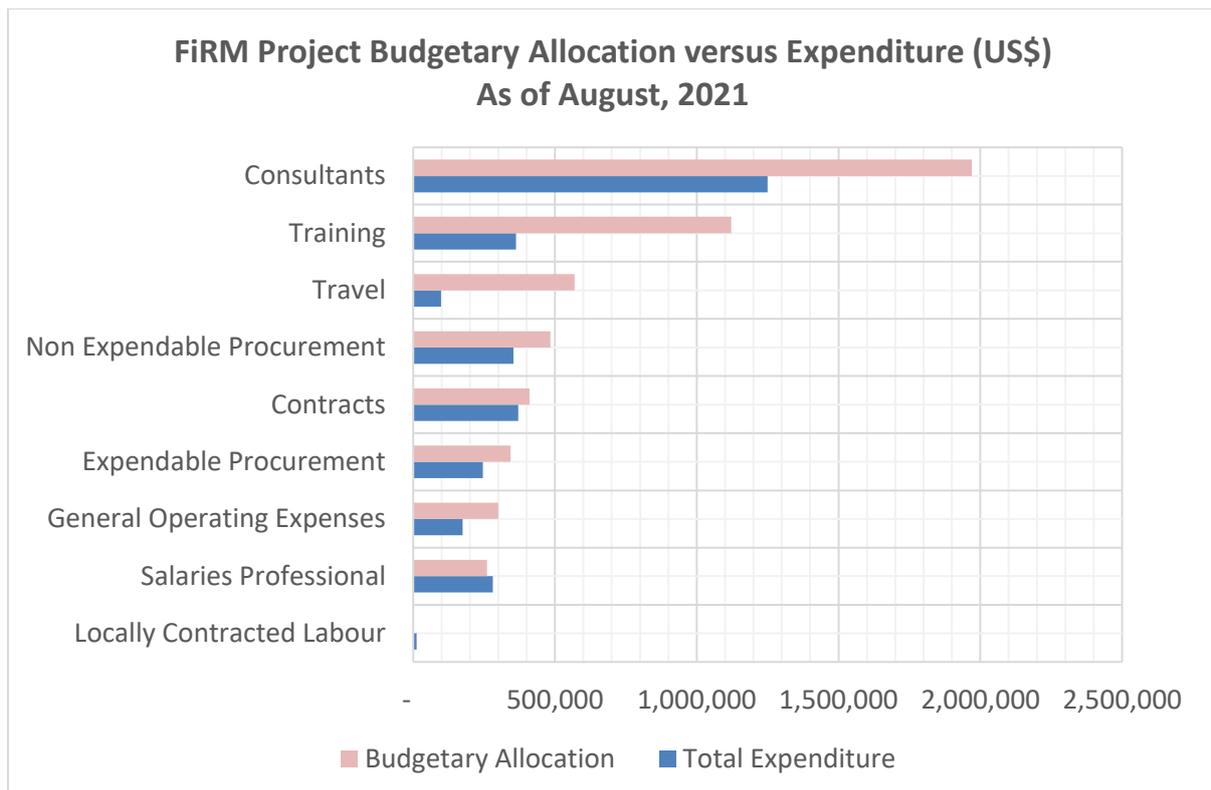


Figure 4-5. FiRM Project Budgetary Allocation (Entire Project Amounts) versus Expenditure as of August, 2021

163. Over the years, a normal (steady increase in) expenditure is observable in component 3: Strengthening capacities at local level to increase the resilience of fishing communities to climate change. Otherwise, the expenditure for the project has generally been erratic with no defined trend, which is characteristic of a project that is experiencing fund flow challenges (Figure 4-1).

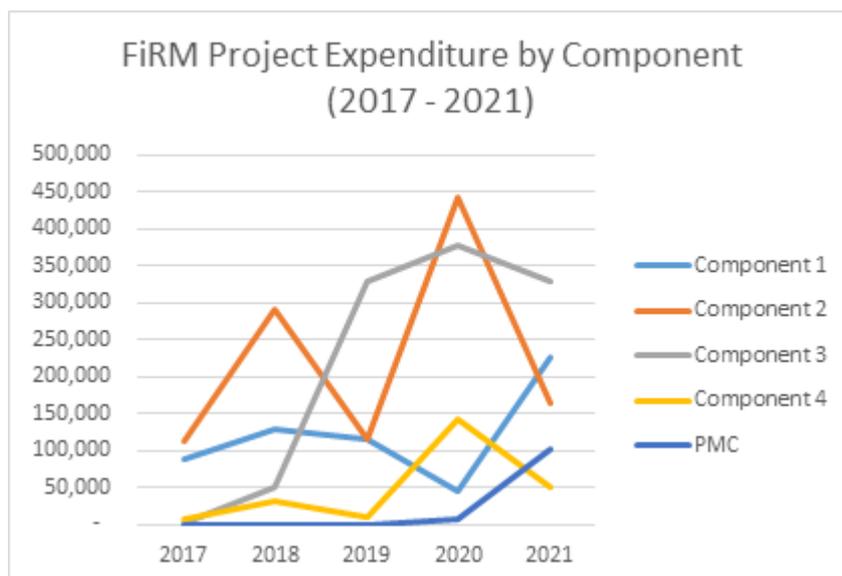


Figure 4-1 FiRM Project Expenditure by Component (2017 - 2021)

4.3.2 Timeliness of activities

164. The design implementation period for the project was 5 yrs. (01 Jan. 2017 to 31 Dec. 2021). However, all the outcomes have been delayed and unlikely to be achievable within the planned timeframe. Generally, project has experienced systemic delays and extended processes with regard to processing of resources for activities and procurement of goods and services (e.g. patrol vessel (>3.5 yrs.); LUANAR Contract (>2 Yrs.), and UoF (>2 Years)). Covid-19 has exacerbated these delays.

4.4 Sustainability

165. Sustainability refers to the probability that the impacts of a project's results will continue to be felt by beneficiaries in the long-term after the end of the project intervention. The MTR is expected to identify and assess the key conditions, factors and risks that are likely to contribute towards or undermine the continuation of a project's impacts. The key question to be answered under the MTR is "To what extent are there financial, institutional and governance, sociopolitical and environmental risks to sustaining project results in the long-term?". Therefore, sustainability should be assessed and rated for four main aspects, namely Financial, sociopolitical, institutional and governance and environmental.

4.4.1 Financial risks to sustainability

166. Most interventions being undertaken as project interventions are not technically demanding, and also, they are the type that are already being practiced by the mother institutions. For example, climate information by DCCMS; and capacity development in EAFM and adaptive co-management can be absorbed and embedded within DoF's routine activities. The DOF is interested and can, with prudent management, utilize its resource allocations to implement and sustain the activities considering that they fit with DOF policy and planning. It is activities such as the catchment and watershed management activities that are not within the ambit of the DoF routine activities that might present problems of absorption, if partners such as Departments of Forestry and Agriculture cannot absorb these financially after the project. While these are crucial partners of the project, they feel less involved in planning and

decision making on project matters. The willingness to cooperate with the project has apparently not been the issue. Rather, it is the unmet expectation for different operational resources including allowances that has been a main obstacle. However, this can be resolved through increased engagement and clarification on expectations and implementation arrangement.

167. What would present challenges would be if there would be a need to maintain the intensity of training and capacity development activities at current project level, which would require increased budget provision for the Mangochi District Fisheries Office and DoF. The running and maintenance of equipment bought by the project for improved efficiency in undertaking fisheries governance activities (for example, the patrol vessel, the truck and motorcycles) will likely require increased financial provisions for the fisheries Inspectorate at Namiasi and the Mangochi District Fisheries Office. Another key equipment that will require developing a solid financial strategy for continuity is the VMS. This will require putting in place the appropriate financial mechanisms for management and operation of the VMS system, apart from the supporting legislative mechanisms. Another project intervention that will require thinking through its financial sustainability is pond aquaculture and Upper Shire River cage culture. Who will take over these after the project and what are the budgetary implications for the DoF? Certainly not Mangochi District Fisheries Office as this is not an area of the Office's skills capacity. Under the project, Domasi National Aquaculture Centre is responsible for the aquaculture aspect while Senga Bay Fisheries Research is responsible for the cages. Therefore, the risk is that the DoF might not be able to muster the required additional budgetary provisions for Mangochi District Fisheries Office, Namiasi Fisheries Inspectorate, Senga Bay Fisheries Research and Domasi National Aquaculture Centre to take over and continue with these activities in order to maintain the high level of intensity of activities such as enforcement as behavioral change by fishers sets in as a positive long-term outcome and impact of the project. DoF undertakes to allocate adequate funding to continue with the activities and the running and maintenance of equipment procured under the project. The increase in the Other Recurrent Transactions (ORT) budget for the Mangochi District Fisheries Officer for 2020 showed an increase of 18% on the 2019 budget, which was mainly to cover annual increase in salaries and their routine operational costs. The office, and other departments undertaking activities under the project would have to get a bigger increase in ORT if they are to continue with the activities and running and maintenance of equipment at the current project level.
168. Some of the interventions, for example contribution to the development of an early warning system for Lake Malombe might not require any further financial inputs by the DoF after the project provided that the responsible agency, the DCCMS, takes over the activities around this. Consultations with the DCCMS show that this is not a challenge considering that the institution has already invested substantially in EWS in southern Lake Malawi through installation of lake buoys that are collecting and transmitting information to DCCMS, and DCCMS is further processing and transmitting these to lake based communities through radio and mobile phones.

4.4.2 Socio-political risks to sustainability

169. Malawi is a very stable and peaceful country politically. It has had stable governments since independence in 1964, including a smooth transition from one-party rule to multi-party democracy in 1993. Since then the country has successfully held multi-party presidential and parliamentary elections every five years. There is general societal and political support for improved Environmental and Natural Resources Management (ENRM). In this context, there is general realization of, and concern over depletion and degradation of natural resources and what this entails in the long-term and for future generations.

170. Malawi remains one of the poorest countries in the world despite making significant economic and structural reforms to sustain economic growth in recent decades. Poverty and inequality remain stubbornly high, with the 2016 figures showing a poverty rate of 51.5%. The economy is heavily dependent on agriculture, which employs nearly 80% of the population. Poverty is driven by low productivity in the agriculture sector, vulnerability of agriculture to external shocks particularly climatic shocks, limited opportunities in non-farm activities, volatile economic growth, rapid population growth, environmental degradation and limited coverage of safety net programs. Lack of economic and employment opportunities outside agriculture and the formal sector results in reliance on increased exploitation of natural resources for livelihoods and income. The high fishing effort is an example of this. The lack of other livelihood opportunities mean that fishing represents the main source of income for fishing communities to the extent that most are not able to leave the sector even when production has declined and 'catch per unit of effort' in the fishery has dramatically declined. Unless opportunities outside fishing can draw people away from the fishery, high levels of poverty and extreme reliance on natural resources will continue to present a stumbling block to reduction in fishing effort and therefore improved sustainability of the fishery.
171. The COVID-19 pandemic has further negatively impacted economic growth and livelihoods. Growth was estimated at 1.0% for 2020, compared with earlier projections of 4.8%. Although growth was projected to rebound in 2021 to 2.8%, the nature of the recovery is likely to depend on the evolution of the COVID-19 pandemic. In this context, the second wave of the pandemic has been more intense than the first. The COVID-19 vaccine is not expected to reach a significant portion of the population until at least mid-2022. As such, stronger social distancing policies and behavior are expected to weigh on economic activity and suppress domestic demand. The pandemic is also disproportionately affecting human capital investment in poor households, thereby reducing future intergenerational income mobility. The possible further disruption of project activities presents the risk of negatively impacting on successful implementation and therefore sustainability of project outcomes. For example, training and capacity development for DoF members of staff has been severely affected, thereby affecting achievement of some of the outputs that require enhanced skills such as EAFM.
172. Most communities in the project area depend on fishing and agriculture for food security and livelihoods, with the baseline survey showing that less than 10% of the households depend on fishing due to inequitable access to financial resources for investing in the fishery. Fishing is male dominated while women mostly undertake farming responsibilities in the households. Where possible, women participate in post-harvest activities. The formal sector within Mangochi District comprises mainly the civil service and tourism industry. Even at the best of times, these offer limited opportunities for employment. The closure and/or slowdown of tourism as a result of the coronavirus pandemic has only made things worse for formal employment in that sector. The lack of opportunities in the formal sector and seasonality of agriculture means that the opportunities that the fishing industry value chain activities, in particular fish processing and trading and value addition through improved processing and waste reduction, offer in such contexts have implications for fisheries governance and power relations. The risk for the project is that it is very difficult to convince people to leave the industry as one of the project strategies (for example, the removal of all illegal fishing gears) for reducing fishing effort or reducing the number of fishing gears due to lack of (competitive) opportunities outside fishing. Women are marginalized, especially in terms of ownership of means of production and processing, and access to fish for processing. Strengthening BVCs and Sub-FAs and including women in these bodies, and making BVCs partners for long-term efforts for behavioral change and removal of illegal gears is probably the most plausible option.

Even restocking will only work and provide for recovery of the fishery if behaviour change is implemented along with strong enforcement mechanisms involving BVCs and Sub-FAs.

4.4.3 Institutional and governance risks to sustainability

173. One of the key aspects of this intervention is the revitalization and strengthening of BVCs and Sub-FAs (see section 4.2.1). This is in realization that although co-management has been practiced for nearly 30 years in Lake Malombe and Upper Shire River, this has not resulted in recovery of fish stocks in the two water bodies. Even then, the partnership with fishing communities for the recovery and sustainable management of fisheries in the two water bodies (and the Southeast Arm of Lake Malawi) is still the best way forward because if the fishers cannot live with a management and governance framework that is imposed from outside, this is not going to work.
174. If BVCs are not supported through a sustainable financing mechanism to undertake their management functions under co-management agreements e.g. enforcement of regulations in their areas, then illegal fishing activities will continue to the detriment of the fishery.
175. The project is revitalizing BVCs into strong and independent co-management institutions. However, if the Government does not continue supporting the capacity development interventions (materially and technically) started by the project, then the institutions may get disorganized due to lack of overarching leadership/guidance and fall into dysfunctionality. If that happens, traditional leaders or local elites will recapture the BVCs for their own benefits resulting in the collapse of these governance institutions and fishery
176. The EAFM approach requires understanding that upland agricultural activities and deforestation have both positive impact (provision of alternative livelihoods and firewood for fish processing) and negative impact (soil erosion, siltation and sedimentation, reduced water flow into the lake as a result of its extraction through agriculture and aquaculture practices or changing rainfall patterns due to climate changes and/or deforestation). The success of the continuation of the co-management partnership will depend on putting in place a framework of understanding between the DoF and BVCs/Sub-FAs and other stakeholders in terms of how authority and responsibility will be shared in future, how differences will be resolved and how partnership activities will be funded. Without such a framework, there is a risk that the gains through the project will be lost or dissipate. Success of EAFM requires strong institutional partnerships and coordination among key Departments such as Fisheries, Agriculture and Forestry, with the communities undertaking agricultural and livelihood activities upland so that the working relationships can continue and be sustained beyond the project.

4.4.4 Environmental risks to sustainability

177. In the Project Identification Form (PIF) (January 23, 2014), no major risks, including climate change risks, potential social and environmental risks that could have prevented the project objectives from being achieved had been identified. Since then, the major risk that had not been foreseen has been the Coronavirus pandemic which broke out worldwide in early 2020 and is continuing wave after wave. This has greatly impacted the implementation of project activities to the extent that this might impact on the overall achievement of project objectives within the planned time frame
178. The project activities under this intervention are generally of low environmental risk. The outputs are mainly fostering behavioral changes among fishing and farming communities to effect recovery of the fisheries in Lake Malombe and the Upper Shire River. These are around strengthening community-level institutions (BVCs) through revitalization and capacity development of these for improved fisheries governance partnerships. For farmers, the

activities are around watershed and catchment management. However, the benefits of these interventions are long term and may not be realized within the timeframe of this project. Unfortunately, there is no evidence suggesting that the watershed management interventions along the Kulungwi river and surrounding areas are successful.

4.5 Factors affecting performance

179. Several factors have negatively affected performance of project. These are in the areas of the delays in start of the project, the covid-19 pandemic, oversight for operations, implementation and management of the project; and communications and visibility.

4.5.1 Project design and readiness - quality of project execution and management arrangements and assessment of risks

180. Delays in project implementation due to the Covid-19 pandemic and delays in recruitment of the CTA and staff for the PMU put the project on the back foot from the very beginning. The Project uses Operational Advances (OAs) to individual project implementation officers as the mode of disbursement of funds for implementation of activities. The demanding processes involved in releasing and liquidating OAs result in delays and lack of transparency, which have had very negative impact on project implementation from the start.

4.5.2 Project oversight by FAO as the GEF Agency and national partners

181. FAO is the main agency that provides oversight of the project, disburses the funding and does the procurement. Ultimately, the Budget Holder (the FAO Resident Representative, Malawi) has responsibility for the project. The Budget Holder is supported by an advisory body, the Project Task Force (PTF), which is composed of the Budget Holder, the Lead Technical Office, the Financial Liaison Officer, the CTA and others as might be required from time to time. These have provided adequate management support and oversight for the project

182. The main independent committee for project oversight is the Project Steering Committee (PSC). The PSC is composed of key national stakeholders such as the DoF, Environmental Affairs Department, Universities, project leaders from relevant projects, etc. In addition, FAO and the GEF Operational Focal Point for Malawi (or a member of the Environmental Affairs Department) are members of this committee. The main purpose of the PSC is stated as being to ensure that the project is managed professionally and delivers on its expected outputs through: (i) providing oversight and assurance on quality of outputs; (ii) ensuring close linkages and complementarity between the project and other projects and programs relevant to the project; (iii) ensuring timely availability and effectiveness of co-financing support; (iv) providing guidance on the sustainability of key project outcomes, including up-scaling and replication; (v) ensuring effective coordination of government's partner work under this project; and (vi) receiving and considering the six-monthly Project Progress and Financial Reports. The Committee is expected to meet at least twice a year. The PSC has met three times so far (once in every year instead of twice a year as has stipulated in its ToRs due to the Covid-19 pandemic) to discuss progress on implementation of the project and provide advice and recommendation on issues requiring action. For example, the PSC recommended that the project should establish a Project Technical Committee at district level and recruit a dedicated Communications Officer for the project instead of using the FAO Malawi headquarters (Lilongwe) communications unit. The two recommendations are yet to be effected.

