AFRICAN DEVELOPMENT FUND



SUSTAINABLE FISHERIES, AQUACULTURE DEVELOPMENT AND WATERSHED MANAGEMENT PROJECT **PROJECT:**

COUNTRY: REPUBLIC OF MALAWI

PROJECT APPRAISAL REPORT

Date: July 2019

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AFRICAN DEVELOPMENT FUND



MALAWI

SUSTAINABLE FISHERIES, AQUACULTURE DEVELOPMENT AND WATERSHED MANAGEMENT PROJECT

RDGS/AHAI/COMW/PGCL DEPARTMENTS

October 2019

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Currency Equivalents

July 2019

1 UA = 1037.76 Malawian Kwacha (MWK) 1 USD = 746.48 Malawian Kwacha (MWK)

1 UA = 1.38 USD

Fiscal Year

[July - June]

Weights and Measures

1metric tonne = 2204 Pounds (lbs)

1 kilogramme (kg) = 2.200 lbs 1 metre (m) = 3.28 feet (ft) 1 millimetre (mm) = 0.03937 inch (")

1 kilometre (km) = 0.62 mile 1 hectare (ha) = 2.471 acres

Acronyms and Abbreviations

ADD	Agricultural Development Division
ADF	African Development Fund
ADP	Agricultural Development Programme
ADP-SP	Agriculture Development Programme- Support Project
AfDB	African Development Bank
ASWAp	Agriculture Sector-Wide Approach
BVC	Beach Village Committees
CAADP	Comprehensive Africa Agriculture Development Programme
CSP	Country Strategy Paper
DCAFS	Donor Committee on Agriculture and Food Security
DoF	Department of Fisheries
DDP	District Development Plans
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FAO	Food and Agriculture Organization (United Nations Agency)
GoM	Government of Malawi
LUANAR	Lilongwe University of Agriculture and Natural Resources
MGDS	Malawi Growth and Development Strategy
MITC	Malawi Investment and Trade Centre
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
NAP	National Agriculture Policy
NAC	National Aquaculture Centre
NFAP	National Fisheries and Aquaculture Policy
RBCSP	Results Based Country Strategy Paper
RMC	Regional Member Country
TAAT	Technologies for African Agricultural Transformation

Loan and grant information

Client's information

BORROWER/RECIPIENT : Republic of Malawi

EXECUTING AGENCY : Ministry of Agriculture, Irrigation and Water Development

Financing plan

Source	Amount (UA million)	Amount (USD million)	Instrument
ADF loan	6.51	8.98	Loan
ADF grant	3.05	4.21	Grant
GOM	1.00	1.38	Counterpart (in-kind contributions)
TOTAL COST	10.56	14.57	

ADF's key financing information

	ADF
Loan Currency	UA
Interest Rate Spread*	NA
Commitment Charge*	0.50% per annum on non- disbursed amount beginning 120 days after signature
Service Charge	0.75% per annum on the amount disbursed and outstanding
Tenor	(40 Years including the Grace Period)
Grace Period	10 Years

Timeframe - Main Milestones AfDB'S financing (expected)

Concept Note approval	May 2019
Project approval	September 2019
Effectiveness	January, 2020
Completion	December, 2024
Last Disbursement	June, 2025

Project summary

Project purpose and geographical scope

The purpose of the "Sustainable Fisheries, Aquaculture Development and Watershed Management" Project is to contribute towards poverty reduction through improved fish commodity value addition and increased consumption, strengthened nutritional security, and build climate resilience in Malawi. The outcomes will include improved fisheries and aquaculture productivity, reduction of post-harvest losses and facilitating market oriented intensification along fisheries value chain and strengthened fisheries and watershed management. The project will promote diversification from capture fisheries to aquaculture ventures, and hence increased production and incomes. It will contribute towards increased livelihoods and employment opportunities; reduction of local fish prices, increase export of commercial fish species, and increase fish production to meet food and nutritional security. The project planning follows an ecosystem approach, which includes conservation of catchment areas as 75% of transboundary watersheds are located in Malawi, which are critical fish breeding and nursery grounds. The geographical scope covers 11 lakeshore and three non-lakeshore districts including the entire basins of Lake Malawi and Chilwa, part of the Shire River and selected upland districts for aquaculture. The project time frame is 60 months effective January 2020. The total estimated project cost is UA 10.56 million.

The project estimated number of direct beneficiaries is 20,000 fishers, fish farmers, students, and value chain entrepreneurs of which 50% will be women in the targeted regions. Indirect beneficiaries are estimated at 250,000 of which the 40:60 Gender Policy ratio of either sex is considered indicating greater involvement of women where necessary. Benefits include (i) sustained income from fisheries (ii) increased recovery of stocks through multispecies and watershed management (iii) employment opportunities through processing and value addition activities, and (iv) and increased local access to fish protein consumption.

Needs Assessment

The need for the project is justified by the priorities in the Malawi Growth and Development Strategies III (MGDS III: 2017-2022) which emphasises on agriculture and food security. The project is also in line with the National Agriculture Policy (2016) and the National Fisheries and Aquaculture Policy (2016), National Agriculture Investment Plan (2018). Fisheries is an important economic sector that plays a key role in nutrition and livelihoods in Malawi. The sector provides income and a direct employment opportunity to ~60,000 people and indirectly engages over 500,000 people in fish processing, trading, distribution, and other associated trades. The value of the fisheries industry is last estimated at US \$273.18 million (GoM, 2018)¹. Malawi supports the highest freshwater fisheries biodiversity worldwide, however, fish stocks and fishery biodiversity are at risk from overfishing, climate variability, and poor fisheries management exacerbated by substantial institutional capacity limitations)². Decreasing catch rates (catch per unit effort) suggest this is the case, and in particular there is a decline of the endemic Oreochromis (Nyasalapia). The total chambo catch has declined by over 70% over the last 10 years. A failure to regulate fisheries offshore and widespread land degradation estimated at 29t/ha/year lie at the heart of the decline of the fish stocks in addion to limited institutional capacity.