183. Formation of a Project Technical Committee (PTC) was proposed by the PSC as stipulated in the preceding paragraph. The thinking was that this committee would provide guidance on overall project implementation and outcomes and give feedback to the Steering Committee. It was suggested that the Committee should be composed mainly of technical people based in Mangochi, a representative of an NGO operating in the project area and a representative from the Commercial fishers. It was also proposed to incorporate three national level members from DCCMS, EAD and Academia into the Committee. A member of the PMU was also to be part of the committee. Although the Committee has been constituted, it has never been operationalized.

4.5.3 Project execution and management arrangements and assessment of risks

184. The Project Management Unit (PMU), which is led by the Project Manager (in this case, the CTA), is responsible for the on the ground execution and day-to-day running of the project. The transfer of funding for implementation of the project (through OAs) by FAO has experienced long delays, which has impacted project implementation negatively. Procurement processes have been slow and rigorous. The major procurement items, namely the patrol vessels (expected to be delivered by November 2021) took more than 3.5 years to process, the contract for training in EAFM by LUANAR took more than 2 years to process and similarly, the LoA with the UoF for RA took about 2 years to process. Procurement of smaller items have experienced similar delays.

185. With most financial and procurement decisions and implementation of these thereof are under the FAO country headquarters in Lilongwe. The PMU feels that this frustrates the unit's ability to undertake activities speedily and efficiently. This alludes to the need for the project to have greater authority over operational funding and procurement, if the project is to be managed on the basis of achieving the planned outputs speedily and efficiently. The fact that the project has a PMU based in the project areas at Mangochi highlights the need to decentralize most of the operational funding decision making to the PMU, which is headed by the CTA. On the ground, the Director of Fisheries is represented by the person seconded to the project by the Department as counterpart to the CTA. As the project enters its final hand-over phase, the counterpart should begin to play a more leading role and be more visible in order to ensure a smooth transition of the activities between the project and the Department.

186. The move of the project office and the project implementation team to the project area - Mangochi District (Lake Malombe, Upper Shire River and the Southeast Arm of Lake Malawi) has provided for greater ownership of the project by target communities, Mangochi District Fisheries Office and the District Council/Assembly. The localized location has also enabled better and greater interaction between the project implementation team (PMU) and the beneficiaries, and also closer monitoring of activities and their impacts.

187. At District level, the project could have benefitted from more visibility within the District Administration structures. The PSC proposed Project Technical Committee (PTC) could have played this role apart from providing feedback to the PSC. At the moment, a representative of the PMU attends the District Executive Committee meetings at which he or she briefs this committee on the project and handles any other project matters in these committees.

4. The other problem has been the poor performance on the aquaculture activity in terms of challenges encountered with sourcing and delivery of fingerlings. This appears to have been as a result of problems of finding a trustworthy source of fingerlings for distribution to fish farmers.

188. The overall experience with procurement processes under FiRM has been one of successive delays and extended processes involving multiple steps, clearances, requests for clarifications

and slow turnaround. There are long delays between initiating, publishing and evaluating tenders. One of the reasons for this is that the FAO Malawi project portfolio has grown rapidly over the past few years, which apparently has overwhelmed the procurement section. Another problem that arose was that the inputs by the International Procurement Officer (IPO) were periodically diverted following tropical cyclone Idai in 2019, when support had to be provided to FAO Mozambique, which meant that buyer decisions were delayed. After that, the IPO attention had been diverted to supporting the Democratic Republic of Congo (DRC). Some of the delays had also been as a result of external factors, including slow responses and decisions by service providers and the government partner. On the issue of the patrol vessel procurement, the DoF changed specifications for the vessels several times, which resulted in further delays since each time that happened, the whole process had to be restarted again. In principle, FAO procurement processes appear over-regulated, even following the recent revision of the FAO handbook on procurement. It is believed that there could be potentially great benefits from introducing a fully digitized procurement system, whereby all concerned have transparent and relevant access to the status and documentation of procurement processes.

4.5.4 Financial management and co-financing

189. Interviews with FAO confirm that the project finances have been used for the intended purposes. There have been no instances of misuse or mismanagement of finances, including Operational Advances. FAO, a United Nations (UN) international organization, has a rigorous financial management regime, to the extent that this has actually adversely impacted on the project activities. There are three examples in this context: the disbursement of Operational Advances; processing of contracts and LoAs; and Procurement.
190. Implementation of the project has been hampered by operational issues, including delays with the release of Operational Advances for implementation of activities. Apparently, 2-3 weeks' delay is the norm between submission of a request and the release of the OA. This leads to tight and sometimes delayed work schedules on the ground. In addition, the current process does not appear to be transparent to finance administrators in the field. There are examples of OAs lingering in the system for several months before being cleared. Aggravating the situation is the FAO rule that any one person cannot hold an OA exceeding USD 5,000 and, that another OA cannot be issued to the same person before the preceding OA has been liquidated and cleared.
191. Although the use of LoAs appears to be better than contracts (if one analyses the difference between what happened between LUANAR and UoF) a problem with LoAs is that the organization/unit proposed for entering into a LoA with FAO has to undergo assessment and pass the 'Harmonized Approach to Cash Transfers (HACT)', a UN system that assesses the fiduciary risk of an organization. In this context, the Fisheries Research Unit at Monkey had been proposed for a LoA for the revision and improvement of the data collection system, but has failed this test/assessment, whereas the Department of Fisheries Headquarters has passed the assessment for the LoA for implementation of the 'Save the Chambo Campaign'. In this case, the LoAs agreement that was intended with Monkey Bay Research Fisheries will be signed by and executed through Department of fisheries headquarters, the mother Department of Monkey Bay Research.
192. The other challenge encountered by project staff in implementation of activities has been the different policies around incentives for participation by communities in project activities being implemented by different projects within the same area and targeting the same communities or staff for training activities. A key aspect is the lack of harmonization of Daily Subsistence Allowances (DSA). For daily activities such as those within Kulungwi River

catchment, the project does not pay anything to the participants. PROSPER, a project funded by UKAID and also being executed by FAO, that includes Mangochi as one of the districts where it is undertaking activities, uses different incentives structures compared FiRM. The different policies and approaches among projects and NGOs is counterproductive and calls for harmonization of policies among all projects regarding incentives for working with communities and government staff.

193. Co-financing for the project appears to be on track, with 55.5% of the co-financing estimated to have materialized by 30 June 2021. There is lack of clarity though regarding co-financing from PACT/FISH project which ended in December 2019 and was providing the biggest amount of co-financing (\$5,500,000 – 45%). There is no letter re-affirming continuation of co-financing by the REFRESH, which is the new project that replaced PACT/FISH. LEAD has been undertaking some national EAFM training activities targeting decision makers (for example, District Councilors), which include people from Mangochi and the project area. In addition, the Department of Fisheries is implementing the AfDB-financed Sustainable Fisheries, Aquaculture Development and Watershed Development Project (SFAD-WD) that is informally co-financing FiRM interventions.

4.5.5 Project partnerships and stakeholder engagement

194. The project is actively engaging and working very well with the various sections of the Department of Fisheries. For a start, the project is based and housed at the Mangochi District Fisheries Offices. The Mangochi District Fisheries Officer and his staff work with the project in terms of implementation activities. The cage culture and limnology activities are being implemented by Senga Bay Fisheries Research and the National Aquaculture Centre is collaborating with the project on aquaculture and the development of biosecurity guidelines. The Fisheries Inspectorate, based at Namiasi, which is responsible for enforcement activities and licensing, and will be in charge of the patrol vessel that the project has purchased. In fact, the project has been funding enforcement and extension activities by the Mangochi District Fisheries Office and Namiasi Inspectorate Office and also Police that are working together with the district fisheries inspectorate. The VMS, which is a key component of the EAFM component of the project, in particular the purchase of the devices, is being funded by the project.
195. The project is working with the DOF to develop protocols and legislation for VMS requirement for all trawlers. The DoF headquarters is actively involved in the implementation of the project and also provides normative support to the project, given that the Director of Fisheries is FiRM's National Project Director (The Department has seconded Dr. Harold Sungani as counterpart to the CTA and therefore representative of the National Project Director in the day to day running of the project). Engagement with the Department of Fisheries staff also includes the training component of the project. In this context, fisheries staff, including those from other stations other than Mangochi, are also benefiting from training and Capacity Development being provided by the project. Therefore, engagement with DoF sections and staff is very active and progressive. Unfortunately, the Covid pandemic had put on hold most of the planned training activities.
196. However, there has been limited engagement with other project partners at District level. Key among these partners are the Departments of Agriculture and Forestry who are supposed to be close collaborators with the project, in particular for the Kulungwi River Watershed Management component of the project. The challenges around the collaboration are related to the problems of delays surrounding OAs and also the two departments appear to have expected that they would get their own and much more funding than what is given to them for their activities under the project. As a result, the two district partners are disgruntled over low resource allocation and delays of the allocations.

197. Some of the important partnerships for key outputs, for example EAFM training by LUANAR and UoF development of a protocol for stock enhancement using the 'Responsible Approach (RA) to stock enhancement' approach had suffered long delays due to long and complicated processes by FAO for the LUANAR contract and the LoAs for the UoF exacerbated by the Covid-19 pandemic. This means that the impacts of these inputs have not so far been felt as had been planned. LUANAR expressed frustration with the delays in processing of their contract and delays in actual start of the activities after the contract had been signed due to slow processes for disbursing the funds by FAO. The PMU has been frustrated by the delay in the execution of the UoF contract, which has partly been due to delays processing of the LoA between FAO and UoF resulting from legal issues involved in the execution of the LoA and Covid-19.
198. However, there are other interventions in the project area that are pursuing similar objectives as those of FiRM but have weak linkages with FiRM as discussed under section 4.1.5.

4.5.6 Communication, visibility, knowledge management and knowledge products

199. The project had collaboratively developed a visibility and communication strategy at the start of the project in 2017, which set out the key principles that would guide management of communication within the project, that is – what the key messages should be, how to facilitate the sharing of messages, how to influence behavioral change among fishers, promotion of the project, creation of understanding among its various stakeholders, what the channels of communication should be (e.g. radio) and the tactics/tools to be used to communicate with key stakeholders. In addition, the strategy took into consideration culture, gender, and vulnerable communities in the crafting of the messages and presentation of the project. The goal of the communication strategy was stated as being "to ensure strong project ownership by the communities and Government of Malawi officials and to raise awareness of project activities with a view to disseminating lessons learned for an eventual scaling-up action across the country".
200. The arrangement for communication has been that the project would use the communications unit at FAO Malawi headquarters in Lilongwe instead of having its own dedicated Communications Officer. The FAO Communications unit works across different projects. Therefore, its time and attention are spread over a large portfolio of projects. Even so, the FAO Communications Team has been to the FiRM project site and in the field several times, as and when required. There has been misunderstanding in terms of who is responsible for communications activities on the ground once these have been developed and transferred to the PMU in Mangochi. The MTR has made a recommendation on this under section 5.2.
201. One of the major activities that require communications expertise is the 'Save the Chambo Campaign'. This is a national campaign that the FiRM project is supporting, given that the Chambo is the most valuable species in the project area. The campaign is supposed to be run by the Department Fisheries Headquarters, but with funding from the FiRM project (through a LoA) and communications support from the FAO team (The project Communications Officer that had been proposed to be part of the implementation team was supposed to help lead this campaign). The major challenge for the FAO communications team providing the support for the campaign has been the red tape and approval systems involved even though they have been working with the Department of Fisheries Extension/communications officer at the Department's headquarters.
202. There is evident lack of capacity among fisheries staff members, particularly at the Mangochi Office and also at the Headquarters, for communications. Within the Department of Fisheries, this portfolio is occupied by the Extension Officer. Extension officers are not

specifically recruited for and/or trained in communications. MTR recommendation on this is presented under section 5.2.

4.5.7 Monitoring and evaluation (M&E), including M&E design, implementation and budget

203. The TCP project (TCP/MLW/3504 - 2016 to 2018) undertook a baseline survey from which most of the indicators for Monitoring and Evaluation (M&E) for the FiRM project could be derived. The assumption, therefore, was that the TCP project would provide baseline information and values. Given that FiRM officially started in January 2017 and the TCP project only ended in 2018, the two projects officially overlapped for about two years. This means that FiRM did not have the final results of the TCP project before launch of the project.
204. The other problem is that the Project has a dual scope to deliver national as well as catchment level commitments. However, the focus of the Project this far has been on the catchment level aspirations and commitments with little focus on national output and outcomes targets resulting in a diluted ambition for the project. Resultantly, M&E system has failed to capture progress on and draw lessons from national level indicators.
205. The main reporting tools that are used for M&E are the Project Implementation Reports (PIRs), quarterly reports and monthly reports. Even though there is some semblance of a M&E system, there has been limited use of Monitoring and evaluation (M&E) in tracking progress, and for accountability particularly due to low engagement of project partners in the annual and other period planning, review and revision of outputs and activities.
206. There has been a proposal to use mobile phone spending as a proxy for discretionary spending, which it is assumed reflects increased wealth/income and in effect improved resilience. The MTR observes that 'discretionary spending on mobile phones' cannot be linked to 'increased resilience' given that not all people might value having a mobile phone (and what quality of phone to have) to the extent that this could be used as a proxy for increased wealth.

4.6 Cross-cutting dimensions

207. The cross-cutting issues in relation to resilience and vulnerability are in the areas of gender, youth and environmental and social standards. These are discussed below.

4.6.1 Gender and Equity dimensions

208. Project interventions are geared towards reducing vulnerability and increasing resilience. The Project is supporting men and women equally, but with a special focus on elevating the status of, empowerment and benefits for and the participation of women at all levels of the fisheries value chain and value network.
209. A total of 374 BVC members were elected, 11 members for each BVC of which, 45% are women, an increase from the previous composition, in which female representation was at 43%. Additionally, 155 (41.4%) of the 374 BVC members are youths (age 18 - 35). Further, more women were elected into Fisheries Management leadership roles as Sub-FA members. Out of the 33 Sub-FA members, 11 are women whereas previously, out of 15 Executive sub-FA members, only 4 were women. In previous management regimes, women could not contest for Fisheries Association positions since the minimum criteria for consideration into the association was for the candidate to be a BVC chairperson, a position that could not be offered to women.
210. However, delays in procurement and delivery of material support such as fingerlings for pond aquaculture has adversely affected women fish farmers considering that under the project, aquaculture is propagated as one of the most potential alternative sources of income

and livelihood for vulnerable populations. If carefully delivered, aquaculture would demonstrate an attractive entry for women into the fishery industry given that culturally, the ownership of mean of production in capture fisheries is male dominated.

4.6.2 Environmental and social standards

211. The Project was rated as low risk in terms of impact of its activities on the environment when designed. An Environmental Management and Monitoring Plan for pilot cage aquaculture has been developed and is being implemented. Also, the project has developed biosecurity guidelines for tilapia farmers to support juvenile fish given that it is part of its mandate to supply juvenile fish and fingerlings to fish farmers and cages.
212. However, restocking of Lake Malombe will require additional Environmental Safeguard measures related to Biosecurity. Additionally, support for the implementation of hatchery-level biosecurity at the National Aquaculture Centre has been a challenge to justify since the project does not specify implementation of biosecurity among its implementation strategies. Ensuring precautionary biosecurity measures is critical for ensuring that the fingerlings introduced into Lake Malombe are free from pathogens. National biosecurity standards for fish hatcheries are drafted under Outcome 3.2 and yet to be finalized and institutionalized.

5. Conclusions and Recommendations

5.1 Conclusions

5.1.1 Conclusion 1– Relevance

213. The project is relevant as it seeks to address climate related vulnerability, fishery and land resources degradation, and livelihood challenges affecting the Lake Malombe and Upper Shire River fishing communities.
214. The need and urgency to addressing these concerns are expressed in global and regional development frameworks including the Sustainable Development Goals (SDGs) and the Africa Agenda 2063.
215. The project's objective and outcomes are aligned with national policies and planning frameworks for agriculture development, climate change, environment, natural resources and disaster risk management including the National Adaptation Programmes of Action (NAPA) of 2006, the Nationally Determined Contributions of 2021, and the United Nations Development Assistance Framework (UNDAF) in Malawi (2012-2015).
216. It is also coherent with the three GEF Focal Area Objectives for climate change adaptation (CCA1, CCA2 and CCA3); and with FAO Strategic Objectives and higher goals particularly the National Medium-Term Priority Framework (NMPF) 2010-2015, and Outcomes 1, 2 and 3 of the FAO Country Planning Framework (CPF) for the period 2020-2023 that promote the provision of an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare which is the object of the FiRM Project.
217. Further, the Project is complementing past and ongoing interventions by FAO and the Department of Fisheries (DOF) particularly those in support of the Ecosystem-based Approach to Fisheries Management (EAFM), and Aquaculture, and is complementing similar interventions by others stakeholders nationally and in the Lake Malombe catchment.

218. Notwithstanding, there are other interventions in the project area that are pursuing similar objectives but have weak linkages with FIRM. These offer the opportunity for collaboration, partnership and co-financing.
219. The Project's design, particularly advancement of the EAFM approach, capacity building and piloting of catchment level interventions for upscaling at the district and national levels is generally appropriate to delivering the expected outcome. In addition, communication, gender equity and cross-cutting issues/aspects were well integrated in the design through provision of dedicated specialists based at the PMU to spearhead mainstreaming of these aspects in project activities. However, environmental and social safeguards requirements surrounding restocking of Malombe fishery were not adequately considered in the design.
220. The dual scope of the project to address both national and sub-national (catchment level) natural resources and climate change management requirements was also appropriate on the assumption that, apart from direct support towards national development or revision/updating, catchment level interventions would generate lessons for upscaling and out scaling in other parts of the country. Notwithstanding, the projects aspiration to mainstream climate change management considerations in national level policies in agriculture, climate change, disaster risk management and related policies and strategies; undertake country-wide fish habitat restoration interventions; and restoring the Lake Malombe fishery was overly ambitious and hence not practically achievable within the allocated budget and schedule. In addition, supporting communities with alternative livelihood options such as climate-proofed aquaculture and agro-based production is plausible only if the value chains for these products are also enhanced but this remains a weak area in the project design.