¹ Government of Malawi(2018). 2018 Annual Economy Report

² Malawi Country Environmental Analysis January 2019.

Bank's Added Value

The Banks comparative advantage lies in its capacity to foster policy dialogue with other donor partners to facilitate the implementation of needed policy reforms in the fisheries sector and the convening power to bring together stakeholders from local and national levels to reach consensus for resolving competing demands on the fish resources. The Bank has supported the implementation of a Lake Malawi Fisheries Artisanal Development Project as well as the Multi-National Lakes Edward and Albert Fisheries and Water Resources Project. The Bank has been an active partner in the agricultural sector and has gained valuable experience in the sector including fisheries and the Blue Economy Flagship. The Bank has adequate lessons from the previously funded and on-going projects, which have been used to inform the design of this project. The proposed project fits within the Bank's 10 Year Strategy (2013-2022) particularly its operational focus areas (private sector development) and areas of emphasis (agriculture and food security).

Knowledge management

The project provides the Bank with a wealth of knowledge for implementing similar operations in other areas of the continent. Strengthened fisheries, aquaculture ventures and watershed information systems will enable sharing of data, capacity and skills building to facilitate longer term development planning for improved climate resilience. Information products and field guides will be developed for sustainable fisheries and aquaculture management and monitoring of environmental hotspots. The project will build on local needs, traditional knowledge and innovative research to ensure sustainability. The knowledge will be captured through systematic monitoring and evaluation. The knowledge obtained will be shared within the African Development Bank, other development partners as well as with RMCs. The project experience in using technologies to increase fisheries and aquaculture productivity under TAAT Aquaculture Compact will be replicated in other *Feed Africa* projects especially where it is not presently the case.

Results Based Logical Framework

 REPUBLIC OF MALAWI: SUSTAINABLE FISHERIES, AQUACULTURE DEVELOPMENT AND WATERSHED MANAGEMENT PROJECT
To increase fish production in order to contribute to the well-being of Malawians, improve on food security, reduce on poverty levels through employment opportunities and enhanced adaptive capacity of value chain enterprises and fishing and fish farming communities.

	Post Kord of	Performance indica	tors	Means of	D: 1 / 2/2 /			
	Results chain	Indicator (including CSI)	Baseline	Target	verification	Risks/mitigation measures		
	Reduce poverty and malnutrition in the country and promote local fish trade	% contribution of the fisheries sector to the national gross domestic product, livelihoods and landed value of fish products % reduction of malnourishment amongst under five children through fish diet	4% (2018) 1.1 million 37.1% (2015-2016)	6% (2024) 0.9 million 35% (2024-2025)	National statistics, mid-term and completion reports, surveys and reports.			
	Outcome 1: Improved incomes for the fishers and aquaculture farmers.	Number of jobs created (Disaggregated by gender) wincrease in revenue and household incomes	60,000 (2016) 60,000 beneficiaries (2016)	80,000 (2024) + 20% (2024)				
	Outcome 2: Increased fish production	2.1 % Volume change in aquaculture production 2.2 % Volume change in fish landed value and yield	3,600 MT/year (2018) 150,000 MT/year (2018)	10,000 MT/yr (2024) 220,000 MT/yr (2024)	Department of Fisheries reports and program	Risk: Climate changes impacts (floods, drought) could affect essential infrastructure, water quality, productivity, and supply chains		
		3.1 Increase intake of fish protein consumption 3.2 Number of women and children 6.23 months	8 kg/capita /year (2016)	12 kg/capita (2024)	- reports	Mitigation: activities developed will be climate change resilient, integration of best practices of climate proofing, institutional strengthening, climate financing, and sensitization done as part of capacity building.		
	Outcome 3: Improved nutritional well- being and inclusive livelihood security for youth and women entrepreneurs			20% (2024) 100,000 beneficiaries (2024)				
	Output 1							
177.0	1.1 Capacity of fish enterprises strengthened	thened ancillary activities (disaggregated by gender) 40:60 1.2.1 Number of Beach Village Committees (BVC's) enhanced in co-management of fisheries regulation (disaggregated by gender) 40:60 0		20	Quarterly	Risk: Sustainability of the fisheries co-management model and the role of BVCs in catalysing SMEs Mitigation: Project will seek to initiate financial		
	1.2 Fisheries resources management strengthened			10 100	supervision reports, and mid-term reviews	mechanism to sustain activities Risk: The Government is unable to sustain the recurrencosts of fisheries surveillance activities after the Program		