5.1.2 Conclusion 2 – Effectiveness

221. Effectiveness measures the extent to which the intervention achieved, or is expected to achieve, its objectives and results, including any differential results across groups.
222. Achievement of project outputs has been mixed with some progress observed in relation to Identification of the extent of vulnerability of the impact areas to climate and disaster risk and identification of adaptation options (Output 1.1.1); institutional development of DOF with physical assets resulting in increased local community participation fisheries monitoring/patrol operations (Output 2.2.2); pilot cage culture, though partially, and training of BVC members and village heads in cage culture management practices (Output 3.3.4); revival of BVC co-management structures and linking them with other co-management institutions (Output 3.1.1); and Formulation of annual adaptive EAFM management plans (Output 3.1.1).
223. However, challenges have been experienced in the identification of ecological parameters for determining management and resilience options (Output 1.1.2), establishment of a forum disseminating climate resilience data and lessons generated by the project (Output 2.1.1); and climate-proofing pond aquaculture (output 3.4.1), particularly, delayed supply of fingerlings.
224. The Project's progress towards outcomes has also been mixed with some progress observed as regards improving the understanding of EAFM among fisheries professionals as a step towards climate resilience building in the fisheries sector (Outcome 2.2); and improved perception of representation in co-management structures by major stakeholder groups as a step towards adaptive co-management and improved resource governance ((outcome 3.1).
225. However, limited progress has been observed towards mainstreaming of climate change resilience into key national level policy and planning instruments of relevance to fisheries and fishing communities (outcome 2.1); improvement of compliance with illegal gears restriction (Outcome 3.1); fish stocks and habitats restoration through the Ecosystem Approach to Fisheries Management (Outcome 3.2); livelihoods diversification and resilience-building through aquaculture and other interventions (Outcome 3.4); and application of results-based

management approaches and imbedding of lessons learned and good practices in current and future interventions (Outcome 4.1).

226. The MTR was unable to assess progress relating to changes in the proportion of key institutions that are using relevant information for resilience (decision-making, planning and regulation) (Outcome 1.1); and extent of household level adoption of climate change resilience measures (Outcome 3.4) due to limited data.

227. The major obstacles to achievement of outputs and progress towards outcomes have been delays caused by late start of the project due to delayed recruitment of PMU personnel; Covid-19 work related restrictions; restrictive disbursement procedures; and protracted procurement. In addition, aquaculture development has been adversely affected by the service provider's incapability to deliver fingerlings as per contract. Further, low achievement on national level targets has been caused by the PMUs limited focus on national level expectations and commitments as per the project document.

5.1.3 Conclusion 3 – Efficiency

228. The delivery of this intervention has been inefficient with high expenditure in administrative budget lines and low expenditure on high impact activities, and with constrained delivery on outputs and slow progress towards the achievement of outcomes. This is attributed to delays in execution caused by late start of the project due to delayed recruitment of PMU personnel, Covid-19 work related restrictions, restrictive disbursement procedures, and FAO's protracted procurement procedures.

5.1.4 Conclusion 4 - Factors affecting performance

229. The location of the PMU has facilitated effective implementation of the project. It has also provided for good interaction with the District Council (which oversees District Development) and district level project partners. However, a number of factors have negatively affected project performance including: The delayed start of the project by almost two years; slow pace, delays and size of the Operational Advances for project implementation; delays in procurement; lower and uncompetitive incentives and allowances for participation of communities and government staff in training and other project activities compared to other projects targeting the same communities; and poor implementation of the communications strategy. Most of all, the coronavirus has had a huge impact on training and other activities as these had to be suspended at the height of project implementation.

5.1.5 Conclusion 5- Sustainability of Project Results

230. Most of the activities that are being executed by the project should be easily integrated by the Department of Fisheries and the other departments undertaking EAFM activities in partnership with the Department of Fisheries, as they are mostly related to activities that are already being undertaken by the Departments routinely. The risk is that the project does not deliver the required capacity development and embed the habits and behaviors into communities to the extent that the Departments will need to continue with these activities at levels and intensities that will require additional budgetary provisions from the Treasury in order to sustain the project results. The operation and maintenance of equipment, such as the patrol vessel, the VMS system, etc. will certainly require additional budget provisions. **Government will therefore need to put in place mechanisms for ensuring additional budgetary provisions in order to sustain activities and equipment after the project ends.**

231. Like the rest of the world, Malawi’s economy has been greatly impacted by the coronavirus pandemic. The loss of jobs in the formal economy means that there is likely to be increased reliance on natural resources for livelihoods and food security. This could mean that there is a risk of losing whatever gains are made by the project in trying to reduce fishing effort and change fisher behavior towards sustainable fishing methods and patterns.

5.1.6 Conclusion 6 – Cross-cuttings dimensions

232. The project has made headway in implementing measures for greater inclusion of women in BVCs and FAs, including ensuring that they occupy positions where they can influence decisions within such bodies rather than mere tokenism. Also, the provision of co-funding for improved fish processing technologies is empowering women to improve earnings from their post-harvest activities. ***The challenge is maintaining these gains after the project. There is a need therefore to find ways ensuring the effective participation of women in fisheries decision-making bodies and in all other fisheries value chain activities, including ownership of fishing equipment. This will also require changing the men’s mind-sets toward respecting gender equality.***

5.2 Recommendations

233. The MTR has made a number of recommendations that may be taken within the available time and resources (including local capacities) of the project to ensure maximum delivery of the planned results by the end of the project (Table 5-1).

Table 5-1. Recommendations Table

Rec. No.	Rationale for recommendations	Recommendation	Lead actor(s) with Responsibility for addressing recommendation	Timing/ dates for actions
Strategic relevance				
A.1	Supporting communities with alternative livelihood options such as climate smart agriculture and other land-based climate smart interventions is plausible only if the value chains for these products are also enhanced. This is one element that is conspicuously missing in the project design.	Given the prevalent budget and schedule constraints, <i>the Project should strengthen partnerships</i> with institutions or projects that have similar objectives as those of FiRM such as REFRESH, PROSPER, SFAD-WDP, M-CLIMES <i>and explore co-financing arrangements</i> (leveraged co-funding) e.g. with REFRESH. Co-financing should particularly aim at addressing the	CTA/PMU	Mar. 2022

Rec. No.	Rationale for recommendations	Recommendation	Lead actor(s) with Responsibility for addressing recommendation	Timing/ dates for actions
		financing gaps relevant to but not adequately addressed through current programming – such as strengthening value chains for the fishery and sustainable the land-based income-generating activities.		
Effectiveness				
B.1	The project has to deliver on its promise but the schedule has been constrained by delayed start, Coronavirus pandemic, systematic logistical hurdles in operational disbursements and protracted procurement procedures. As of August 2021, project had spent slightly over half (57.6%) of the resources allocated (proportionally it should have spent about 93% of the resources by August 2021). Given that the project is officially ending in December, 2021, a lot of resources may have to be returned to the donor	The Project management should request for a no-cost extension to deliver the remaining outputs and outcomes. Relatedly, there is need for budget re-allocation to sustain the salaries of the PMU. A further periodization is required to implement high impact activities given this financial constraint	CTA/PMU	November 2021
B2	Sustainability and replication of the EAFM relies heavily on the uptake by the communities of improved knowledge, and governance arrangements and practices. However, this	Expedite execution of the remaining EAFM activities to demonstrate and test effectiveness of the EAFM approach before project closure (e.g. sanctuaries, Kulungwi watershed	CTA/PMU	June 2022

Rec. No.	Rationale for recommendations	Recommendation	Lead actor(s) with Responsibility for addressing recommendation	Timing/ dates for actions
	has to be tested within the project timeframe.	management, VMS, etc.).		
Efficiency				
C.1	Support to and funding for Partnership activities has been hampered by delays in processing of LoAs and failure of some of the DoF units to pass the HACT assessments.	<ul style="list-style-type: none"> • Expedite processing and execution of LoAs for activities such 'Save the Chambo Campaign' (under DoF) • Execute the data methodology/collecti on activity by Monkey Bay Research under DoF Headquarters LoA 	FAO/CTA	Dec. 2021
C.2	There has been low utilization of the training budget (only 32.3% of training and 17.3% of travel budget spent as of August 2021) due to suspension of training activities as a result of the Covid-19 pandemic. Online training is not possible since most potential trainees work and live in rural areas and thus do not have the appropriate equipment and connectivity for this mode of training	Expedite physical (in-person) training sessions given that the rate and risk of infection to Covid-19 have come down sufficiently, and will presumably continue to do so as more people get vaccinated.	CTA/PMU	Mar. 2022
Sustainability and catalysis/replication				
D.1	Project has invested in key equipment and infrastructure (e.g. VMS, patrol vessel, truck, motorcycles staff houses and office renovations) for the DoF for improved governance of fisheries.	Prepare a practically implementable sustainability plan inclusive of legislation and financing mechanisms of VMS	DoF/CTA	June 2022
Factors affecting performance				

Rec. No.	Rationale for recommendations	Recommendation	Lead actor(s) with Responsibility for addressing recommendation	Timing/ dates for actions
E.1	Use of Operational Advances (OAs) for implementation of activities has severely impacted the delivery of project activities	FAO should look into the use of LoA for implementation of activities. If this is not possible, then FAO should review the processing and modalities for use of OAs and make the system faster and more efficient.	FAO/CTA	December 2021
E.2	District level coordination of project activities with partners and district authorities has been hampered slow transfer of resources and amount of the resources	The project should develop, agree and sign a partnership strategy with its project partners for the remainder of the project. This should set out the role and responsibilities, what each partner will deliver, and with what resources.	CTA/PMU	December 2021
E.3	Limited engagement of FAO Malawi HQ to support project level Communication despite the high significance of communication to change fisher behaviour towards sustainable fishing practices.	Recruit a dedicated communications officer to be part of the PMU.	CTA/FAO	December 2021
Cross-cutting dimensions				
F1	While the project is advancing gender mainstreaming in project activities, women's access to and control of ownership of means of production and processing in the fishery value chain is still low.	Expedite co-funding arrangements to support women's participation and advancement in the fishery value chain and other livelihood interventions.	CTA/PMU	December 2021

Rec. No.	Rationale for recommendations	Recommendation	Lead actor(s) with Responsibility for addressing recommendation	Timing/ dates for actions
F.2	Artificial restocking of Lake Malombe could increase biosecurity risk including genetic contamination and emergence of diseases resulting in the collapse of the indigenous fish species.	National biosecurity standards for fish hatcheries are drafted under Outcome 3.2. Therefore, expedite finalization of biosafety standards and implementation of biosafety mitigation measures for Lake Malombe.	DOF/CTA/PMU	January 2021

6. Lessons learned

234. The project used baseline indicators from the TCP project that was not compatible with the monitoring requirements of the FiRM project. Realizing this midway through implementation, the Project conducted a complementary baseline of limited scope that could not completely address the gaps. **Therefore, indicators for a project should be specific to the project and not 'borrowed' from another different project. Additionally, the baseline should be conducted at the start of the project (best practice is within three months of commencement of the project).**
235. There have been challenges around the participation of project partners in project activities, particularly from the Ministry of Agriculture and the Department of Forestry in the Kulungwi River Watershed Management due to lack of clarity on expectations and resource allocations. **Therefore, is imperative to clarify and address expectations in terms responsibilities, deliverables and resources allocations among partners for effective delivery of project outputs and outcomes.**

Appendix 1. Terms of reference for the MTR

1. Background and Context of the Project/Program

1. Even without climate change, fishery resources in Malawi face severe pressures, with major implications for livelihood sustainability and food security. The fisheries resources in Lake Malawi, particularly in the South-East arm of the lake, have been heavily pressured and eventually over-exploited for many years. From the 1970s to 2009, per capita consumption of fish in the country fell by more than 70% from 14kg per person per year to about 5.4 kg. This is far less than 13-15kg per capita supply recommended by World Health Organization (WHO).
 2. A similar situation is found in the project's main target area, Lake Malombe: in the 1980s, when the fishery was near its peak, the lake produced over 12,000 tons of fish, representing approximately 17% of Malawi's total production; however, the fishery has experienced a rapid decline in annual catches from about 12,000 tons in 1988 to around 3,700 tons in 1999, despite fishing effort having increased markedly (from 472,425 net sets in 1983 to 1,368,993 in 1995), resulting in a sharp fall in Catch per Unit Effort (CPUE). The lake now contributes only 2-5% of the total national fish production.
 3. The Building climate change resilience in the fisheries sector in Malawi (FiRM) project was launched in January 2017 and is scheduled to close in December 2021. The total budget of the project is USD 17 580 000, with a GEF-contribution of USD 5 460 000. Currently, delivery is at USD 1 467 880. The project objective is to improve the resilience of fishing communities around Lake Malombe to climate change.
 4. The project is promoting an integrated package of resilience strategies, which build upon the coping strategies already applied by local communities, and is adapted to reflect local variations in conditions and needs.
 5. The resilience strategies promoted through the project responds to a number of strategic considerations, in addition to the nature of the climate change stresses themselves:
 - Under a "business as usual" scenario (BAU), capture fisheries on Lake Malombe are already in a state of collapse, due to overfishing resulting primarily from high prevalence and use of inappropriate gear. Climate change threatens to accentuate and accelerate the existing processes of decline, while increasing some pre-existing stresses (such as lake level variations) from manageable to critical levels. There is therefore a need for "no regrets" actions to correct the drivers of this decline, at the same time introducing additional measures to counter the additional stresses imposed by climate change and to improve the resilience of fisheries and livelihoods to climatic shocks.
- i.
 - The actors with least ability to adapt to climate change through switching livelihood support options are the poorest. Those with greater access to economic resources, who currently own most of the factors of production in the form of fishing boats and gear, are considered to have a relatively high capability to adapt by investing their capital in alternative businesses. There is therefore a need to ensure that adaptation strategies are formulated in such a way as to maximize their benefits for the poor, both through improvements to their own production systems and through the

generation of employment opportunities and other economic multiplier effects as a result of improvements to production systems managed by the less poor.

- There are already a number of aquaculture ponds in the project area, and aquaculture has some potential to contribute to the income and food needs of local stakeholders. A number of factors, however, including poorly developed value chains, limited technical and organizational capacities, high capital requirements and the risk of price fluctuations due to the availability of fish from the large wild fisheries of Lakes Malombe and Malawi, limit the potential of aquaculture as a reliable alternative livelihood strategy capable of generating significant resilience benefits for the poor. These constraints are beyond the scope of this project alone to address effectively. The project will not therefore aim to increase the scale of aquaculture in the area, but rather will focus on supporting the “climate-proofing” aquaculture and on integrating it into diverse and resilient farming/livelihood systems, accessible to the poor.
6. Taking into account these considerations, the FiRM project aims to create a situation in which:
- 1) *Capture fisheries on Lake Malombe are restored and “climate-proofed”*, allowing them to generate livelihood benefits for local people in the form of income and food security, despite the BAU stresses of overfishing and the added stresses to ecosystems and livelihoods that are expected as a result of climate change;
 - 2) *Local people (especially the poor) have access to resilient options* for meeting income and food security needs, in order to buffer their livelihoods against the potential impacts of climate change and BAU pressures on their existing livelihood support strategies.
 - 3) A Vessel Monitoring System (VMS) for commercial fishing on Lake Malawi was supported by TCP/MLW/3504, including the first two years of implementation. FiRM is now preparing to support the VMS for an additional, third year. The justification is based on the ecological (including fisheries governance) linkage between Lake Malombe and the SE Arm of Lake Malawi

1.1 Description of the project, project objectives and components

Description of the context

7. The population of Malawi is estimated at 17.6 million people (NSO, 2018⁷) with an annual growth rate of 2.6%. The major cause of high population growth is the high total fertility rate (TFR), which is the number of children a woman will give birth to in her lifetime. Malawi's TFR of 4.17 (NSO, 2018) is one of the highest in Africa. Malawi ranks among the world's most densely populated and least developed countries with a population density of 186 persons per km² (NSO 2018).
8. The economy of Malawi is predominantly agricultural, with about 80% of the population living in rural areas (World Bank 2013). Agricultural activity represents approximately one-third of GDP and 90% of export revenues. The most important export crop is tobacco, accounting for more than half of all exports. Other agricultural revenue streams include cotton, corn, maize, potatoes, cassava, sorghum, rice, pulses, tea, groundnuts, macadamia nuts, cattle and goats. Traditionally Malawi has been self-sufficient in its staple food, maize

⁷ National Statistics office, 2018 Population and Housing census. Zomba, Malawi

(corn), and during the 1980s it exported substantial quantities to its drought-stricken neighbours. Nearly 90% of the population engages in subsistence farming⁸.

9. Officially, the fisheries sector is estimated to contribute around 4% to GDP⁹. However a recent report by the Pact FISH project valued the contribution at 7.2% to GDP¹⁰. Despite the declining per capita access to fish, fish stocks of Malawi account for an estimated 28% of total animal protein consumed in Malawi (Jamu and Chimatiro, 2005), one of the highest dependencies on fish for animal protein in Southern Africa. This is particularly true for poorer Malawians, for whom fish may be the only regularly available source of animal protein. The demand for fish in Malawi is very high, as a result a large proportion of the catch is consumed locally. Because fish is in high demand, it is easily traded in both rural and urban communities. Overall, Malawians today find it more difficult and more expensive to obtain fish than before (PIAD, 2006)¹¹.