D. V. 1 .	Performance indica	tors	Means of	D. 1 / 10 /	
Results chain	Indicator (including CSI)	Baseline	Target	verification	Risks/mitigation measures
1.3 Increased governance of catchment basin	1.3.1 Total catchment areas restored and protected for fish nursery and breeding grounds 1.3.2 Number of DDP's engaged on catchment areas and fisheries management	0	4 5		Mitigation: The Project will focus on low-cost, surveillance operations; and develop a low-cost surveillance network that captures economies of scale Risk: Fish landing site clusters are not properly managed or operated, so that the infrastructure does not generate the intended benefits Mitigation: The Program will support PPPs to assist the government to identify potential managers and
Output 2	<u> </u>				operators for each site from the private sector or SMEs
2.1 Enhanced business and entrepreneurial	2.1.1 Number and units of entrepreneurs trained in fish value chain through an incubation program (disaggregated by gender) 40:60 2.1.2 Number of interns place in a business	0	300		
development	incubation programs (disaggregated by gender) 40:60 2.1.3 # of actors trained into SME's and supported with financing (disaggregated by gender) 40:60	0	150	Progress & supervision reports, mid-	Risk: long-term training could affect full participation and gender discrimination
2.2 Fish farmers cooperatives strengthened	2.2.1 Number of cooperatives created and organised and registered as SMEs (disaggregated by gender) 40:60 2.2.2 Number of cooperatives linked to demonstrative	0 0	300	term reviews and evaluations	Mitigation: The project will fully finance training and conduct gender mainstreamim of fish chain activities
	centers and commercial farms for fingerlings and feeds needs. Disaggregated by gender) 40:60		200	_	
2.3. Increased production of fingerlings2. Increased production of fish feed	2.3.1 Number of fingerlings produced 2.3.2 Quantity of fish feeds produced	10,000,0000 (2016) 5,400 t (2018)	60,000,000 (2024) 20,000 t (2024)		
Output 3					
3.1 Enhanced capacity for value chain actors	3.1.1 Number of fishers and processors trained and supported for economic viability (disaggregated by gender) 40:60 3.1.2 Quantity and value addition generated	0	75 50-75% landed value	Program	Risks: Conflicts amongst value chain actors Mitigation: Training workshops and capacity building for addressing value chain bottlenecks and building
3.2 Rehabilitated landing sites, fish processing zones, and feeder retail roads	3.2.1 Number of infrastructure support for processing, storage and retail e.g refrigerated trucks, warehouses 3.2.2 Number of fishing landing sites equipped with landing facilities: hygiene, processing infrastructure 3.2.3. Km of feeder roads renovated	0	10	progress and supervision reports, and mid term reviews and	trusts and collective action Risk: Technical design of the project: The project is complex, involving the coordination of multiple stakeholders and solutions across various sectors, and potentially challenging to implement.
3.3 Food safety/aquatic health program establish	3.3.1 Number of fish value chain actors (farmers, processors and retailers trained on phyto-sanitary standards (disaggregated by gender) 40:60 3.3.2 Guidelines and best management practices developed for quality, eco-certification and branding	0	500	evaluations	Mitigation: Ensuring use of qualified technical assistance across the Bank and GoM, building institutional capacity, focus on attaining specifc results, and takes advantage of wide consultation with stakeholders during preparation and implementation.
Output 4	, , , , , , , , , , , , , , , , , , , ,		•		
4.0 Program work plans and activities implemented, monitored and evaluated	4.1 Rate of program implementation and delivery	0	100%	Program progress and supervision	Risk: Weak implementation of the project Mitigation: Harmonised PiU, institutional capacity
	4.2 Number of technical reports and plans developed (gender, restoration, communication, ESMPs, audits, fisheries, adaptation guide, etc.)	0	10	reports, and mid term reviews and evaluations	building through training, robust fiduciary systems in place, and competitive selection of project's experts and establishment of performance contract.

	Dec Keelet	Performance indica	tors		Means of	D: 1./. '/.				
	Results chain	Indicator (including CSI)	Baseline	Target	verification	Kisks/miti	gation measures			
	COMPONENT		INPUT COSTS	INPUT COSTS (MillionnUA)						
		es and Watershed Management: ement plans; Rehabilitation of selected fish landing sites; officials and BVCs for co-management; Training of exten	2.40							
IES		and feeds; Piloting of cage aquaculture in selected sites of creation and organization of fish farmer's cooperatives; S		3.10		Sources of financing: (UA million):				
HVITHES	Component 3: Fish Value Chain Strengther	ning. gies (solar drier, cold storage, refrigerated trucks, kilns) fo	or scaling out			ADF loan:	6.51			
KEY ACTI	production; Reducing on PHL through training financing and community business models inc	g and cold chain storage; Training and capacity developmed uding an innovation hub; Promoting private sector partners and cooperatives (and fish market hub such as in Mzuz	nent for business ership and	3.43		ADF grant:	3.05			
	Component 4: Project Coordination, Monit Day to day project management activities; De	•			Government contribution	n: 1.00				
		erm review and project completion reports ogress reviews and regular project follow up meetings al managementAnnual financial and technical audits;		1.63						
	Total			10.56						

^{*}The zeroes in the baseline indicates activities that has not been previously undertaken and is non-existent prior to project implementation. The target year is 2024.

Project timeframe

	Project timetrame Year 2019 2020 2021 2022 2023 2024																								
	Year							20													1 -	2024			
	Task	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4																
A	Project start																								
	Internal procedures and approval AfDB																								
	Appraisal																								
	Signing of Loan Agreement																								
В	Component 1: Sustainable Capture Fisheries and Watershed Management																								
	Advance contracting of consultants																								
	Post-harvest loss reduction activities																								
	Fisheries Resources Management																								
	Watershed Management and Dev. activities																								
	Formulation & implementation of watershed plans																								
C	Component 2: Aquaculture Development																								
	Advance contracting Consultants/ TA																								
	Business and Entrepreneurial dev activities																								
	Strengthening Fish farmers cooperatives																								
	Technology development transfer																								
	Knowledge and replication activities																								
D	Component 3: Fish Value Chain Strengthening																								
	Advance contracting Consultants/TA																								
	Capacity strengthening - value chain actors																								
	Rehabilitation of landing sites, marketing infrastructures and feeder roads																								
	Food safety/aquatic health programs																								
E	Project management																							<u> </u>	
	Management, monitoring and evaluation																								
	Quarterly progress reports																								
	Project Steering Committee meetings																								
	Project Technical Committee meetings																								
	Final Report																								

REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSED LOAN TO MALAWI FOR THE SUSTAINABLE FISHERIES, AOUACULTURE DEVELOPMENT AND WATERSHED DEVELOPMENT PROJECT

Management hereby submits the following Report and Recommendation for approval of the proposed ADF Loan of UA 6.51 million and ADF Grant of UA 3.05 million to finance the Sustainable Fisheries, Aquaculture Development And Watershed Development Project in the Republic of Malawi.

1 STRATEGIC THRUST & RATIONALE

1.1 Project linkages with country strategy and objectives

- 1.1.1 Malawi is ranked 171 out of 189 countries on the United Nations Human Development Index for 2018 (UN Statistics). As one of Southern Africa's most densely populated countries, Malawi's growing population of 18.9 million (2018) is expected to increase to 43.1 million by 2050. The Gross Domestic Product (GDP) in 2018 was estimated at \$7065 million USD, with a 3.5% growth since 2017, and GDP per capita of 357 USD in 2018. Absolute poverty levels are not declining and above 50% within the rural population. Agriculture (including fisheries) accounts for 30% GDP and 80% rural employment.
- 1.1.2 The project is consistent with the Bank's Country Strategy Paper (CSP) for Malawi (2018 2022) through its second pillar namely: "Investing in economic transformation by strengthening agriculture value addition and developing water infrastructure" with the objective to broaden diversification, support agroprocessing and small industry development. The objective of the Strategy is to support the foundations for private sector led growth by investing in public infrastructure to unlock private investment, promote diversification and build economic resilience to reduce poverty and inequality. This is also in line with the national development strategies and policies of vision 2020, the Malawi Growth and Development Strategy III 2017-2022 (MGDS III), and the Decentralization Policy especially the District Development Planning Frameworks³. The MDGS III recognises that unsustainable natural resource management poses a challenge to economic development through diminishing economic opportunities from resource-base enterprises. The need to sustainably manage fisheries resources and develop aquaculture as business in the country within the changing environment has been emphasized in various national policies including the National Fisheries and Aquaculture Policy (NFAP) of 2016 (see Technical Annexes for more detailed policy frameworks). The strategy focus is to narrow the gap between food supply and domestic and international market demand in the medium to longer terms.

1.2 Rationale for Fund's involvement

1.2.1 Malawi's economy is faced with two interlinked challenges of persistently high poverty levels and high environment and natural resources degradation rates. The Malawi's fisheries sector is of great importance to the national economy as it contributes 4% to the Gross Domestic Product (GDP) and is also a source of employment, food, rural income, export, import substitution and conservation of biodiversity. The sector directly employs about over 60,000 fishers and 9,000 fish farmers and indirectly supports 500,000 people who are involved in fish processing, fish marketing, boat building and engine repair while only two investors are engaged in commercial aquaculture. Millions of people depend on fish for their dietary requirement as over 60% of animal protein intake and 40% of the total protein supply of Malawians come from fish. Much of the species such as Usipa (*Engraulicypris sardella*) and matemba (*Barbus species*) are affordable and easily accessible by the poor households for their nutritional requirements in terms of animal protein supply.

³Government of Malawi, 2016. Mangochi District Development Plan: Towards a Prosperous and Self-Reliant District, Mangochi, Malawi| Government of Malawi, 2012. Karonga District Development Plan 2013-2018.

- 1.2.2 The major challenges to fisheries and aquaculture sector productivity in Malawi include high population growth and increasing levels of poverty which have led to overexploitation of fishery resources, high post-harvest losses, climate change impacts, weak collaboration among stakeholders, watershed degradation in the lake catchments affecting fish habitats, and slow progress in aquaculture development due to quality fingerlings, feed availability, and institutional capacity. The per capita annual fish consumption has fallen since the 1970s from 12.9 kg and to about 8 kg which is below 15kg as recommended by the World Health Organization. Malawi relies mostly on import of fish to meets its demand. Moreover, fresh fish is almost unavailable in the market during the day as issues of low volume, post-harvest loss and storage exacerbates access to this nutrition sensitive diet to local households. The proposed project will contribute to improving fisheries and aquaculture productivity under climate change; reduce on post-harvest loss and facilitate market oriented intensification along the fish value chain. It will promote diversification from capture fisheries to aquaculture to meet internal demand and hence increased outputs and incomes.
- 1.2.3 The Bank's intervention is consistent with the principles of key regional and national initiatives as well as Bank Group policies and strategies. These include the CAADP Compact; Bank's Ten Year Strategy (2013-2022) particularly in its operational focus areas (private sector development) and areas of special emphasis (agriculture and food security). The proposed project is also consistent with 4 out of the Bank's 'High 5' by addressing "Feed Africa" (with the Blue Economy and TAAT Flagships), "Industrialise Africa", "Integrate Africa" and "Improve the quality of lives of people of Africa". It is aligned to the Jobs for Youth in Africa (2016-2025) strategy; the Gender Strategy (2014-2018), Regional Integration Strategy 2018 (through trade corridors and transportation networks), the Multi-Sectoral Nutrition Action Plan (2018-2025) and the Bank's Climate Change Action Plan 2016-2020.
- 1.2.4 The Project is also aligned with the Bank's Strategy on fragility "addressing Fragility and Building Resilience in Africa" (2014-2019) which promotes inclusiveness and build resilience. The fisheries sector remains a strong mode of building resilience through a holistic value chain approach by involving all stakeholders within the value chain with multiplier effects. The project targets key drivers of fragility in Malawi such as infrastructure deficit for sustainable aquaculture, youth unemployment, gender inequality, and regional development imbalances.

1.3 Donors Coordination

Donor Coordination: Malawi is highly dependent on external development assistance. It has a welldeveloped aid coordination framework established on the principles of the Paris Declaration, Accra Agenda for Action, and the Busan Partnership Agreement. The agricultural sector remains the main economic growth contribution. In the 2017/18, total disbursement was USD 308 million and donor contribution to the agriculture sector budget in Malawi was estimated at 60% (DCAFS database, Table 1). The Bank is one of the leading development partners in the agriculture sector and contributes to the overall Development Partners support to the agriculture sector in 2017/2018 fiscal year. The Donor Committee on Agriculture and Food Security (DCAFS), whose aim is to deepen dialogue, coordination and harmonize development aid is currently chaired by the EU. DCAFS has played an important role in the formulation of the recent National Agriculture Policy (NAP), National Agriculture Investment Plan (NAIP), National Irrigation Policy, Reforms for the Farm Inputs Subsidies Program (FISP). All the key donors in the agriculture sector in Malawi, including the Bank are members of DCAFS. Since its establishment in 2007, the Malawi Country Office (COMW) has continued to play a pivotal role in donor coordination activities, as well as overall portfolio management. AfDB currently is a member of three (3) Technical Working Group on food related issues. In addition the project will build synergies and leverage investments by other development partners as detailed in the Technical Annex.