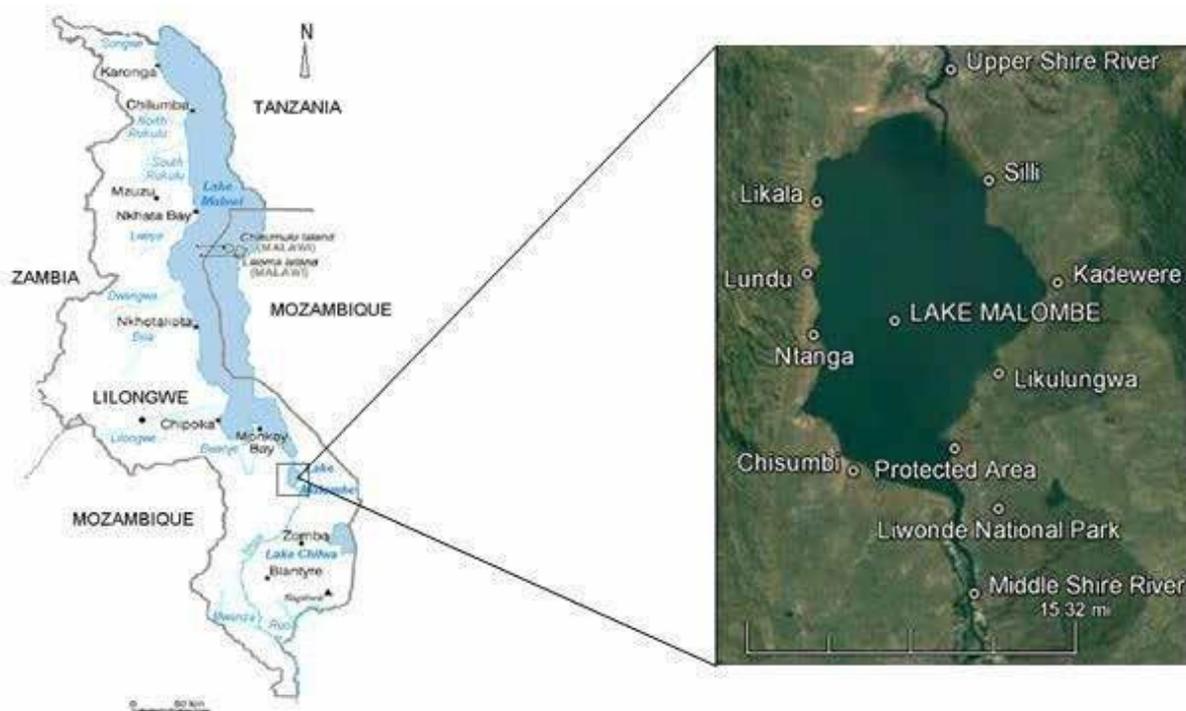


Figure 6-1 Map of (the project zone in) Malawi

⁸ ADVERSE IMPACTS OF CLIMATE CHANGE AND DEVELOPMENT CHALLENGES: INTEGRATING ADAPTATION IN POLICY AND DEVELOPMENT IN MALAWI. JOHANNES CHIGWADA PROGRAMME MANAGER ZERO REGIONAL ENVIRONMENT ORGANISATION, HARARE, ZIMBABWE. <http://pubs.iied.org/pdfs/10013IIED.pdf>

⁹ <http://acpfish2-eu.org/index.php?page=malawi>

¹⁰ FISH (2018). Lake Fisheries Value Chain and Post-Harvest Loss: A Policy Brief, USAID/FISH Project, Pact Publication. Lilongwe, Malawi: 17 pp.

¹¹ Modelling And Forecasting Small Haplochromine Species (Kambuzi) Production In Malaŵi – A Stochastic Model Approach Wales Singini, Emmanuel Kaunda, Victor Kasulo, Wilson Jere. INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH VOLUME 1, ISSUE 9, OCTOBER 2012

Project Operational Context

10. Project implementation was expected to start in January 2017, but formally started in 2018 with an inception workshop held between 30 January and 1 February. In August 2018 the project was presented to the District Executive Committee (DEC), a committee of District level technical officials responsible for development initiatives. Recruitment of staff for the project management unit was finalized by mid-November 2018, and the project was launched in Mangochi District on the 27th of the same month, which officially marked the start of activity implementation.
11. However, implementation has been hampered by operational issues. This includes delays with the release of operational advances (OA) for implementation of activities (about 2-3 weeks delay is the norm between request submission and the release of the OA) leading to tight and sometimes delayed work schedules. Further, following submission of OAs for liquidation, the process is currently not transparent to finance administrators in the field, and there are examples of OAs lingering for several months before being cleared. Aggravating the situation is the FAO rule that any one person holding an OA should not exceed USD 5,000 and, in theory, no OA can be issued before the preceding OA has been cleared. The FAO rules on OAs tends to affect activities in Malawi more than other countries where banking systems are better developed – in Malawi many stakeholders simply do not have bank accounts and/or find such services too expensive, meaning that cash payments for operational expenses is the norm.
12. Another challenge is protracted procurement processes resulting in delayed delivery of required resources. This is to some extent due to an overstretched FAOMW procurement unit, which is dealing with a substantial increase in funding and projects. An ongoing decentralisation of procurement may cause further issues, including the sharing of international procurement officers between two country offices (in the case of Malawi the IPO was shared with Mozambique and later DRC).

Description of the project and linkages to development priorities

Table 2: Project description

Project Title	Building climate change resilience in the fisheries sector in Malawi
Country(ies)	Malawi
Description of the project	
When and how the project/program was initiated	30 Jan-1 Feb 2018, Inception Workshop
FAO project ID	620333
GEF ID	5328
Resource Partner	Global Environment Facility
Project Executing Partner(s)	Ministry of Agriculture, Irrigation and Water Development
FAO Project Symbol	GCP/MLW/053/LDF
Project Duration	60 months

Actual Implementation Start (EOD)	January 2017	
Proposed Implementation End (NTE)	December 2021	
GEF Grant Amount (USD)	5,460,000 USD	
Co-financing amount at approval (USD)	12,120,000 USD	
Budget Holder	Zhijun Chen (FAOR Malawi)	
Lead Technical Officer	Vasco Schmidt (FAOSFS) and John Jorgensen (NFIFL)	
Financing Plan	In-kind USD	Grant USD
GEF allocation		5,460,000
<i>Co-financing</i>		
LUANAR	750,000	
DCCMS	300,000	
DoF	1,500,000	
PACT/FISH	5,500,000	
FAO	570,000	
MoAIWD	1,500,000	
UNDP	2,000,000	
Subtotal co-financing	12,120,000	12,120,000
Total Budget		17,580,000
Link to priority areas		
Contribution to FAO's Strategic Framework	Strategic Objective 2: Increase and improve the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner Strategic Objective 5: Increase the resilience of livelihoods to threats and crises.	
GEF Focal Area	Climate Change Adaptation (CCA)	
GEF Strategic Objectives	<ul style="list-style-type: none"> - CCA1: Reducing vulnerability - Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level - CCA2: Increasing Adaptive Capacity: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level - CCA3: Adaptation Technology Transfer: Promote transfer and adoption of adaptation technology 	
Environmental Impact Assessment Category	Low	

1.2 Project stakeholders and their roles

The following state and private sector institutions, civil society and NGOs have participated in and benefited from the project:

Table 3: Project stakeholders

Key stakeholders (disaggregated as appropriate) ¹²	Their role in the project	Reason for their inclusion in or exclusion from the MTR	Priority for MTR (1-3) ¹³	How and when should they be involved in the MTR?
1. Active stakeholders with direct responsibility for the project, e.g. FAO, executing partners				
District fisheries Office	Direct implementation of capture fisheries, aquaculture and Integrated Watershed Management (IWM) components.	Included in the MRT due to the key role they are playing in the delivery of the project	1	Throughout the MTR process
FiRM-CTA (Niklas Mattson)	Provision of technical supporting to Implementing partners.	Included in the MRT due to the key role they are playing in the delivery of the project	1	Throughout the MTR process
District Forestry Office	Direct implementation of Integrated watershed Management (IWM) of component.	Included in the MRT due to the key role they are playing in the delivery of the project	1	Throughout the MTR process
District Agriculture Development Office	Implementation of Integrated Watershed Management (IWM)	Included in the MRT due to the key role they are playing in the delivery of the project	1	Throughout the MTR process
Senga bay fisheries research station	Supporting in the installation of fish cages in upper shire and also a beneficiary of capacity building trainings from the project	Included in the MTR as they are making substantial contributions to the project	1	During MTR review
Monkey Bay fisheries research unit	Research and expert knowledge support and also a beneficiary of capacity building trainings from the project	Included in the MTR as they are making substantial contributions to the project	1	During MTR review

¹² Include the names of relevant individuals, if known, and be as specific as possible

¹³ 1 = essential; 2 = desirable; 3 = if time and resources allow

National Aquaculture Centre (Domasi)	Research and expert knowledge support. They will be responsible for supplying fish fingerlings and also a beneficiary of capacity building trainings from the project	Included in the MTR as they are making substantial contributions to the project	1	During review MTR
Malawi College of Fisheries (MCF)	Capacity Building support	Included in the MTR as they are making substantial contributions to the project	1	During review MTR
2. Active stakeholders with authority to make decisions on the project, e.g. members of the PSC				
Department of Fisheries (Ministry Headquarters)	Co-financing partner. Involved in the formulation of the project. Major decision makers on all aspects of the project Including approval of project documents.	Included for being co-financing partners	2	During MTR Review
FAO	Involved in the formulation of the project. Key in ensuring that finances are made available. Even procurement of major items for the project Is supported by FAO's procurement unit. Key people to interview include FAOR, Procurement Officer, Operations Officer and Finance Officer.	Included in the MTR as they are key in decision making especially on resource (funds) transfer, procurement of major Inputs, liaising with the project donor among others.	1	Throughout the MTR process
GEF Focal point (Mrs Shamiso Najira)	She is a member of the Project Steering Committee (PSC). Provision of technical guidance for the project.	Included as she is also a member of the PSC	2	During MTR Review
PSC	The committee provides technical guidance to the project. Principle Secretary PS for Ministry of Agriculture Irrigation and Water Development who is the Chairperson for the PSC should be Involved In the process or any member delegated by the PS should be Interviewed	The PS for MAIWD is the chair of the PSC hence the inclusion.	2	During MTR Review
Technical Officer (Fritjof Boerstler)	Provide technical support and make decision for the quality delivery of the project.	Included for the role being played in the project	2	During MTR Review
Lead Technical Officer- (Simon FungeSmith)	Provide technical support and make decision for the quality delivery of the project.	Included for the role being played in the project	2	During MTR Review
Lead Technical Officer_ (Vasco Schmidt)	Provide technical support and make decision for the quality delivery of the project.	Included for the role being played in the project	2	During MTR Review
Funding Liaison Officer- [Chris Dirkmaat (CBCDD)]	Ensures availability of project funds	Included for the role being played in the project	2	During MTR Review
FAO-GEF coordination (Geneviève Braun)	Central in the coordination of GEF projects	Included as she is the MTR focal point person for GEF projects	1	Throughout the MTR process
3. Secondary stakeholders (only indirectly or temporarily affected)				
Mzuzu University	One of beneficiaries of capacity building for Ecosystems Approach to Fisheries Management.	Dr. Wells Singini Is a member of PSC hence his inclusion	3	During MTR Review
Lilongwe University of Agriculture and Natural Resource (LUANAR)-	The institution is a beneficiary of capacity building for Ecosystems Approach to Fisheries Management.	Included for being Co-financing partner and has Professor Emmanuel Kaunda who is a	3	During MTR Review

		member of PSC and was also involved in the formulation of the project.		
CHANCELLOR College- Professor Sosten Chiotha	Involved in the formulation of the project	He is also a member of PSC	3	During MTR Review
4. Stakeholders at grassroots level who benefit directly or indirectly from the intervention (gender disaggregated where possible)				
Beach Village Committee (BVC)	Joint project planning and implementation; Leads for BVC revival and “reformation”; Identification, promotion and enforcement of relevant by-laws; Beneficiaries of capacity support; Co-management partners	Included because they are direct beneficiaries of the project	1	During MTR Review
Village Natural Resources Management Committee (VNRMC)	Support implementation of IWM; Beneficiaries of capacity building	Included because they are direct beneficiaries of the project	1	During MTR Review
Village Agriculture Committee (VAC)	Support implementation of IWM; Beneficiaries of capacity building	Included because they are direct beneficiaries of the project	1	During MTR Review
Aquaculture farmers	Beneficiaries of aquaculture interventions. So far, a total of 15 farmers are benefiting (4 females and 11 males) from the target of 35 farmers.	Included because they are direct beneficiaries of the project	1	During MTR Review
Fishers, processors, Gear Owners	These are beneficiaries of the Capture fisheries interventions. So far they have benefited from capacity building support.	Included because they are direct beneficiaries of the project	1	During MTR Review
Traditional Authorities (Chimwala, Chowe and Mponda)	Joint project planning and implementation; Beneficiaries of capacity support; Co-management partners; Identification and promotion of relevant by-laws; Lead in mobilizing community actions and project support.	Included because they are direct beneficiaries of the project	1	During MTR Review
Other interest groups that are not participating directly in the intervention, e.g. development agencies working in the area, civil-society organizations				
PACT	Co-financing partner through REFRESH project in Mangochi	Included since they are Co-financing partner	3	During MTR Review
UNDP	Co-financing partner through Climate proofing project in Mangochi	Included since they are Co-financing partner	3	During MTR Review
Department of Climate Change and Metrological Services (DCCMS)	Co-financing partner	Included since they are Co-financing partner	3	During MTR Review
Ministry of Agriculture Irrigation and Water Development (MoAIWD)	Co-financing partner	Included since they are Co-financing partner	3	During MTR Review

1.3 Theory of Change

13. It is important to note that FAO has recommended that project concept notes include a theory of change since 2015¹⁴. The project was formulated before 2015 hence did not develop a theory of change as part of the project document. A draft TOC has been prepared and is included as Annex 1. The ToC is to be further developed and validated with key project stakeholder as part of the midterm review process.

1.4 Implementation Progress to Date

14. The Inception Workshop was held in the first quarter of 2018, followed by additional planning exercises and preparation of activities, and the first steering committee meeting was held in June 2018. Subsequently the project was presented to, and approved by the Mangochi District Executive Committee in August 2018. Field activities and research actions were gradually initiated, and in November 2018 the Project Launch was conducted at an event near Lake Malombe. After which full implementation of the project activities could start. However, the implementation of the project in 2020 and 2021 was hugely affected by Covid-19 pandemic. Key deliverables were delayed thereby negatively impacting on project results. As of 24 May 2021 restriction are eased, and FAO offices moving to phase 2 (essentially reintegration of 40% of normal capacity)
15. Progress towards the project Objectives include the following:

Outcome 1.1. Enhanced access to information on climate trends, extreme events and resource status, necessary for the formulation and implementation of effective and timely resilience and management measures

- Awareness on fisheries regulations was disseminated in advance of the 2019 and 2020 closed fishing season (starting on 1 October each year), which in combination with support to enforcement actions by DOF resulted in a marked decrease in illegal fishing during the closed season. Out of a total of 184 Nkacha fishing units¹⁵ in Lake Malombe, in November 2019 on average only 7 units and 15 units were observed during the day and night, respectively.
- A biomass survey of fishing areas B and C was carried out, and while analysis is still under way, preliminary results indicate a shift in catch species composition and a significant decline in shallow water fish biomass. The biomass survey is related to the introducing of a Vessel Monitoring System which will assist with reducing illegal fishing in Area A of Lake Malawi, which is a linked ecosystem via the Upper Shire River (c.f. Outcomes 2.2 and 3.1).
- Information for routine fisheries data collection has been the subject of discussions with DOF, where FiRM has highlighted the need to review, improve and streamline the data collection for the production of information suitable for management purposes. DOF has agreed in principle to the need and plans are under way for a national workshop so that support to fisheries information generation can be optimized.
- Early warning messages for extreme weather events, provided by Department of Climate Change and Meteorological Services have been piloted using dissemination via WhatsApp. While the information has been well received and appreciated, the penetration of smart phones is limited in the area, and further evaluation is required.
- The Kulungwi River is a sub-catchment to Lake Malombe, selected as a demonstration area for actions to address integrated catchment management (ICM). Remote and ground

¹⁴ OED Evaluation_Manual_April_2015_new.pdf p.6

¹⁵ DOF 2018. Annual frame survey report of the small-scale fisheries

truthing surveys have generated hot-spots in Kulungwi river catchment (sub-catchment to Lake Malombe) for interventions to be carried out by members of three villages, with support from FiRM and PROSPER¹⁶. This will include mitigation of erosion, reduction of bush fires, protection and regeneration of vegetation in identified areas and integrating agriculture with aquaculture (c.f. Outcome 3.4).

Outcome 2.1 Climate change resilience considerations mainstreamed into key policy instruments of relevance to fisheries and fishing communities

- Generally, the time scales for preparing and enacting key policy instruments are often beyond the scope of normal project. Also, the FiRM project is clearly focusing at the District level. Nevertheless, the project is addressing decision makers that are involved in the preparation of policy and related instruments, including District instruments such as the District Development Plan. FiRM is preparing training and information dissemination on the Ecosystem Approach to Fisheries management (EAFM; c.f. Outcome 3.2), which will include modules to address policy and decision makers. FiRM is also preparing to institute a "Think Tank" as part of the annual Fisheries and Aquaculture Forum – unfortunately the Forum was cancelled for 2019. Obviously, Codes of Conducts and policy advisory materials can and will be produced, to inform policy decisions, potentially also beyond the time frame of the project.

Outcome 2.2 Strengthened capacities and awareness for promoting climate resilience in fisheries sector:

- Training of government staff has increased the capacity of fisheries protection officers (vessel navigation, safety at sea, use of vessel monitoring system), and strengthened the mobility of District extension officers (road safety, operation of motor bikes)
- FiRM has increased the capacity of DOF by providing and renovating vehicles and vessels, and by ongoing renovation of buildings in Mangochi.
- A key innovation is the project's roll-out of a vessel monitoring system (VMS) for commercial fishing units, which among other is assisting DOF in monitoring the protected Area A of Lake Malawi. Area A is closely linked to Lake Malombe via the Upper Shire River, and improved fisheries management is assumed to be critical for the restoration of Lake Malombe's fisheries. Issues with the VMS include tampering and vandalism of the tracking units (40 fishing units had VMS installed) – this enforcement related issue is being addressed by DOF.
- For the local fisheries management authorities (LFMAs; i.e. co-management entities) improved transparency and accountability has been supported via training events. The result of this increased capacity will accrue under Outcome 3.1.

Outcome 3.1 Adaptive co-management and resource governance systems in support of climate-resilient capture fisheries

- Stakeholders in the Lake Malombe and Upper Shire River fisheries, including Beach Village Committees (BVC), the local Co-management institutions, which in turn form the Fisher Association (FA) at Lake/Ecosystem level, recently (2018) signed management agreements with DOF, which expands their rights and responsibilities. In December 2019 successful

¹⁶ PROSPER (Promoting Sustainable Partnerships for Empowered Resilience), a multi-disciplinary consortium bringing together UN agencies (WFP, UNDP, UNICEF and FAO), financed by UKAid (UNJP/MLW/076/UNJ)

elections of new committee members for each of the currently 34 BVCs (elections are due every three years) were carried out, which sets the scene for training of the BVCs and FA, which will include participatory review and revision of management plans and by-laws.

- The VMS (Outcome 2.2) is providing surveillance of the commercial fishers, which is essential to encourage artisanal fishers to comply with the fisheries by-laws. Enforcement actions by the Fisheries Protection Unit in combination with strengthened BVC' is expected to result in substantially improved compliance.
- Self-financing options for BVC and FA actions have been explored through a participatory process, and are ready to be deployed.