Table 1: Donor Support to Agriculture in Malawi

	Sector or subsector	Size		
		GDP	Exports	Labour Force
	Agriculture	28	90	80
	Players - Public Annual			
	Government	Donors	AfDB	8%
			WB	28%
UA m	[UA 83 m]	[UA 117 m]	DFID	10%
%	41	59	EU	11%
			USAID	16%
			Irish Aid	3%
			WFP	2%
			GIZ	2%
			UN Women	1%
			FAO	2%
			IFAD	5%
			JICA	2%
			FICA	2%
			RNE	8%
	Existence of Thematic W	orking Groups		[Y]
		ntegrated Sector Approach	es	[Y]
	AfDB's Involvement in de			[M]****

^{*} As most appropriate ** Years [yy1 to yy2] *** for this sector or sub-sector

2 PROJECT DESCRIPTION

2.1 Project Development Objectives

2.11 The goal of the project is to improve on the resilience of the wild capture fishing and fish farming communities to taking into account the prevalent climatic variability including floods and drought. The project will contribute towards poverty reduction through improved value addition employment opportunities and provision of infrastructure for increased fisheries productivity, and strengthened nutritional security through household comsumption.

2.2 Project components

2.2.1 The project consists of 4 components which include :(i) Sustainable Capture Fisheries and Watershed Management; (ii) Aquaculture Development; (iii) Fish Value Chain Strengthening and (iv) Project Management, Coordination, Monitoring and Evaluation. A detailed description of the Project components is given in Technical Annex. A summary description is given below with activities in the table below.

Table 2: Project components, estimates and summary activities

	Components	(UA Million)	Component description						
1	Sustainable	2.40	This component aims at restoring and sustaining fisheries resources						
	Capture		through an ecosystem approach to fisheries (EAF) and within a blue						
	Fisheries &		economy framework.						
	Watershed		Sub-component1:						
	Management		Capture Fisheries Management						
			• Development of multispecies fisheries management plans;						
			Rehabilitation of selected fish landing sites;						
			• Strengthening decentralization through capacity building of officials and BVCs for co-management;						
			• Training of extension workers and reforming shoreline by-laws;						
			Stock assessment and fisheries management support;						
			Developing of a blue economy framework that has sectoral and						
			cross-sectoral dimensions as well as partnership arrangements.						

^{****} L: leader, M: member but not leader, none: no involvement

	Million)	Component description
2 Aquaculture Development 3 Fish Value Chain Strengthening	3.10 3.43	 Sub-component 2: Ecosystem-based Fisheries & Watershed Management Develop institutional capacity for ecosystem-based fisheries and watershed planning and monitoring (includes three watershed management plans for Chirwa, Zomba, and Lower Shire basin); Pilot community-based soil and water conservation and Improved fallow and agroforestry in the Lake Chilwa catchment (with Chambo Restoration Plans), the lower shire river, Bua River and the Nkhata Bay river basins; Restoration of spawning grounds for capture fisheries. Including invasive aquatic weeds control (Songwe, Bua, & Dwanga Rivers) Strengthened Community based Early Warning System This component aims to promote commercial aquaculture ventures, integrated pond-based polyculture systems and various fish farm pilots. Support the NAC on production of fingerlings and feeds; Viability assessment and piloting of cage aquaculture in selected sites with endemic species; Fish genetic improvement research; Creation and organization of fish farmer's cooperatives; Training of fish farmers on pond management, biosecurity and post harvest activities. This component aims to strengthen the fish value chain approach in order to meet local fish demand and also advance market-oriented development to reduce post-harvest loss and promote skills for men, women and youth in the fisheries and aquaculture sector. Adopting innovative fish processing technologies (solar drier, cold storage, refrigerated trucks, kilns) for scaling out production; Reducing on PHL through training and cold chain storage; Training and capacity development for business financing and community business models including an innovation hub; Promoting private sector partnership and infrastructure development with selected SMEs and cooperatives (and fish market hub such as in Mzuz
		 in Mzuzu); Faciliate access to finance for SMEs and organized cooperatives/clubs Facilitating fish processing zones and fish export trade corridors in
		the SADC region (Zambia, Tanzania & Mozambique) thrugh the Nacala and Mtwara transportation corridors).
4 Project Coordination, Monitoring & Evaluation	1.63	This component will ensure effective implementation of the project based on a set of target indicators, executed by a PIU and supported by a Steering Committee. Day to day project management activities; Development of sub project specific gender action plans; Development and implementation of site specific ESMPs; Development of web based results framework for M&E Conduct at least 2 supervision missions per year, mid term review (by mid 2022) and project completion report by 2024; Monitor project activities through quarterly progress reviews and regular project follow up meetings; Procurement, disbursement, audit and financial management activities Annual financial and technical audits; Strengthening reforms and governance related studies including the Blue Economy Framework and multispecies management plans; Procurement of vehicles, vessels, and ICT equipment; Operation costs (staff salaries, office spaces, fuel, vehicle O & M staff travel expenses, steering committee meetings etc.).

2.3 Technical solution retained and other alternatives explored

2.3.1 There were many alternatives considered and rejected during project preparation. The main alternatives considered include: (a) project phasing (b) No project approach and (c) a single sector focus. Table 2 shows the alternatives considered and reasons for rejection.