Outcome 3.2 Fish stocks and habitats restored through Ecosystem Approach to Fisheries (EAF)

- The FAO developed training modules on the Ecosystem Approach to Fisheries management (EAFM) was introduced to Malawi in March 2019, including the transposition of the training materials from a marine fishery focus to inland fisheries (i.e. EAFM IF). The trained participants represent a resource for further TOT training, and involvement in awareness courses for policy and decision makers.
- In preparation for a pending decision on restoration approaches for Lake Malombe, a biosecurity manual has been drafted for the production of fingerlings. For the same purpose, a needs and capacity assessment of the National Aquaculture Centre indicates required actions and improvements.

Outcome 3.3 Aquaculture is climate-proofed and able to contribute to diverse and resilient livelihood strategies of the most vulnerable sectors of the population

- A total of 35 aquaculture pond sites in the catchment of Lake Malombe was assessed, which show that there is a 44% yield gap that could be closed by providing improved inputs (seed and feed) and implementing climate proofing.
- Three learning centres established at Lake Malombe in cooperation with PROSPER are providing capacity for action learning and knowledge generation in climate proof aquaculture. Trained lead farmers are acting as community based facilitators.
- A pilot comprising 5 fish cages (5 m diameter, 3 m deep) in the Upper Shire River is ongoing in collaboration with Senga Bay Fisheries Research Station. The siting of the cages is informed by a bathymetric, water quality and ecological survey of the Upper Shire River. A commercial operator, MALDECO, is engaged in the pilot to ensure a full range of options are considered, from fully owned cages to contract farming. Community members are involved in the installation and operation of the cages, and economic considerations are central to the pilot.

ii. Outcome 3.4 Local people have access to diverse, pro-poor farming systems as a central element of resilient rural livelihoods

- A micro-catchment identified for demonstration of Integrated Catchment Management (ICM), Kulungwi River, located SW of the Lake and comprising three villages (Msauka, Mpembena and Somanje), has been assessed in cooperation with the District Agriculture Development Office (DADO). The assessment collated information on hot-spots for erosion, reforestation and other enhancement and protection actions. Activities will be carried out in cooperation with PROSPER.

- Trained resource users from three villages at Kulungwi River are able to collect seeds and understand the requirements for natural forest regeneration.
- Knowledge on fish processing methods have been collated and converted into actionable improvements to in particular climate smart methods for fish smoking at Lake Malombe.

Outcome 4.0. Project implementation is based on results-based management and application of lessons learned and good practices in current and future interventions:

- Baseline surveys, including a vulnerability and disaster risk assessment provides the foundation for project planning and implementation processes.
- Project actions are guided by a regularly updated M&E plan to gauge results and incorporate lessons into the project and for use by future interventions.

2. MTR Purpose and Scope

16. The Mid-Term Review (MTR) will serve both learning and accountability purposes. It will seek to identify any problems and constraints and formulate appropriate recommendations for corrective actions for the effective implementation of the remaining part of the planned project intervention.
17. The MTR will review the effectiveness, efficiency, relevance, sustainability and impact, as well as factors that have affected the performance and delivery of the project to date. The MTR will contribute through operational and strategic recommendations to improve implementation for the remaining period of the project's life. Lessons learnt shall contribute towards national development through the relevant sectors relating to sound environmental management.
18. The mid-term review will assess the implementation period of the project from January 2017 to May 2021, time of the MTR. The MTR will cover all activities undertaken within the framework of the project as described in the project document. Planned project results will be compared with actual results and an assessment will be undertaken to determine the likelihood of sustainability and impact of the project, providing any information relevant to the future decision-making and project implementation.

3. MTR Objective and Key Questions

19. The main objective of the MTR is to assess the relevance of the project, its progress in achieving outcomes for beneficiaries, the cost-effectiveness and efficiency, the strategy for stakeholder engagement and partnerships and the likelihood of sustainability and potential for long-term impacts.
20. MTR questions incorporating GEF evaluation criteria of Relevance, Effectiveness, Efficiency and Sustainability will guide the MTR. The MTR will look at indications of the potential impact of project activities on beneficiaries and sustainability of results, including the contribution to capacity development.
21. The MTR will be guided by the following questions, which will guide the MTR Report. The MTR team will propose a final proposal of the MTR Matrix:
 - **RELEVANCE:** To what extent are the project outcomes congruent with the GEF focal areas/operational program strategies, country and regional priorities and FAO Country Programming Framework? (Relevance, Design)

- **EFFECTIVENESS:** To what extent is the project on track towards achieving the planned results under each of the outputs? How much progress towards project outcomes can be measured, and to what degree is the project on track towards the attainment of project objectives and higher-level results, including assessment of the likelihood of impact (using a Review of Outcomes to Impacts analysis)? (Effectiveness) How can the delivery be improved over the remainder of the project - what changes are needed?
- **EFFICIENCY:** What has been the cost-effectiveness of the project? Were project activities timely implemented, and were there sufficient management procedures to affect efficiency, including regular monitoring and evaluation? To what extent has the project built on existing agreements, initiatives, data sources, and synergies, complementarities with other projects and partnerships, etc. and avoid duplication of similar activities of other groups? (Efficiency)
- **FACTORS AFFECTING PERFORMANCE:**
 - Partnerships and stakeholder engagement: How has FAO collaborated with partners and to what extent does the project develop new partnerships or enhance existing ones? Has the partnership strategy been appropriate and effective? To what extent are stakeholders engaged in the project? How, if at all, has FAO contributed to improving organizational policies, strategies and programmes? What linkages, if any, exist between the capacities developed among diverse types of beneficiaries? (government ownership, partnerships, capacity development)
 - How effective has the materialization of co-financing been?
 - Is the project design appropriate for delivering the expected outcomes? Is the project's logic coherent and clear? To what extent are the project's objectives and components, clear, practical and feasible within the timeframe? (Project Design)
 - The project was initially drafted with a national scope, but was subsequently entirely focused on sub-District level. Vestiges of earlier versions appear to linger in the project document. The MTR seeks to provide answers on this question: how does the geographical approach of the project consistent with the main objectives?
 - As presented area, a Vessel Monitoring System (VMS) for commercial fishing on Lake Malawi was supported by TCP/MLW/3504, including the first two years of implementation. FiRM is now preparing to support the VMS for an additional, third year. The justification is based on the ecological (including fisheries governance) linkage between Lake Malombe and the SE Arm of Lake Malawi. To what extent do this require adjustments to the project design?
 - To what extent have the project's management, administrative, operational and oversight arrangements contributed to the efficient achievement of the project results? How effective has project management dealt with the challenges facing the project and adapted to overcome difficulties and improve delivery? To what extent has accumulated delays been caused by circumstances beyond the control of the project?
 - Does the project have sufficient capacity to address communication and visibility, considering that the budgeted (part-time) position as Communication and outreach specialist was subsumed by the Communication unit of FAOMW?
- **SUSTAINABILITY:** What are, if any, the socio-political, financial, institutional and governance, and environmental risks to sustainability? What evidence exists indicating the feasibility of replication or catalysis of project results, likelihood project activities will continue following project closure (financial and operational sustainability). What does the project need to do to increase the sustainability of its results?

- **CROSS CUTTING ISSUES:** To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender equitable participation and benefits? To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?

4. Methodology

22. The MTR will adhere to the UNEG Norms & Standards¹⁷ and be in line with FAO-GEF MTR Guidance Document and annexes which detail methodological guidelines, templates and practices. The MTR will adopt a consultative and transparent approach with internal and external stakeholders kept informed throughout the MTR process. Triangulation of evidence and information gathered will underpin its validation and analysis and will support the conclusion and recommendations. Due to the COVID pandemic, all the interviews, will be conducted under the strict adherence of COVID 19 preventive measures. Both survey participants and interviewers will put on Masks and always sanitize during the data collection process. In an event that the participant prefers to be interviewed remotely, the consultant will organise virtual meetings to collect data remotely.
23. The first question on relevance relies on data collected through key informant interviews, desk review, observation and some results from the institutional survey. Regarding the question on effectiveness, field observation, desk review, key informant interviews, focus groups (separated by gender), and results from the survey of institutional engagement and capacity development will be used. To gather data related to efficiency and sustainability, the MTR will conduct desk review and interviews with key informants such as project management team, government partners and project steering committee and, whenever possible, focus group discussions.
24. To assess stakeholder engagement, commitment to co-financing and capacity development, the MTR will rely on the desk review, interviews, as well as a survey instrument. The concept for the survey instrument is to measure engagement, which for these purposes is defined as participation, alignment and integration of project activities into national-led initiatives. Capacity development, drawing from the FAO corporate approach to capacity development, is defined as improved skills and knowledge that contribute to enhanced organizational effectiveness.
25. To review co-financing, the MTR team will rely on the validation of the initial estimates, drawing from data and information made available and collected during the project implementation. The final question related to a gender analysis will benefit from desk review, key informant interviews and focus group discussions, and draw heavily from the recent GEF guidance and the guidance provided in OED's framework to evaluate gender results¹⁸
26. However, the above methodology is only a guide and the final methodology will be agreed and finalized during the inception phase by the MTR Team.

5. Roles and Responsibilities

¹⁷ <http://www.uneval.org/document/detail/21>

¹⁸ <http://www.fao.org/evaluation/resources/manuals-guidelines/en/>

27. This section describes the different roles that key stakeholders play in the design and implementation of the MTR.

- i. The **Budget Holder (BH)** is accountable for the MTR process and report and is responsible for the initiation, management and finalization of the MTR. To fast track the MTR Process, the BH has designated an **MTR Manager (RM)** who will act on his behalf.
- ii. The **BH and Lead Technical Officer (LTO)** will provide support to the RM in drafting the ToR, in the identification of the consultants and in the organization of the mission. RM is responsible for the finalization of the ToR and of the identification of the MTR team members. RM shall brief the MTR team on the MTR methodology and process and will review the final draft report for Quality Assurance purposes in terms of presentation, compliance with the ToR and timely delivery, quality, clarity and soundness of evidence provided and of the analysis supporting conclusions and recommendations in the MTR report.
- iii. **The GEF Coordination Unit (GCU)**, will appoint a focal point to provide technical backstopping throughout the MTR process, including guidance and punctual support to the BH/RM and MTR team on technical issues related to the GEF and the MTR. This includes support in identifying potential MTR team members, reviewing candidate qualifications and participating in the selection of consultants, as well as briefing the MTR team on the MTR process, relevant methodology and tools. The GCU will provide quality assurance to the main products of the MTR. The FAO GEF CU also follows up with the BH to ensure the timely preparation of the Management Response. The RM will also organize briefing sessions before and after the main data collection mission with the FAO-GEF Coordination Unit.
- iv. The **MTR Team** is responsible for further developing and applying the MTR methodology, producing a brief MTR inception report, conducting the MTR, and for producing the MTR report. All team members will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the MTR with written inputs to both the draft and final versions of the MTR report (the MTR Team Leader has overall responsibility for delivering the MTR report). The MTR team will agree with the GCU MTR focal point on the outline of the report early in the MTR process, based on the template provided in Annex 12 of the MTR Guidance Document. The MTR Team is free to expand the scope, criteria, questions and issues listed above, as well as develop its own MTR tools and framework, within time and resources available and based on discussions with the BH/RM, consults the BH and PTF where necessary. The MTR Team Leader is fully responsible for the MTR report, which may not reflect the views of the Government or of FAO. The BH/RM and GCU do provide Quality Assurance of all MTR reports.
- v. The MTR Team Leader guides and coordinates the MTR Team members in their specific work, discusses their findings, conclusions and recommendations and leads on the preparation of the draft and the final report, consolidating the inputs from the team members with his/her own.

6. MTR Team Composition and Profile

28. The MTR Team will be composed of TWO Consultants, a Lead Consultant and a National Expert. The International Consultant will be the MTR Team Leader and will be expected to have expertise in climate change resilient based ecosystem approach to fisheries management and

in project evaluation (preferably GEF or UN agency evaluation experience). The National Consultant will be expected to have experience in fisheries to support the International Consultant in collection of data in the project areas. The detailed TORs area annexed in this document.

29. The MTR consultants will be independent of any organizations that have been involved in designing, executing or advising on any aspect of the project being evaluated in the MTR and will not have been involved in any aspect of the project previously.

30. The international consultant/Team leader will have extensive evaluation experience, especially under the theme of ecosystem approach to fisheries management. In addition, the candidate is expected to have the following:

- At least a Master's Degree in fisheries science, Agriculture, Environment, Social Sciences or related field
- Demonstrated experience in monitoring and evaluation of GEF projects;
- Familiarity with the objectives of the GEF CCA focal area;
- Understanding of Ecosystem Approach to Fisheries Management;
- Familiarity with FAO's execution modality, rules and procedures will be an advantage.

iii.

31. The national consultant is expected to have the following:

- Master's Degree in Fisheries Science, Agriculture, Environment, Rural Development, Social Sciences or related field
- Extensive evaluation experience, especially under the theme of fisheries management
- Must be knowledgeable of the Malawi context within which the project is being implemented;
- Demonstrated experience in monitoring and evaluation of technical assistance projects;
- Understanding of natural resources and fisheries management;
- Must demonstrate professional competence and expert knowledge of the pertinent substantive areas of work;
- Must have strong written and oral communications;
- Must be a Malawian.
- Familiarity with FAO's execution modality, rules and procedures is an added advantage.

iv.

32. Both consultants are expected to demonstrate the following competencies:

- results focus
- teamwork
- excellent communication skills (both written and oral) in English
- building effective relationships
- knowledge sharing and continuous improvement

v.

7. MTR Products (Deliverables)

- i. **MTR inception report.** An inception report should be prepared by the MTR team before beginning the fully-fledged data collection exercise that details the MTR Team's understanding of what is being assessed and why. The inception report will serve as a roadmap and reference in planning and conducting an MTR. It also serves as a useful tool for summarizing and visually presenting the MTR design and methodology for discussions

with stakeholders. It details the GEF evaluation criteria/questions that the MTR seeks to answer (in the form of an MTR Matrix); data sources and data collection methods; analysis tools or methods appropriate for each data source and data collection method; and the standard or measure by which each question will be evaluated. The inception report should include a proposed schedule of tasks, activities and deliverables, designating a team member with the lead responsibility for each task or product. The inception report will also include the evaluation matrix

- ii. **Draft MTR report.** The project team, BH/RM, GCU and key stakeholders in the MTR will review the draft MTR report to ensure accuracy and that it meets the required quality criteria through two rounds of review, one internal to the project and FAO followed by a review by key external partners and stakeholders.
- iii. **Final MTR report.** This will include an executive summary and be written in English. Supporting data and analysis will be annexed to the report when considered important to complement the main report.
- iv. **A summary of the main results and achievements of the project in two pages.**
- v. Further guidance on the development of the MTR inception report and the full MTR report is given in the ***Guide for Planning and Conducting Mid-term Reviews of FAO-GEF projects and Programmes*** and annexes.

8. MTR Timeframe

National Consultant

Task	Duration/Date	Responsibility
ToR Finalization	May 2021	BH/RM with support from LTO, FLO PSC and GCU MTR focal point
Team Identification	15 th March 2020	BH/RM, LTO, FLO and GCU MTR focal point
Team Recruitment	27 th May 2021	BH/MTR Manager
MTR missions – confirmation of interviews, meetings and visits	8 th – 24 th June 2021	National Consultant with the support of PMU
Briefing on preliminary findings of the MTR following the field mission(s) (Workshop)	28 th June 2021	National Consultant and PMU
Support production of the first draft for circulation	7 th July 2021	National Consultant and PMU
Circulation and review of first (zero) draft	9 th – 14 July 2021	BH/RM, PMU, GCU MTR focal point, LTO for comments and quality control (organised by BH/RM)
Support production of the second draft	19 th July 2021	National Consultant
Circulation of the second draft	20 th – 21 st July 2021	BH/RM and key external stakeholders (organised by BH/RM)
Support production of a final report	23 rd July 2021	National Consultant

A follow-up report in PPR or PIR	27 th July 2021	BH
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International Consultant

Task	Duration/Date	Responsibility
ToR Finalization	May 2021	BH/RM with support from LTO, FLO PSC and GCU MTR focal point
Team Identification	15 th March 2020	BH/RM, LTO, FLO and GCU MTR focal point
Team Recruitment	27 th May 2021	BH/ MTR Manager
Start-up meeting with the International Consultant	28 th May 2021	MTR Manager
Inception Report International consultant	4 th June 2021	International Consultant
MTR missions – confirmation of interviews, meetings and visits	8 th – 24 th June 2021	International Consultant with the support of PMU.
Briefing on preliminary findings of the MTR following the field mission(s) (Workshop)	28 th June 2021	International Consultant and PMU
Production of the first draft for circulation	7 th July 2021	International Consultant
Circulation and review of first (zero) draft	9 th – 14 July 2021	BH/RM, PMU, GCU MTR focal point, LTO for comments and quality control (organised by BH/RM)
Production of the second draft	19 th July 2021	International Consultant
Circulation of the second draft	20 th – 21 st July 2021	BH/RM and key external stakeholders (organised by BH/RM)
Production of a final report	23 rd July 2021	International Consultant
Preparation of the Management Response	Within 4 weeks since MTR report finalization	BH/ RM in consultation with PMU, PSC, PTF
A follow-up report in PPR or PIR	27 th July 2021	BH

Appendix 2. MTR itinerary, including field missions

The following was the Timetable to the MTR and list of interviewees in the accepted Inception Report

Table 6-1 Timeline for the MRT (from the Inception Report)

SN	Task	Duration/Date		Responsibility
		Start date	Finish date	
1	Start-up meeting with the International Consultant	30 Jun 2021	30 Jun 2021	MTR Manager
2	Inception Report International consultant	7 Jul 2021	30 Jul 2021	International Consultant
3	MTR missions – confirmation of interviews, meetings and visits	31 Jul 2021	21 Aug 2021	International Consultant with the support of PMU
4	Briefing on preliminary findings of the MTR following the field mission(s) (Workshop)	23 Aug 2021	23 Aug 2021	International Consultant and PMU
5	Production of the first draft MTR Report for circulation	23 Aug 2021	30 Aug 2021	International Consultant
6	Circulation and review of first (zero) draft MTR Report	30 Aug 2021	6 Sep 2021	BH/RM, PMU, GCU MTR focal point, LTO for comments and quality control (organized by BH/RM)
7	Production of the second draft	6 Sep 2021	13 Sep 2021	International Consultant
8	Circulation and review of the second draft	13 Sep 2021	20 Sep 2021	BH/RM and key external stakeholders (organized by BH/RM)
9	Production of a final report	20 Sep 2021	27 Sep 2021	International Consultant

Table 6-2. MTR Itinerary for the Field MTR Mission in Mangochi

Day	09:00 - 10:00	11:00 - 12:00	13:30 - 14:30	15:30 - 16:30
Tuesday ¹⁹ Planning and confirmations	Planning and confirmations	Courtesy Call at DC: Discussion around political support towards FIRM	District Forestry Office: Discussion around implementation of Integrated watershed Management (IWM) of component.	District Agriculture Development Office: Discussion around implementation of Integrated Watershed Management (IWM)
Wednesday	Traditional Authority Chowe: Discussion around Beneficiaries of aquaculture interventions. Madina BVC for cages	VNRMC & VAC; Msauka and Mpembena	Ngoyi/Chipeta Beach Village Committee (BVC), T/A Mponda: Discussion around Joint project planning and implementation; BVC revival and "reformation"; Identification, promotion and enforcement of relevant by-laws; Benefits of capacity support; Perspectives on Co-management	Likulungwa Beach Village Committee (BVC), T/A Chowe: Discussion around Joint project planning and implementation; BVC revival and "reformation"; Identification, promotion and enforcement of relevant by-laws; Benefits of capacity support; Perspectives on Co-management
Thursday	Traditional Authority Mponda: Discussion around Beneficiaries of aquaculture interventions with Kuchira fish farmers. (2 groups)	VNRMC & VAC, Somanje Discussion around engagement in implementation of IWM; Benefits of capacity building	Aquaculture group in Somanje Discussion around Beneficiaries of aquaculture interventions	District fisheries Office: Discussion around implementation of capture fisheries, aquaculture and Integrated Watershed Management (IWM) components
Friday	Fish processors: Mwalija BVC Discussion around Capture fisheries interventions and benefits from capacity building	Malawi College of Fisheries (MCF): Discussion around Capacity Building support		

¹⁹ Kick-off meeting at 08:15 at FAO with M&E Specialist

Appendix 3. Stakeholders interviewed during the MTR

SN	First Name	Last name	Position	Organisation/Location
1	Alan	Brooks	Chief of Party	PACT/FISH
2	Amos	Mtonya	Chief Meteorological Officer	DCCMS / Blantyre
3	Dalitso	Kafumbata	Research Advisor	FAOMW / Lilongwe
4	Demistar	Misomali	Administrative Officer	FAOMW / Mangochi
5	Emmah	Muthanje	Operations Officer	FAOMW / Lilongwe
6	Emmanuel	Kaunda	PSC	LUANAR / Lilongwe
7	Faith	Teleka	PMU	FAOMW / Mangochi
8	Francis	Phiri	PMU	FAOMW / Mangochi
9	Friday	Njaya	National Project Director	DoF, Lilongwe
10	Harold	Sungani	PMU	FAOMW / Mangochi
11	Jeffrey	Chisale	Communication for Development Officer	FAO / Lilongwe
12	King	Chimphambano	Procurement Associate	FAO / Lilongwe
13	Leonard	Kamangadazi	District Forestry Officer	Forestry / Mangochi
14	Letson	Yoyola	Principal	MCF /Mangochi
15	Luis	Amaya-Ortiz,	Programme Officer	FAO / Lilongwe
16	Neverson	Msusa	District Fisheries Officer	Fisheries Department / Mangochi
17	Niklas	Mattson	PMU	FAOMW / Mangochi
18	Orton	Msiska	FAO TCP project coordinator	Independent Consultant / Mzuzu
19	Owen	Kumwenda	Chief Agriculture Officer	Agriculture / Mangochi
20	Shamiso	Najira	Deputy Director	EAD/Malawi
21	Sophie	Mahonya	Climate Change and Natural Resource Management specialist	FAOMW / Mangochi
22	Sophie	Moyo	M&E Specialist	FAOMW / Mangochi
23	Stella	Gondwe	Procurement Associate	FAO / Lilongwe
24	Towela	Munthali	Senior Communications Officer	FAO / Lilongwe
25	Wales	Singini	PSC member/FAO TCP Consultant	Mzuzu University / Mzuzu
26	Zhijun	Chen	FAO Resident Representative, MLW - BH	FAO - Malawi
27	Okoth	James	FAO - MLW	FAO - MLW
28	Luis	Amaya-Ortiz,	Programme Officer,	FAO, MLW
29	Vasco	Schmidt	LTO	FAO, Harare

SN	First Name	Last name	Position	Organisation/Location
30	Emillie	Wieben	FLO	FAO- Rome
31	Ellah	Minthanje	Forestry Assistant	Mangochi
32	Kuntaja	Alabi	AEDC	Mangochi

Local Level Governance Institutions Consulted			
SN	Name of Institution	Type of Institution	Location
1	Likulungwa BVC	BVC	TA Chowe /Mangochi
2	Mwalija BVC	BVC	TA Chimwala /Mangochi
3	Ngoyi /Chipeta BVC	BVC	TA Mponda /Mangochi
4	Nkuchira FFG	Fish Farmer's Group	TA Mponda /Mangochi
5	Msauka VAC	VAC	TA Chimwala /Mangochi
6	Somanje VAC	Village Agriculture Committee (VAC)	TA Mponda /Mangochi
7	Somanje VNRMC	Village Nat. Res. Mgmt. Committee	TA Mponda /Mangochi
8	Msauka VNRMC	VNRMC	TA Chimwala /Mangochi

Appendix 4. MTR matrix

Evaluation questions	questions/sub-questions	Indicators	Methods/Response	Other data sources
1. Approach/design (relevance)				
How adequate was the project design in supporting the activities and expected outcomes?				
1.1 To what extent are the project outcomes congruent with the operational program strategies, country and regional priorities and FAO Country Programming Framework?		<ul style="list-style-type: none"> Level of alignment of ProDoc with progress reports 	Methods: KII/FGD	ProDoc Progress reports Steering committee reports Reports of participatory needs assessments
1.1.1 Which national/regional strategies are supported and which are conflicting with the project?		<ul style="list-style-type: none"> Respondents' views and perceptions 	FAO (CTA, LTO, BH, FLO), GCU	
1.1.2 In what way is the project consistent with the FAO Country Programming Framework?			FAO (CTA, LTO, BH, FLO)	
1.2 Is the project design appropriate for delivering the expected outcomes?				
1.2.1 Is the project responding optimally to increasing knowledge and changing people's attitudes and practices towards adaptive management of the Lake Malombe ecosystem?			FAO (CTA, LTO, BH) GCU DFO (Fisheries) DFO (Forestry) DAEANR ²⁰ BVCs VNRMCs Farmer organizations	
1.2.2 Is the project design optimally facilitating fish stocks and habitat restoration?			FAO (CTA, LTO, BH) GCU DFO (Fisheries) BVCs VNRMCs Farmer organizations	
1.2.3 Is the project design optimally accelerating the adoption of climate-smart agriculture and climate-smart aquaculture?			FAO (CTA, LTO, BH) GCU DFO (Fisheries) DAEANR BVCs Farmer organizations	
1.2.4 Is the project design optimally advancing adaptive learning?			FAO (CTA, LTO, BH) GCU DFO (Fisheries) DFO (Forestry) DAEANR BVCs	

²⁰ Director of Agriculture, Environmental Affairs and Natural Resources

Evaluation questions/sub-questions	Indicators	Methods/Respondent	Other data sources
		VNRMCs Farmer organizations	
1.3 To what extent are the project's objectives and components clear, practical and feasible within the timeframe?			
1.3.1 Were the objectives/activities of Component 1 (Access to climate Information) practical and feasible and consistent with the overall goal and intended impacts?		FAO (CTA, LTO, BH) GCU DOF	
1.3.2 Were the objectives/activities of Component 2 (Regulatory framework for climate change management) practical and feasible and consistent with the overall goal and intended impacts?		FAO (CTA, LTO, BH) GCU PMU PSC DOF	
1.3.3 Were the objectives/activities of Component 3 and 4 (Local level capacity building) practical and feasible and consistent with the overall goal and intended impacts?		FAO (CTA, LTO, BH) GCU PMU PSC DOF	
1.3.4 Were the objectives/activities of Component 4 and 4 (Monitoring and evaluation and adaptive learning) practical and feasible and consistent with the overall goal and intended impacts?		FAO (CTA, LTO, BH) GCU	
2. Results (outcome level, effectiveness) To what extent have project objectives been achieved?			
2.1 To what extent is the project on track towards achieving the planned results under each of the outputs?	<ul style="list-style-type: none"> Level of achievement 		Work plan Progress reports M&E reports
2.1.1 How much progress towards project outcomes can be attributed to the project?	<ul style="list-style-type: none"> Respondent perception 	Methods: Desk review; KIIs; Direct observation FAO (CTA, LTO, BH), GCU, PMU, PSC	Steering committee reports Reports of participatory

Evaluation questions/sub-questions	Indicators	Methods/Respondent	Other data sources
2.1.2 To what degree is the project on track towards the attainment of project objectives and higher-level results, including assessment of the likelihood of impact (using a Review of Outcomes to Impacts analysis)?		Methods: Desk review; KII; Direct observation	needs assessment
2.2 What has been the effect of COVID-19 in the delivery of the project results, both at the strategic and community level? and what is likely to be the long term impact of COVID-19 in the achievement of the results under the action?		Methods: KII/FGD	
2.2.1 What has been the effect at strategic level		FAO (CTA, LTO, BH) DFO (Fisheries) DFO (Forestry) DAEANR	
2.2.2 What has been the effect at community level		DFO (Fisheries) DFO (Forestry) DAEANR BVCs; VNRMCS Farmer organizations	
2.2.3 What is likely to be the short or long term impact of COVID-19 on the results under the action?		FAO (CTA, LTO, BH) PMU DFO (Fisheries) DFO (Forestry) DAEANR	
2.2.4 What challenges were/are being faced in the project due to COVID-19?		FAO (CTA, LTO, BH) PMU DFO (Fisheries) DFO (Forestry) DAEANR BVCs; VNRMCS Farmer organizations	
2.3 What are key factors (internal and external) influencing the achievement / non-achievement of the objectives?		FAO (CTA, LTO, BH) PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR BVCs VNRMCS Farmer organizations	
2.4 Have there been any unintended positive or negative effects of the project activities?		FAO (CTA, LTO, BH) PMU PSC DFO (Fisheries) DFO (Forestry)	

Evaluation questions	questions/sub-questions	Indicators	Methods/Respondent	Other data sources
			DAEANR BVCs VNRMCs	
	2.5 How has the project ensured that the target population was adequately identified (in relation to its objectives) and what factors influenced the coverage and reach of project interventions?		FAO (CTA, LTO, BH) GCU PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR BVCs VNRMCs Farmer organizations	
	2.6 The project was initially drafted with a national scope, but was subsequently entirely focused on sub-district level implementation. How is the geographical approach of the project consistent with the main objectives?			
	2.7 A Vessel Monitoring System (VMS) for commercial fishing on Lake Malawi was supported by Technical Cooperation Programme (CP/MLW/3504), including the first two years of implementation. FiRM seeks to support the VMS for an additional year given the fisheries governance linkage between Lake Malombe and the SE Arm of Lake Malawi. <ul style="list-style-type: none"> To what extent does this require adjustments to the project design? How feasible is the proposal. 		FAO (CTA, LTO, BH) PMU; PSC DFO (Fisheries) FAO TCP	
	2.8 What capacity does the project have to sufficiently address communication and visibility needs of the project given that the budgeted (part-time) role of Communication and Outreach Specialist was subsumed by the Communication Unit of FAOMW?		FAO (CTA, LTO, BH) PMU; PSC	
3. Results (output level, efficiency)				
To what extent were the project management arrangements appropriate, efficient and clear?				
	3.1 To what extent has the project built on existing agreements, initiatives, data sources, and synergies, complementarities with	<ul style="list-style-type: none"> Level of achievement 	Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU; PSC	Work plan Progress reports Steering committee

Evaluation questions/sub-questions	Indicators	Methods/Respondent	Other data sources
other projects, project components, and partnerships, and avoid duplication of similar activities of other groups?	<ul style="list-style-type: none"> Respondent perception 	DFO (Fisheries) DFO (Forestry) DAEANR	reports of participatory needs assessment
3.2 Were project activities timely implemented, was the project cost-effective, and were there sufficient management procedures to affect efficiency?		Methods: KII/FGD FAO (CTA, LTO, BH) PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR	
3.3 Was the M&E system adequate and appropriate, and was M & E data used to improve project performance?		Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU; DFO (Fisheries) DFO (Forestry) DAEANR	
3.4 To what extent have the project's management, administrative and oversight arrangements contributed to the efficient achievement of the project results? <ul style="list-style-type: none"> How effective has the materialization of co-financing been? 		Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU	
3.5 How effectively has project management dealt with the challenges facing the project and adapted to overcome difficulties and improve delivery?		Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU; DFO (Fisheries) DFO (Forestry) DAEANR	
3.6 How can the delivery be improved over the remainder of the project - what changes are needed?		Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU; DFO (Fisheries) DFO (Forestry) DAEANR	
4. Factors affecting performance			
General questions: <ul style="list-style-type: none"> What have been the main challenges that you have faced in delivering the project? What were the major factors influencing the achievement 			

Evaluation questions	questions/sub-questions	Indicators	Methods/Respondent	Other data sources
	<p>or non-achievement of project results?</p> <ul style="list-style-type: none"> How can the delivery be improved in the second half of the project -what changes are needed? 			
<p>4.1 Project design and readiness</p> <p>4.1.1 Is the project's causal logic (set out in its Theory of Change) robust, coherent and clear? To what extent are the project's objectives and components, clear, practical and feasible/realistic within the timeframe?</p> <ul style="list-style-type: none"> Does the project document present a clear rationale for the project with coherent problem and barrier analysis? <p>4.1.2 To what extent are the project's objectives and components clear, practical and feasible within the timeframe (especially given the delays in starting the project)?</p> <p>Are the causal pathways from the project outputs (goods and services) through outcomes (changes in stakeholder behavior) towards impacts (long-term, collective change of state or systems) clearly and convincingly described in the project documents?</p> <p>Are impact drivers and assumptions clearly described for each causal pathway?</p> <p>Does the project have an explicit and coherent theory of change?</p> <p>4.1.3 Is the project design appropriate for delivering the expected outcomes?</p> <p>What were the key challenges faced in designing the project and how can the process be improved for future projects?</p>	<ul style="list-style-type: none"> Level of coherence between project expected results and project design Quality of the project design, result matrix and project indicators Evidence that necessary "preparation and readiness" factors, conditions and other processes were considered in Project design 	<p>Methods: Systematic reviews; KIIs</p> <ul style="list-style-type: none"> Project document Project design stage documents including PIF reviews Project progress reports PSC reports 		
<p>4.2 Project execution and management</p>	<ul style="list-style-type: none"> Extent of delivery of the desired results 	<p>Methods: Systematic reviews; KIIs</p>		

Evaluation questions	questions/sub-questions	Indicators	Methods/Response	Other data sources
<p>4.2.1 What have been the main challenges in relation to the management and administration of the project?</p> <p>Is the project management structure clear, coherent and efficient? Has the management structure and mechanisms outlined in the project document been followed and been effective in delivery project milestones, outputs and outcomes?</p> <p>4.2.2 To what extent have FAO-Malawi, Fisheries Department and Ministry of Agriculture performed their roles and responsibilities as executing partners in managing and administering the project? Have FAO administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. influenced the project's performance?</p> <p>4.2.3 Are all the administrative (including contractual) procedures operating well?</p> <p>Are adequate project management arrangements in place?</p> <p>4.2.4 Are staffing arrangements adequate to deliver the project in the remaining timeframe?</p> <p>Are staffing arrangements adequate to deliver the project in the remaining timeframe?</p> <p>4.2.5 Are there any unforeseen issues (positive or negative) that are affecting project implementation and progress towards outcomes and objectives that need to be considered?</p> <p>Are work plans clear, adequate and realistic and actively used by project management?</p>	<ul style="list-style-type: none"> • Evidence of approaches and adaptive management used in the implementation of the project to ensure the attainment of project results, including extent to which the project has responded to identified and emerging risks • Extent to which project partners committed time and resources to delivery of the project 	<ul style="list-style-type: none"> • Project document • Results Matrix • Project progress reports • FAO staff and project team • Project focal points in the implementing agencies • Key stakeholders at district and community level • PSC members and minutes of meetings 		

Evaluation questions/sub-questions	Indicators	Methods/Response	Other data sources
<p>4.2.6 What changes to project administration and management are needed to improve delivery in the second half of the project?</p> <p>Have any planned activities been changed? If so how well have these changes been managed?</p>			
<p>4.3 Risk identification and management</p> <p>4.3.1 How well have risks been identified and managed (both at the project design phase and later)?</p> <ul style="list-style-type: none"> ▪ Are there any unforeseen effects that are negatively or positively impacting project implementation and its outcome? <p>4.3.2 Have all potentially negative social, economic and environmental impacts of the project been identified and is the mitigation strategy adequate?</p> <ul style="list-style-type: none"> ▪ Are risks appropriately identified by the project? <p>4.3.3 What actions have been taken to mitigate risk factors?</p> <ul style="list-style-type: none"> ▪ How is risk identification and mitigation being managed? ▪ What is the quality of the risk mitigation strategy developed by the project? ▪ To what extent has the project addressed the assumptions of the ToC? 	<ul style="list-style-type: none"> ▪ Quality of risk identification ▪ Quality of strategies taken to mitigate risks 	<p>Methods: Systematic reviews; KIIs</p> <ul style="list-style-type: none"> • Progress reports • Results framework • Risk assessment reports, meeting reports/ minutes, monitoring data, progress reports • FAO staff and project team • Key implementing partners • Minutes of PSC meetings • Key stakeholders and beneficiaries 	
<p>4.4 Financial management and co-financing</p> <p>4.4.1 What have been the financial management challenges of the project to date?</p> <ul style="list-style-type: none"> ▪ Have there been any issues related to the financing and financial management of the project? Any irregularities? <p>4.4.2 Are the budgets/financial planning adequate to complete the project and deliver the expected results?</p> <ul style="list-style-type: none"> ▪ What is the rate of delivery and budget balance and 	<ul style="list-style-type: none"> • Evidence that financial resource levels and cash flow management were adequate to support effective overall management • Evidence that recruitment/practice, use of financial resources and 	<p>Method: Systematic review; KIIs</p> <ul style="list-style-type: none"> • Financial reports and audits • Project progress reports • Completed GEF co-financing table • FAO staff (e.g. FLO) and project team • Key implementing 	