Table 3: Project alternative considered and reason for rejection

Alternative name	Brief Description	Reasons for Rejection
A single sector focus;	The project would undoubtedly be simpler if the focus was only on a single sector or even institution (e.g. the Department of Fisheries) that already has significant needs.	This would not help achieve the basic concept of this project, resulting in continued degradation of the watershed and Fisheries resources and non-sustainable aquaculture practices
Project phasing	Develop the project in two phases	Very high cost, which cannot be guaranteed with limited ADF resources, and headroom.
No Project Approach	An option always to be considered is a no- project approach	This would imply continued unsustainable fisheries exploitation and deterioration of the catchment lands, not being able to provide a foundation for the long-term sustainable fish options and build resilience for vulnerable populations

2.3.2 <u>Innovative features of the project.</u> The project uses an Ecosystem Based approach to fisheries management within the "blue Economy framework" in the various regions, districts and lakes in Malawi. The ecosystem approach to fisheries (EAF) represents a move from fisheries management that focuses on target species, towards multispecies and participatory decision-making processes that balance environmental, human and social well-being. It also strengthens local level development through mainstreaming fish and other agro-commodity value chains and rural economic activities into the new District Developmen Planning frameworks as well as linking cooperatives and SMEs with commercial banks and the creation of investment and business innovation hubs with MITC and LUANAR.

2.4 Project type

2.4.1 This is a standalone investment operation aimed at sustainably managing fisheries resources, restoring depleted fish stocks, promoting aquaculture ventures and building climate resilience through watershed management and EAF. The standalone approach was used because systems are not yet in place to enable a sector-wide blue economy investment planning framework.

2.5 Project cost and financing arrangements

2.5.1 Project Costs: The total cost of the project is estimated at UA 10.56 million, net of taxes, and based on 2019 prices, comprising of 63% of the total cost in foreign cost, and 37 % in local costs. The project cost comprises of an ADF loan of UA 6.51 million (61.6%), ADF grant of UA 3.05 (28.6) and GoM contribution of UA 1.00 million (10.0%) in kind. This cost is inclusive of physical and price contingencies estimated at average rates of 7% and 9% respectively. The price contingencies were estimated on the basis of actual and projected levels of local and foreign inflation rates of about 13% and 2.2% per annum, respectively. The physical contingencies are estimated from 0 to 15%, based on common practices. A summary of the project cost estimates by components and expenditure accounts is shown in Tables 3, 4, 5 and 6, while details are provided in the Technical Annexes – Volume II.

Table 4: Summary of Project Cost by Components

COMPONENT		(MK Million)	(UA, 000)				%.
COMPONENT	Local	Foreign	Total	Local	Foreign	Total	For	Base
1. Sustainable Capture Fisheries &								
Watershed Management	824.99	1,389.31	2,214.30	808.67	1,361.83	2,170.50	63	24
2. Aquaculture Development	974.48	1,755.29	2,729.77	955.20	1,720.57	2,675.77	64	29
3. Fish Value Chain Strengthening	699.16	2,184.28	2,883.44	685.33	2,141.07	2,826.40	76	31
4. Project Coordination, Monitoring and								
Evaluation	798.68	683.23	1,481.90	782.88	669.71	1,452.59	46	16
Total Baseline Costs	3,297.30	6,012.11	9,309.41	3,232.08	5,893.18	9,125.26	65	100
Physical Contingencies	178.22	439.59	617.81	174.70	430.89	605.59	71	7
Price Contingencies	506.06	340.00	846.06	496.05	333.28	829.32	40	9
Total Project Cost	3,981.58	6,791.70	10,773.28	3,902.82	6,657.35	10,560.17	63	116

Table 5: Summary of Program Cost by Category of Expenditure

		(MK Million)			% For	%		
Expenditure Category	Local	Foreign	Total	Local	Foreign	Total	Exch	Base
A. Goods	246.94	1,050.03	1,296.98	242.06	1,029.26	1,271.32	81	14
B. Services	1,813.42	2,166.87	3,980.29	1,777.55	2,124.01	3,901.56	54	43
C. Works	879.78	2,639.35	3,519.14	862.38	2,587.14	3,449.53	75	38
D. General Operating Expenses	357.15	155.85	513.00	350.09	152.77	502.85	30	6
Total Baseline Costs	3,297.30	6,012.11	9,309.41	3,232.08	5,893.18	9,125.26	65	100
Physical Contingencies	178.22	439.59	617.81	174.70	430.89	605.59	71	7
Price Contingencies	506.06	340.00	846.06	496.05	333.28	829.32	40	9
Total Project Costs	3,981.58	6,791.70	10,773.28	3,902.82	6,657.35	10,560.17	63	116

Table 6: Financing arrangements by Local & Foreign Distribution

C	(UA, 000)							
Sources of finance	Foreign	Local	Total	% Total				
ADF Loan	4,050.06	2,459.76	6,509.82	61.6				
ADF Grant	2,227.55	822.45	3,050.00	28.9				
Government	379.75	620.61	1,000.35	9.5				
Total	6,657.35	3,902.82	10,560.17	100.0				

Table 7: Expenditure Schedule by Component

Component		(UA, 000)							
Component	2020	2021	2022	2023	2024	TOTAL			
1. Sustainable Capture Fisheries & Watershed Management	537.79	888.73	503.45	256.63	216.06	2,402.66			
2. Aquaculture Development	686.68	522.85	813.78	638.03	440.46	3,101.81			
3. Fish Value Chain Strengthening	131.51	597.88	1,101.60	1,061.91	531.01	3,423.92			
4. Project Coordination, Monitoring and Evaluation	452.68	281.35	286.72	299.19	311.84	1,631.79			
TOTAL	1,808.67	2,290.82	2,705.56	2,255.75	1,499.38	10,560.17			

2.6 Project's target area and population

- 2.6.1 <u>Project Areas:</u> The project interventions will be implemented in the eleven lakeshore districts with high potentials for aquaculture and capture fisheries in addition to Likoma, Chilwawa, Nsanje and Blantyre. The selected areas are Karonga District (see details in Technical Annex), Nkhatabay and Nkhotakota on capture fisheries, Salima, Mzuzu and Chitipa for aquaculture, Mangochi (on post-harvest loss). The project will also target the Mulanje, Thyolo, Phalombe, while Zomba, Machinga, Chikwawa and Phalombe will cover both aquaculture and capture fisheries. Details on selection criteria and specific activities for each site have been elaborated in the technical Annex under section B 2.1.2
- 2.6.2 <u>Project Beneficiaries</u>: The estimated number of direct beneficiaries is about 20,000 fishers, fish farmers, students and interns, and value chain entrepreneurs of which 50% will be women in the targeted

regions and zones. Women and youth will be given high priority. Indirect beneficiaries is estimated at 250,000 of which the national gender ratio is considered.