Evaluation questions/sub-questions	Indicators	Methods/Respondent	Other data sources
<p>could financial resources be used more efficiently?</p> <p>4.4.3 Are financial resources well managed and accountable?</p> <p>4.4.4 To what extent has co-financing materialized as expected?</p> <ul style="list-style-type: none"> ▪ How well does co-financing activities complement project activities and contribute to results? <p>4.4.5 Has there been any additional co-financing leveraged during project implementation and how has this contributed to the project's objectives?</p> <ul style="list-style-type: none"> • How has any shortfall in the co-financing or unexpected additional funding affected project results? 	<p>financial reporting followed proper standards</p> <ul style="list-style-type: none"> • Level of transparency in the funds used • Evidence that co-financing levels were delivered 	<p>partners (for co-financing)</p>	
<p>4.5 Project oversight, implementation role</p> <p>4.5.1 Is the project governance and supervision model comprehensive, clear and effective?</p> <ul style="list-style-type: none"> ▪ Was FAO project supervision and backstopping effective in terms of: adequacy of supervision plans formulated and inputs/processes provided; application of results-based project management approach (outcome monitoring); accuracy of reporting and rating systems applied; documentation of project supervision activities; and financial, administrative, and other fiduciary aspects of project implementation supervision? <p>4.5.2 How effective is the coordination and decision-making among the Project Steering Committee (PSC) and Project Task Force?</p> <ul style="list-style-type: none"> ▪ How efficiently have the Lead Technical Unit, the Budget Holder and Project Task Force provided administrative and technical support? 	<ul style="list-style-type: none"> • Evidence of effective project supervision and backstopping provided by FAO • Views of PSC and Project Task Force members • Views of key implementing partners 	<p>Method: KIIIs</p> <ul style="list-style-type: none"> • FAO staff (e.g. LTO) and project team • Key implementing partners • PSC and Task Force members and meeting minutes 	

Evaluation questions/sub-questions	Indicators	Methods/Response	Other data sources
4.5.3 To what extent has FAO delivered oversight and supervision and backstopping (technical, administrative and operational) during the project design and implementation phases?			
<p>4.6 Monitoring and Evaluation (M&E)</p> <p>4.6.1 M&E - design</p> <p>4.6.1.1 How well is the project M&E framework designed? How could the M&E design be improved?</p> <ul style="list-style-type: none"> ▪ To what extent are the project indicators specific, measurable, attainable (realistic), and relevant to the objectives, and time-bound (SMART)? ▪ Are the targets and milestones in project's monitoring plan appropriate, realistic and sufficient to track progress and facilitate management towards outputs and outcomes? <p>4.6.1.2 How has stakeholder engagement and gender assessment been integrated into the M&E system?</p> <ul style="list-style-type: none"> ▪ Are there sufficient/specific indicators to measure progress on gender equity? <p>4.6.1.3 Is the M&E plan practical and sufficient to track progress towards achieving project objectives?</p> <ul style="list-style-type: none"> ▪ Do any of the indicators or their associated targets need to be removed or reformulated? ▪ To what extent has baseline information on performance indicators been collected and presented in a clear manner? ▪ Is the methodology for the baseline data collection explicit and reliable? 	<ul style="list-style-type: none"> • Evidence and review of M&E plan to monitor results and track progress towards achieving project objectives • SMART indicators identified and used, adequate baselines set • M&E budget allocated 	<ul style="list-style-type: none"> • Results matrix • FAO staff and project team • Main partner organizations • Key stakeholders from the national and local levels • Project documents • Project progress reports, especially PIRs and PPRs • Other project M&E documents • Relevant correspondence related to FAO's design and management of the project 	
<p>4.6.2 M&E implementation</p> <p>4.6.2.1 To what extent is the project M&E system operational and contributing to provide systematic</p>	<ul style="list-style-type: none"> • M&E arrangements made 	<ul style="list-style-type: none"> ▪ Completed GEF Tracking Tool for the mid-term ▪ M&E reports 	

Evaluation questions/sub-questions	Indicators	Methods/Response	Other data sources
<p>information on the project outcomes and outputs target?</p> <ul style="list-style-type: none"> ▪ To what extent has the project budgeted and implemented a sound M&E plan and tools to track project delivery and evaluate its results towards achieving its objective? <p>4.6.2.2. Has the project been implemented based on result-based management?</p> <ul style="list-style-type: none"> ▪ Has information been gathered in a systematic manner, using appropriate methodologies? ▪ Are monitoring reports (e.g. GEF PIR, FAO PPR) sufficiently informative, produced in a timely manner and used for adaptive management? <p>4.6.2.3 To what extent has the project engaged stakeholders in the design and implementation of monitoring? (any community-based monitoring elements, or 'citizen science'?)</p> <ul style="list-style-type: none"> ▪ Are roles and responsibilities for monitoring activities clear? <p>4.6.2.4 How can the M&E system be improved?</p> <ul style="list-style-type: none"> ▪ To what extent have the experiences and lessons learned from the project been identified and captured? ▪ Was the GEF Tracking Tool well applied at the design phase and correctly updated in the mid-term? <p>4.6.2.5 To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achievement of outcomes and ensure sustainability?</p> <ul style="list-style-type: none"> ▪ How well are activities being monitored? Was monitoring used to take corrective actions? 	<ul style="list-style-type: none"> • Timing and implementation of M&E activities • Degree and timeliness of completion of M&E reports e.g. PIRs • Use of the project's Result Matrix as a management tool 	<ul style="list-style-type: none"> ▪ Project progress reports, especially PIRs and PPRs ▪ Other project M&E documents ▪ Key local stakeholder groups (farmer associations) ▪ Key stakeholders from the national and local levels 	

Evaluation questions/sub-questions	Indicators	Methods/Response	Other data sources
<p>4.7 Equity/Gender</p> <p>4.7.1 To what extent were the gender considerations accounted for in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender equitable participation and benefits?</p> <ul style="list-style-type: none"> Are there gender-disaggregated targets and indicators? 	<p>Level of participation</p> <p>Respondent perception</p>	<p>Methods: KII/FGD FAO (CTA, LTO, BH) GCU; PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR</p>	<p>ProDoc Progress reports Steering committee reports</p>
<p>4.8 Environmental</p> <p>4.6.1 To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?</p>		<p>Methods: KII/FGD FAO (CTA, LTO, BH) PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR</p>	
<p>4.9 Partnerships and stakeholder engagement</p> <p>4.9.1 How has FAO collaborated with partners and to what extent does the project develop new partnerships or enhance existing ones?</p>	<p>Field evidence</p> <p>Respondent perceptions</p>	<p>Methods: KII/FGD FAO (CTA, LTO, BH) GCU; PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR</p>	<p>ProDoc Progress reports Steering committee reports</p>
<p>4.9.2 Has the partnership strategy been appropriate and effective?</p>		<p>Methods: KII/FGD FAO (CTA, LTO, BH) GCU; PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR</p>	
<p>4.9.3 To what extent are stakeholders engaged in the project?</p>		<p>Methods: KII/FGD FAO (CTA, LTO, BH) GCU; PMU; DFO (Fisheries) DFO (Forestry) DAEANR</p>	
<p>4.9.4 How, if at all, has FAO contributed to improving organizational policies, strategies and programmes?</p>		<p>Methods: KII/FGD FAO (CTA, LTO, BH) PMU</p>	
<p>4.9.5 What linkages, if any, exist between the capacities developed among diverse types of beneficiaries?</p>		<p>Methods: KII/FGD FAO (CTA, LTO, BH) PMU</p>	
<p>4.10. Communication, awareness raising and knowledge management</p> <p>4.10.1 How effective has the project been in communicating and promoting its key messages and</p>	<ul style="list-style-type: none"> Degree of effectiveness of awareness-raising activities and strategies 	<ul style="list-style-type: none"> FAO staff (e.g. LTO) and project team Key implementing partners 	

Evaluation questions/sub-questions	Indicators	Methods/Response	Other data sources
<p>results to partners, stakeholders and a general audience? How can this be improved?</p> <ul style="list-style-type: none"> ▪ How effective have the project's awareness-raising, information dissemination and public outreach approaches and activities been to date? ▪ Have there been any issues with sharing and/or management of knowledge, e.g. confidential or commercially sensitive data? If so, how is this being resolved? <p>4.10.2 How visible has the project been to partners and stakeholders – what is their general opinion of the profile of the project to date?</p> <ul style="list-style-type: none"> ▪ Are project communication materials, including the project document clear and comprehensible? ▪ To what extent has the project identified appropriate methods, channels, networks for communication with key stakeholders, including gendered/minority groups? <p>4.10.3 How is the project assessing, documenting and sharing its results, lessons learned and experiences?</p> <ul style="list-style-type: none"> ▪ Does the project have a formal structured system for capturing and communicating experiences and lessons learned from the project? 	<p>applied in project implementation</p> <ul style="list-style-type: none"> • Review and analysis of project communication materials e.g. online presence, project reports 	<ul style="list-style-type: none"> • PSC and PTF members and meeting minutes 	
<p>5. Sustainability of Project Results Will the project results likely remain or continue to be useful after the completion of the project?</p>			
<p>5.1 What are, if any, the socio-political, financial, institutional and governance, and environmental risks to sustainability?</p>	<p>Field evidence Respondent perceptions</p>	<p>Methods: KII/FGD FAO (CTA, LTO, BH) GCU PMU; DFO (Fisheries) DFO (Forestry) DAEANR</p>	<p>ProDoc Progress reports Steering committee reports</p>

Evaluation questions/sub-questions	Indicators	Methods/Respondent	Other data sources
5.2 What evidence exists indicating the feasibility of replication or catalysis of project results, the likelihood that project activities will continue following project closure?		Methods: KII/FGD	
5.2.1 What is the likelihood that the VMS will be financially supported by the government budget upon closure of FiRM?		FAO (CTA, LTO, BH) GCU PMU; DFO (Fisheries) DFO (Forestry) DAEANR	
5.2.2 What is the likelihood of EAFM approach continuing beyond FiRM? How has the project prepared (built capacities of) the different stakeholders for this to continue?		FAO (CTA, LTO, BH) GCU PMU DFO (Fisheries) DFO (Forestry) DAEANR BVCs VNRMCs Farmer organizations	
5.3 What does the project need to do to increase the sustainability of its results?		Methods: KII/FGD	
5.3.1 At institutional level?		FAO (CTA, LTO, BH) GCU; PMU; PSC DFO (Fisheries) DFO (Forestry) DAEANR	
5.3.2 At community level?		BVCs; VNRMCs Farmer organizations	

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Appendix 6. Results matrix showing achievements at mid-term and MTR observations

Project strategy	Description of indicator(s)[1]	Baseline level	²¹ Mid-term target[2]	End-of-project target	Mid-Term Level and Assessment (Colour coded red, yellow or green)	MTR Team Achievement rating [3]	Justification for Rating
Objective⁴ Improved resilience of fishing communities around Lake Malombe to the effects of climate change	Vulnerability and risk perception index score	1. Extreme	2. High	3 Medium	1. Extreme	U	Despite the long-term nature of this indicator, both technical people and community members in the catchment perceive the vulnerability and risk of the social and ecological systems to climate change to be still extreme as was the situation at baseline. Thus, the project has not changed the perception level.

	Disposable income in targeted area due to adaptation measures	0%	10%	20%	0%	U/A	No data to validate changes in disposable income at MTR.
	<u>²²Food consumption Score (FCS)⁵</u> - -	HH with Poor FCS: 15%	HH acceptable FCS: 65%	HH acceptable FCS: 85%	HH with Poor FCS: 15%	U/A	No data to validate changes in FCS but Project self-evaluation reported no change.
		HH Borderline FCS: 29%			HH Borderline FCS: 29%	U/A	No data to validate changes in FCS but Project self-evaluation reported no change.
		HH Acceptable FCS: 56%			HH Acceptable FCS: 56%	U/A	No data to validate changes in FCS but Project self-evaluation reported no change.
Outcome 1.1: Enhanced information on climate trends, extreme events and resource status, is available and used for the	% of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures	33%	50%	75%	33% to be updated after a survey	U/A	No updated data as survey not undertaken.

<p>formulation and implementation of effective and timely resilience and management measures.</p>	<p>% of decision-making, planning and regulatory instruments in the project area, related to climate change resilience in fishing communities that are based on reliable information on the above parameters.</p>	<p>No significant incorporation of reliable information</p>	<p>To be reviewed.</p>	<ul style="list-style-type: none"> - All limits on fishing practices and gear- - All district and community level development plans and strategies in the project area - All resilience and restoration plans and strategies (both aquatic and terrestrial) 	<p>Indicator to be reviewed after MTR Based on the reduced project scope from National to Lake Malombe and Upper Shire River, FiRM identified the need to interpret the project document in view of the realities on the ground. Mainstreaming of findings into the national agenda will not be easily achievable by FiRM.</p>	<p>U/A</p>	<p>Not rated because indicator is not relevant to the outputs presented.</p>	
<p>Outcome 2.1: Climate change resilience mainstreamed into key policy and planning instruments of relevance to fisheries and fishing communities</p>	<p>Level of recurrent budget assigned and executed by the district</p>	<p>Spent amount: US\$ 46,638.50</p>	<p>25% increase in spent amount</p>	<p>50% increase in spent amount</p>	<p>50% increase in spent amount</p>	<p>²³Spent amount: \$65,187[6]</p>	<p>U/A</p>	<p>Indicator is not Specific to addressing climate change resilience mainstreaming.</p>
	<p>Proportion of key policy and planning instruments that adequately reflect climate change as related to fisheries resilience</p>	<ul style="list-style-type: none"> - NCCP and DRMP in draft form - MGDS and NAPA predominantl 	<p>50%</p>	<p>75%</p>	<p>Indicator to be reviewed after MTR Based on the reduced project scope from National to Lake Malombe and Upper Shire River, FiRM identified the need to</p>	<p>U/A</p>	<p>Not rated because indicator is not relevant to the output presented.</p>	

		<p>y agriculture-oriented</p> <ul style="list-style-type: none"> - ASWAp does not make specific reference of climate change issues of relevance to fisheries 			interpret the project document in view of the realities on the ground. Mainstreaming of findings into the national agenda will not be easily achievable by FIRM.		
Outcome 2.2 Strengthened capacities and awareness of fisheries professionals and other relevant stakeholders to address climate resilience building in fisheries sector	% of targeted institutions applying increased knowledge and awareness in support of resilience measures	15%	25%	50%	20% (to be updated through a survey)	U/A	No updated data to validate achievement of 20% a reported by the Project.
	Levels of recurrent budget assigned to and executed by DFO	2017/2018: Spent amount: US\$ 20,798	25% increase in spent amount	50% increase in spent amount	²⁴ Spent amount \$24,515[7]	MS	Based on an increase of approx. 18% in spent amount.
Outcome 3.1: Adaptive co-management and resource governance systems in support of	Numbers and types of stakeholders considering that they are satisfactorily represented in co-management structures	30% in all major stakeholder groups	50% in all major stakeholder groups	80% in all major stakeholder groups	45% (BVCs only - Through an opinion survey for the 34 newly elected BVCs) to be updated after a survey	MS	MTR spot checks with BVCs validates the Projects perception of progress.

climate-resilient capture fisheries	% of fishers complying with fishing closed season and gear restriction	27%	40%	80%	²⁵ 50% [8]		S	Based on District Inspectorate reports. However, frame survey analyses are inconclusive in terms of reduction in illegal gears.
	Area excluded from fishing (area set aside for sanctuaries)	80 + 134ha in existing National Park (100m from land)	3,000 ha additional no-take area	6,000 ha additional no-take area	²⁶ 247.2ha [9] representing 0.59% of Lake Malombe. The targets are at national level		U/A	Not rated because indicator is not relevant to output presented.
Outcome 3.2: Fish stocks and habitats restored through Ecosystem Approach to	Representation of higher value species (chambo) in catches from Lake Malombe	6.8% by weight	8.2% (20% increase)	10.2% (50% increase)	²⁷ 1.2 % by weight [10]		U	Over 80% reduction in proportion of Chambo in the catch.
	Catch Per Unit of Effort (CPUE)				²⁸ ²⁹ [11]Gears	L. Malombe	Upper Shire	The CPUE for legal gillnets is 7 times and 11 times higher in

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Fisheries (EAF) management		Gillnet (kg/100m) = 28.59	20% increase	3.75kgs/0.15h50 % increase)	Gillnet	273.2	420	MS	Lake Malombe and Upper Shire River, respectively, than expected at mid-term. The CPUE for illegal gillnet (Kandwindwi) is at least 42 times higher than that of the legal gillnets. CPUE for Nkacha and Chambo seine, which are legal gears but destructive has declined over the project period which is a good thing for Lake Malombe and Upper Shire. The preferred change for all other gears other than legal gillnets not specified.
		Mosquito seine (kg/haul) = 182.29			Mosquito Net	182.43	76.57		
					Kandwindwi	1497.56			
		Nkacha seine (kg/haul) = 654.19			Nkacha	108.69	163.43		
		Chambo seine (g/haul) = 37.57			Chambo seine		20.35		
					FishTrap		115.84		
					Handline		2757		
	Proportion of kasawala (immature chambo i.e. less than 15 cm) in monitoring catches	2% by weight	20% increase	50% increase	Lake Malombe 0.85% by weight;	Upper Shire River 7.4% by weight	U/A	Application (use) of indicator seems contradictory (20% increase of Kasawala by Mid Term?) ³⁰ .	
Outcome 3.3: Aquaculture is climate-proofed and able to contribute to diverse and	Number of aquaculture ponds with climate resilience measures in place	10 ponds	15 ponds	30 ponds	28 ponds		MU	None of the ponds constructed and/or rehabilitated under the project have been stocked.	