2.7 Participatory process for project identification, design and implementation, including active participation of the private sector and civil society

The Bank identification mission was carried out in March 2018, a scoping mission supported by World Fish was done in September 2018, a project preparation mission undertaken between March 18-April 05, 2019 and an appraisal mission in July 2019. The mission consulted several stakeholders which included senior Government officials and District Council staff, development partners, small scale fishers and comanagement entities (BVCs), large scale fishing companies such as Maldeco, fish traders, fisheries associations and cooperatives, research institutions such as WorldFish Malawi, LUANAR, commercial banks, MITC, and Malawi Bureau of Standards who provided valuable inputs. Further consultations were made with similar institutions during the appraisal mission to confirm costing data, discuss risks and mitigation measures, and implementation arrangments for the project which concluded to the final report. More consultation platforms are planned for implementation including a stakeholder engagement committee, project technical committee and the BVCs.

2.8 Bank Group experience, lessons reflected in project design

2.8.1 The Bank has been active in Malawi agriculture sector for many years. The Bank's current active portfolio in Malawi comprised 16 active operations with a total commitment of UA 268 million. The cumulative disbursement rate currently stands at about 44 percent. The overall portfolio performance is satisfactory with ratings of 3.1 (Implementation Progress) and 3.3 (Development Objectives) on a scale of 0 to 4. The portfolio is distributed across the High-5 priorities of Feed Africa (34.8%); Integrate Africa (33.9%), Industrialize Africa (2.6%), and Improve the Quality of Life for the People of Africa (28.7%). Details of the previously Bank financed operations whose experience has informed this operation have been summarized in appendix II. Though the overall performance of the portfolio is satisfactory, weak fiduciary capacity and poor quality-at-entry have hampered the speed of implementation for some projects. Issues of accountability, commitment, high turnover of project staff are also some of the challenges that face the portfolio. Similar challenges were also identified by the Mid-Term review of the CSP 2013-17 (IDEV Country Report 2018) including weak financial management and project implementation capacity and slow procurement. The Malawi Country Office is working closely with the Government to resolve the outstanding issues mentioned and to provide fiduciary implementation support as part of project supervision coupled with day-to-day implementation.

2.8.2 Lessons learned from the aforementioned Bank's financed projects (especially in fisheries), include the following: (i) the need for ownership and participation of beneficiaries to improve sustainability; (ii) the use of innovative institutional arrangements and structures to ensure coordination; (iii) the need to link environmental benefits to improved livelihoods and community well-being; (iv) capacity development at all levels; (v) Improving monitoring and evaluation capacity for tracking project success; (vi) community awareness and sensitization; (vii) the need for a PIU for day to day management with relevant expertise; and (viii) the need for greater Government oversight of the PIU to advance timeliness of procuring services, retain staff on performance merits, and also fiduciary clinics to enhance financial management.

2.9 Project's performance indicators

2.9.1 The Project's key performance indicators are presented in the Results Based Logical Framework. Regular implementation progress will be measured through bi-annual Bank supervision missions, quarterly project progress report and annual technical and financial audit reports. The Project Implementation Unit will collect and analyse data to monitor progress and submit to the Bank on agreed timeframes.

2.9.2 The main indicators defined for monitoring the project's impact, including the Bank's Core Sector Indicators, were developed together with the Government of Malawi and validated during project preparation. Impact indicators include: % contribution of the fisheries sector to the national GDP; nutritional impact in children under five years and reduction in food insecure population. Outcome indicators include: % reduction in post-harvest losses; number of jobs created; increase in aquaculture production; number of SME's with access to markets and finance; increase fish protein consumption; improvemnet of post-harvest opportunities; number of watershed management plans integrated in DDP, and number of institutions supported towards climate resilience. Gender dis-aggregated indicators will inform decision makers to guide project mid-term review and to facilitate project management outcomes after completion. The Malawi Country Office will pay an active role in coordination, capacity support, sector dialogue, project supervision and morntoring.

3 PROJECT FEASIBILITY

3.1 Economic and financial performance

- 3.1.1 A financial assessment of the project was undertaken using activity models, and based on prevailing market prices. The key assumptions underlying the analyses include: (i) Additional 110,000 tonnes of fish will be produced at full capacity of the project; (ii) production of fingerlings will increase to 60 million to sustain stocking of the ponds (iii) a 25-year time period was used to measure the incremental benefits from the project; (iv) Survival rates for fingerlings is 80% of initial stock; Feed Conversion Ratio is 1.8 throughout the project life. Farm gate prices were used in estimating the total revenue from the project; (v) the opportunity cost of capital used for discounting future benefits was estimated to be 12%. For the economic analysis; (vi) hired labour value was adjusted by a conversion factor of 0.75; (vii) the price of fish waste was assumed to be 2% of farm gate price of fresh fish. Summary of financial and economic analysis is in Annex B6 in Volume II of the appraisal report.
- 3.1.2 On the basis of the above-captured assumptions, the project is expected to generate the following benefits: (i) Increase aquaculture production and productivity resulting in total annual aquaculture production of 500,000 tonnes; (ii) improve market linkages and value chain for fish production; (iii) improved fish quality, hygiene and shelf life; (iv) improve average household income of targeted beneficiaries; (v) provide directly employment for 77,000 fish farmers and fishers; and (vi) increased per capita household fish consumption.