³⁰ MTR expected to see a decrease in the proportion of Kasawala in the catch as the preferred trend for project success.

resilient livelihood strategies of the most vulnerable sectors of the population							
Outcome 3.4: Local people have access to diverse, pro-poor farming systems as a central element of resilient rural livelihoods	% of farm households practicing good farm management into diverse portfolio of CC resilience measures	36%	50%	80% (693 households in the 3 villages around Kulungwi micro-catchment)	There are some households who are practicing good farm management but quantification has not been done yet due to Covid-19	MU	Project has initiated implementation of physical soil and water conservation measures including construction of 113 check dams within Kulungwi micro-catchment. However, tangible benefits have not yet been realized and will take time to come by.
Outcome 4.1: Project implementation is based on results-based management and application of lessons learned and good practices in current and future interventions	Number and types of reports produced	0	5	10	8 (PIRs and PPRs)	MU	Limited use of M & E to engage partners and inform decision-making on the project.

Notes

³¹[1] This is taken from the approved results framework of the project. Please add cells when required in order to use one cell for each indicator and one rating for each ind

³²[2] Some indicators may not identify mid-term targets at the design stage (refer to approved results framework) therefore this column should only be filled when relevant

³³[3] Use GEF Secretariat required six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfact

³⁴[4] Applicable only for projects with objective level indicators.

³⁵[5] Source of data – baseline survey report

³⁶[6] Mangochi District Council cost center-wise report

³⁷[7] Mangochi District Council cost center-wise report

³⁸[8] District Inspectorate reports

³⁹[9] 2018 Report on the biophysical assessment of community managed fish sanctuaries for biodiversity and conservation and productivity

⁴⁰[10] DoF Lake Malombe and Upper Shire catch data

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⁴¹[11] DoF Lake Malombe and Upper Shire catch data

Appendix 7. Co-financing table

Sources of Co-financing ⁴²	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2021	Actual Amount Materialized at Midterm or closure (confirmed by The MTR/evaluation team)	Expected total disbursement by the end of the project
Government	DOF	In kind	1 500 000	745,086	745,086	1 500 000
Government	DCCMS	In kind	300 000	98,140	98,140	300 000
Government	MoAIWD	In kind	1 500 000	363,611	363,611	1 500 000
Bilateral aid agency	FISH	Grant	5 500 000	4,134,721	4,134,721	5 500 000
GEF Agency	FAO	In kind	100 000	193,267.64	193,267.64	100 000
GEF Agency	FAO	Grant	470 000	436,993	436,993	470 000
GEF Agency	UNDP	Grant	2 000 000	293,897	293,897	2 000 000
CSO	LUANAR	In kind	750 000	462,560	462,560	750 000
		TOTAL	12,120,000	6,728,276	6,728,276	12,120,000

⁴² Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Beneficiaries, Other.

Appendix 8. GEF evaluation criteria rating table and rating scheme

Rec. No.	Rating	Summary Comments
A. STRATEGIC RELEVANCE		
A.1 Overall strategic relevance	S	The Project is overly aligned with agriculture, natural resource and climate change management and resilience frameworks globally, regionally and nationally. However, the national level expectations and commitments of the project have been neglected, which makes it less ambitious as originally designed.
A1.1 Alignment with GEF and FAO strategic Priorities	HS	<p>The Project is coherent with GEF Focal Area Objectives CCA1, CCA2 and CCA3 that propagate reducing vulnerability to climate change impacts, increasing adaptive capacity to respond to the impacts of climate change and the transfer and adoption of adaptation technology, respectively</p> <p>It is also aligned with FAO Strategic Objectives and higher goals particularly the National Medium-Term Priority Framework (NMTPF) 2010-2015, and Outcomes 1, 2 and 3 of the FAO Country Planning Framework (CPF) for the period 2020-2023 that promote the provision of an enabling environment for sustainable management of natural resources, food production systems, agricultural development and improved household welfare.</p>
A1.2 Relevance to national, regional and global priorities and beneficiary needs	HS	Project aligns with SDGs, Africa Agenda 2063, Malawi 2063, NDCs, Malawi Growth and Development Strategy (MGDS) III, NFAP, NCCMP, National Agriculture Policy (NAP), National Agriculture Implementation Plan (NAIP), NAPA, and National Forest Policy (NFP) given its overarching scope on addressing poverty reduction, climate resilience and the protection, restoration and promotion of sustainable use of terrestrial ecosystems (in this case, fisheries and land-based resources).
A1.3 Complementarity with existing interventions	MU	FISH/PACT had activities in Lake Malombe that are very relevant to the Project. The successor REFRESH Project also has relevant activities in South-east arm of Lake Malawi. However, FiRM has limited integration of the previous activities and limited cooperation with REFRESH.

		<p>Additionally, FiRM is advancing artificial restocking of Lake Malombe, which is contradictory to the recommendation made under the TCP Project.</p> <p>Some of FiRM's objectives are also similar with those of M-CLIMES (e.g. in climate information and EWS), PROSPER and LEAD. However, complementarity with these projects is limited.</p>
B. EFFECTIVENESS		
B1. Overall assessment of project results	MU	Major cause to limited delivery is delayed processing and disbursement of project funds and procurement. Letters of Agreement initiated to speed up implementation but not implemented (e.g. with DoF) and Fiduciary risk is high for Fisheries Research Unit which was proposed for LoA (Revision of Data collection methods)
B1.1 Delivery of project outputs	MU	<p>The project has had mixed progress on outputs but generally, most outputs have not been realized as expected at MTR. On average, delivery of outputs is below 50%.</p> <p>Some progress relates to:</p> <ul style="list-style-type: none"> ▪ Identification of gaps in community level Early Warning Systems and alternative measures, (Output 1.1.1); Institutional development of DOF resulting in resuscitation of local fisheries governance institutions (Output 2.2.2); Piloting of cage culture (3 out of 5 cages partially stocked) and training of BVC members and village heads in good cage culture management practices (Output 3.3.4). ▪ Revival of BVC co-management structures through training in EAFM, fresh elections and strengthening linkages with co-management stakeholders (chiefs, fishers gear owners and ADCs (Output 3.1.1). ▪ Formulation of annual adaptive EAFM management plans despite financing is often not guaranteed (Output 3.1.1). <p>However, delivery of a number of outputs has been delayed while other outputs have been cancelled or need further review before implementation.</p>

B1.2 Progress towards outcomes and project objectives		
Outcome 1.1: Enhanced access to information on climate trends, extreme events and resource status and management measures	MU	A draft lake-wide management workplan was prepared by the three sub-FAs at a workshop 26-28 October 2021. It is expected that following validation, by-laws will be reviewed and revised to support the workplan. The work plan and bylaws are expected to strengthen decision-making, planning and regulation around fisheries management and climate resilience in the project area. However, there is no demonstrated increase in the proportion of key institutions that are using relevant information required for the formulation and implementation of resilience and management measures (Outcome 1.1).
Outcome 2.1: Climate change resilience considerations mainstreamed into key policy instruments of relevance to fisheries and fishing communities	U	No evidence towards mainstreaming of climate change resilience into key national level policy and planning instruments of relevance to fisheries and fishing communities as emphasis of delivery has been on catchment level institutions.
Outcome 2.2: Strengthened capacities and awareness for promoting climate resilience in the fisheries sector	MS	There has been improved understanding of EAFM among fisheries professionals, which is a demonstration of the first step towards application of this tool in climate resilience building in the fisheries sector but more needs to be done to translate this understanding into action for resilience.
Outcome 3.1: Adaptive co-management and resource governance systems in support of climate-resilient capture fisheries	MS	Mixed progress observed. There is improved perception of representation in co-management structures (BVCs, Sub FAs, and FAs) by all the major stakeholder groups (Fishers, processors, farmers, gear owners, traders, boat builders and net menders), which is the first step in increased trust in the governance institutions that would culminate in collective support for climate-resilient development demonstrated through increased compliance with applicable norms and legislation for closed season and gear restriction, and the setting aside of fish breeding grounds or sanctuaries among other interventions). However, there is no evidence of improvement in compliance with illegal gears restriction in Lake Malombe and Upper Shire River was expected to

		increase from 27% at baseline to 40% at MTR and 80% at project closure.
Outcome 3.2 Fish stocks and habitats restored	U	There has been delayed restoration of fish stocks and habitats through the Ecosystem Approach to Fisheries Management as the fishery is showing signs of retrogression (reduced proportion of high value species (chambo) in catches (80% decline from baseline), and emerging illegal and destructive gears (Kandwindwi) that has a CPUE that is 42 times higher than that of legal gillnets). The proportion of kasawala (immature chambo i.e. less than 15 cm) in monitored stocks in Lake Malombe has also declined from a baseline 2% by weight to less than 1% (0.85%) by weight against a projected 20% increase by Mid Term, and 50% increase by end of project.
Outcome 3.3 Aquaculture is climate-proofed	MS	The stocking of cages has been slow (only 3 out of 5 cages stocked) but BVCs members are eager to learn and adopt the intervention in anticipation of upscaling and long-term benefits of the pilot activities. Although pond rehabilitation has been done, and feed supplied, fingerlings have not been supplied rendering the support provided by the project incomplete to climate-proof aquaculture and enhance its contribution to diverse and resilient livelihood strategies of the most vulnerable sectors of the population. The major obstacle has been delayed supply of fingerlings.
Outcome 3.4 Local people have access to diverse, pro-poor farming systems	UA	No validated increase in the proportion of farm households practicing good farm management into a diverse portfolio of climate change resilience measures from the original 312 (36%) determined at baseline due to limited data.
- Outcome 4.1 Project implementation is based on results-based management	U	Generally, the Project's M&E system and particularly, the progress tracking tool suffers from limited data due to any or a combination of the following factors: no baseline, no set target or no updates in over 30% of the outputs; and indicator related issues such as incompatibility of output against indicator, immeasurable indicator, or unspecific indicator in 9% of the outputs. Resultantly, there is limited application of results-based management approaches and imbedding of lessons learned and good practices in current

		and future interventions. Although 4 PIRs and 8 PPRs have been produced, these have mainly been produced and used by the PMU as there has been no annual review of goals, strategies, and assessment plan with project partners that would have offered the avenue for reflection on progress and lessons for learning
- Overall rating of progress towards achieving objectives/ outcomes	MU	Project has been mixed progress towards achieving objectives/ outcomes but mostly, progress has been limited in light of agreed commitments (indicators and targets).
B1.3 Likelihood of impact	Not Rated at MTR	
C. EFFICIENCY		
C.1 Efficiency	MU	There has been high expenditure in administrative budget lines and low expenditure on high impact activities, with limited delivery on outputs and slow progress towards the achievement of outcomes. This is attributed to delays in execution caused by late start of the project due to delayed recruitment of PMU personnel, Covid-19 work related restrictions, restrictive disbursement procedures, and protracted procurement procedures.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	Project has invested substantially in key equipment for improved governance of fisheries in Lake Malombe and SE arm of Lake Malawi e.g. patrol vessel, motor cycles, truck and training. Sustainability and replication of the EAFM relies heavily on the uptake by the communities of improved knowledge, and governance arrangements and practices. However, this has to be tested within the project timeframe. VMS is an important intervention under EAFM for effective recovery of the South East Lake Malawi and in effect Lake Malombe fisheries. However, arrangements for institutionalization and sustenance beyond the project duration are weak.
D1.1. Financial risks	ML	Most interventions advanced are less financially demanding if adequately delivered, as they are already practiced by the mother institutions (e.g. Climate information by DCCMS; capacity building in EAFM embedded in DoF); alternative livelihoods are at the core for partner institutions; policy and legal reforms are a key component of partner institutions. However, adoption of VMS, and all group-based aquaculture (including cage

		culture) may not be sustained due to DoF's financial challenges after the project.
D1.2. Sociopolitical risks	L	Malawi is a very stable and peaceful country politically and is likely to remain so in the foreseeable future. The risk of socio-political upheaval is minimal. External unforeseen risks such a drought (e.g. the Covid-19) are possible and do have potential for causing social problems at household and community levels
D1.3. Institutional and governance risks	MU	Success of EAFM requires strong institutional coordination among key institutions such as Fisheries, Agriculture and Forestry. This is currently not demonstrated; Lower level institutions particularly (BVCs, Fisheries Associations) will need strong nurturing – this aspect has generally been weak countrywide including in Lake Malombe the project area.
D1.4. Environmental risks	ML	Project activities are generally of low environmental risk. The environmental risks of cage culture and restocking will have to be analyzed before upscaling/implementation. If not done within the project, it is unlikely that this will be done after project closure.
D2. Catalysis and replication	MU ⁴³	Project interventions mostly in infancy; and benefits not yet realized and consolidated.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MS	The design and readiness of the project is moderately satisfactory with some elements suited and others less suited to deliver the expected outcomes. The framework elements such as advancement of the EAFM approach; capacity building of technical and local level governance institutions; piloting of catchment level interventions for upscaling at the district and national levels; integration of research and practical adaptation; and the emphasis on communication and adaptive management are all appropriate to delivery of the expected outcomes of this intervention. However, the project has over-ambitious targets particularly for national policies revision to integrate climate change resilience (outcome 2.1), and fish stocks and habitat restoration (Outcome 3.2) that are not practically achievable with the resources available and within the allocated timeframe. In addition, supply capacity and biosecurity risk management around fingerlings production for artificial

⁴³ This is for “Moderately Unsatisfactory

		restocking of Lake Malombe were not adequately conceptualized resulting in uncertainty mid-way through implementation.
E2. Quality of Project implementation		
E2.1 Quality of project implementation by FAO Budget Holder (BH), Lead Technical Officer (LTO), PTF, etc.)	MS	<p>Project oversight by FAO as the GEF Agency has been adequate. The support unit within FAO such as Project Task Force (PTF), and project implementation unit have adequately supported the project. Covid-19 curtailed international travel for the LTO to provide on-site technical support and backstopping.</p> <p>Delays in flow of project implementation finances and procurement has adversely impacted the rate of delivery. In addition, support to project communication needs has been inadequate, particularly the execution of communications activities on the ground based on the presumption that the PMU would undertake these while the PMU see this as responsibility of the Communications unit at FAO Lilongwe.</p>
E2.2 Project oversight (PSC, project working group, etc.)	MS	Oversight by the main national institution, the PSC has also been limited, reportedly due to covid-19. PSC has met three times over the project period by MTR (Last meeting on 11th December 2020) instead of twice a year. Whenever the PSC has met, it has provided guidance and advice to the PMU after getting the progress report
E3. Quality of project execution		
E3.1 Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	MU	<p>The skills compliment for the PMU appears adequate for delivery of outputs and outcomes except the lack of a dedicated Communications Officer.</p> <p>PMU slow pace of delivery of outputs reportedly due to protracted, slow and rigorous systems for obtaining and liquidating operational advances (including a cap of US\$5,000 on advances at a time).</p> <p>Partner performance has also been adversely affected by similar challenges (slow disbursement), and limited amounts of resources for execution (e.g. agriculture and forestry).</p>

E4. Financial management and co-financing	S	<p>No issues with mismanagement or misallocation of funds including Operational Advances (OAs) for implementation of activities.</p> <p>Co-financing has materialized at approx. 55.5%.</p>
E5. Project partnerships and stakeholder engagement	MS	<p>There has been strong engagement with Fisheries Department, but weak engagement of other partners such as Agriculture and Forestry, and the District Council</p> <p>There has been good engagement of LUANAR but weak with other Universities such as University of Malawi and MZUNI with which the Project intended to have LoAs.</p> <p>There has been weak engagement with other project undertaking complimentary activities (e.g. PROSPER, REFRESH)</p>
E6. Communication, knowledge management and knowledge products	MU	<p>Although a “Visibility and Communication Strategy” has been developed, and a number and a range of knowledge products have been produced, the communication and outreach for the project has generally been passive with Project Office expecting action from FAO Communications Unit and vice versa. Additionally, visibility of the Project both in communities and at district level has been low.</p>
E7. Overall quality of M&E	MU	<p>Project has developed an M & E system and is capable of tracking progress on defined indicators. However, the data is mostly being used by the project internally rather than to inform decision-making and/or for engaging with project partners. Additionally, some of the indicators are not relevant to the reduced geographical scope of the project while others are not specific to effectively track progress.</p>
E7.1 M&E design	MU	<p>The project started without a proper baseline from which to develop indicators since the TCP that was supposed to provide the baseline only finished in 2018 well after the official start of the FiRM Project. Therefore, there was lack of alignment between the TCP end line values and FiRM baseline values. Additionally, the TCP Project did not in the end provide all the appropriate indicators for the FiRM Project necessitating the conduction of a partial baseline survey for FiRM in 2020.</p>
E7.2 M&E plan implementation (including	MS	<p>Dedicated personnel (Monitoring and Evaluation Specialist) is available to spearhead M and E</p>

financial and human resources)		<p>planning and implementation. Financial resources were sufficient and effectively allocated but disbursement was often challenged due to financial management.</p> <p>Project has developed an M & E system and is capable of tracking progress on defined indicators especially at the Outcome level. The PIRs and PPRs though are only used internally by the project</p>
E8. Overall assessment of factors affecting performance	MU	<p>The Project budget was adequate, but access by the PMU and partners was limited due to FAO disbursement limitations and slow procurement processes. Additionally, achievement of project outputs and outcomes for the project has been constrained by delayed project start; and poor coordination of activities with district level partners. Project oversight by FAO, and the PSC has also been low.</p> <p>The Project's catchment level implementation focus diverted attention from national level expectations and commitments thereby limiting the delivery of national level outputs and outcomes.</p>
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	S	<p>Project has taken a positive stance towards improved women's access to and control of ownership of means of production and processing in the fishery. But so far, the actual increase in ownership of boats and nets by women is still insignificant compared to men (frame survey results over the period from 2017 – 2019 show an increase of women gear owners from 2 to 4).</p> <p>Project is actively improving participation of women in decision-making bodies and roles (e.g. membership in BVCs and sub-FAs).</p> <p>Project has extended co-financing of improved technologies for fish processing to women's groups.</p>
F2. Human rights issues	NA	
F3. Environmental and social safeguards	MS	<p>Although most of the project interventions pose low environmental risks, and project has developed an Environmental and Social Management Plan (ESMP) and draft biosecurity standards for fingerling production, the proposed</p>

		artificial restocking and cage culture may pose biosecurity risk of the wild fish species if appropriate risk management measures are not implemented.
Overall rating of project	MU	The overall rating of the outcomes of this project is moderately unsatisfactory (MU), based on performance on the criteria of relevance (S), effectiveness (MU) and efficiency (MU). Given that the project is satisfactorily relevant, the weight of the overall rating has mainly been determined from the efficiency and effectiveness ratings, both of which are moderately unsatisfactory.