Table 8: Key economic and financial figures

FIRR: 24.27% NPV (base case) is 4,465.23 million MK EIRR: 19.49% NPV (base case) is 4,289.34 million MK

NB: detailed calculations are available in Annex in PAR Vol II

- 3.1.3 <u>Financial analysis</u>: Based on the above assumptions, the financial analysis generated Net Present Value (NPV) of 4,465.23 million MK and internal rate of return (IRR) of 24.27%, as captured in the technical annexes. Based on the above analysis, the project is deemed financially feasible. The IRR of 24.27% is higher than the opportunity cost of capital (12%).
- 3.1.4 <u>Economic analysis:</u> The economic analysis was conducted using the same approach as the financial analysis, on the basis of shadow prices (prices in conditions of the efficient market operation) of tradable goods and total cost of project. In addition, other indirect benefits were also expected, such as, easy access to markets through market linkages; provision of aquaculture-service centre, reliable market infrastructure, business developments from the incubation trainings and benefits from watershed management. These additional benefits were difficult to value in monetary terms due to the limited scope of this report, hence

they could not be adequately captured in the analysis. In these conditions, the economic analysis yielded an NPV of 4,289.34 million MK and IRR of 19.49% as captured in the technical annexes.

3.1.5 <u>Sensitivity Analysis:</u> The results of the sensitivity analysis indicate that a 15% decrease in fish price results in FIRR decreasing from 24.27% to 23.26%. Simillarly, a 10% decrease in quantity of output results in 13.52% FIRR. This shows that the project is highly sensitize to variations in output quantity. A decrease in output by 22% (switching values) would have to occur before the project's economic benefits reduces to break-even point at 12%, the opportunity cost of capital.

3.2 Environmental impacts

- 3.2.1 The Project is confirmed as Category 2 in accordance to the Bank's Integrated Safeguards System (ISS) requirements. The project anticipates some environmental and social impacts, particularly in relation to its activities for construction/rehabilitation of fish landing sites, construction of a market and processing facilities, the relocation and maintenance of ice plant and cold rooms to support the fish value chain. An environmental and Social Management Framework (ESMF) was prepared because not all the designs of subcomponents were known at the time of the project appraisal, hence the nature and magnitude of the potential impacts were also not known by then. The preparation of the ESMF fulfilled the national environmental management legislative requirements, as well as the Bank's ISS requirements. The executive summary of the ESMF was disclosed in the Bank's website on August 13, 2019 in accordance with ISS requirements. Appropriate stakeholder consultation was carried out in the context of the ESMF preparation. A stakeholder engagement plan is included and ensures that consultations will continue throughout project development with relevant stakeholders.
- 3.2.2 By design, the project will have a multitude of positive impacts which include but not limited to: (i) improved fish handling and increased incomes by actors; (ii) creation of employment opportunities through fish processing; (iii) improved nutritional and food security in the country; (iv) improvement of environmental conditions through catchment management activities; (v) improved infrastructure through development and repairs of road networks and fish handling plants; (vi) capacity building targeting local communities, youth empowerment, the management of natural resources, value addition and fish processing and entrepreneurial skills; (vii) contribution to improved health initiatives; and (viii) improved biodiversity and recovery of fish stock in the fisheries bodies in Malawi.
- 3.2.3 Anticipated impacts and appropriate and relevant avoidance and mitigation options have been proposed in the ESMF to manage and monitor the risks as shown in Annex B9.

Climate change

3.2.4 The project has been identified as climate risk category 2, according to the Bank's Climate Safeguards System, potentially vulnerable to the impacts of climate change. The key risks to the fisheries sector identified include increased climate variability (including temperature), and increased frequency and intensity of extreme events (floods and drought). Lakes Malawi and Chilwa are susceptible to water level variations⁴; the shallow depth (5m deep) and low total volume of lake Chilwa also make for conditions of a very fragile hydrological systems, one vulnerable to variability in precipitation and increased evaporation. Local communities maintain that the decline in lake levels shrink the shallow breeding and nursery grounds. Fish catches, fishing activity and livelihoods have begun to mirror these observed fluctuations. Prolonged high temperatures and drought may cause severe evaporation in lakes and ponds in the watershed; directly resulting in premature harvesting from artisanal inland aquaculture systems, indirectly resulting in enhanced mortality and incidence of disease and parasitism concerning water temperature. Changes in precipitation affect seasonal flooding patterns that drive inland fish production, while flood events contribute to the erosion of infrastructure, sedimentation and loss of pond capacity with risks to aquaculture production

⁴ Records indicate that the water levels have dropped from 477 m above sea level in the 1980s to ~474.8 m in the last 3 decades (Kumambala et. al., 2010).

(upper Nkhata bay watersheds). Intense rainfall and high rates of runoff could cause soil erosion and increase siltation, destroying spawning grounds and hindering fish migration to the rivers like the Bua, Linthipi and Songwe rivers; and prolonged wet periods also impact fish processing resulting in high post-harvest losses. Changes in fishery production will impact communities whose poverty, and lack of livelihood alternatives leave them ill-equipped to cope. Consideration has therefore been made to enhance resilience and adaptation in the project design, through an ecosystem-based approach. Conserving wild fisheries and enhancing aquaculture are considered twin strategies of adaptation to climate variability and change through an ecosystem based approach. Interventions are designed to reduce environmental stresses at source i.e. within the lake, on littoral zone, and from the lake basin. Measures are provided in Technical Annex 9B.

3.3 Gender

Gender Analysis for the project area was carried out in accordance with the National Gender Equality Act (2012). Some of the challenges/gap identified in the fisheries and blue ecoomy sector were as follows: i) Lack of storage facilities at the beach; ii) Sanitation issues at the beach (non existence of toilets, boreholes and pipe borne water); and iii) Dilapidated drying racks. Based on the Gender Marker, the project is a category 2 as it includes various outcones especially Outcome 3. This project will contribute to the advancement of Women Empowerment and reduce on gender-based inequalities through some of the project activities during the implementation phase. In summary, the project will benefit women through the four project components as appear in the log frame. Each project area has its specific intervention. In all the sites, the project will support the Government and fish communities with training on the various subjects on fish value chain and other relevant equipment and vehicles/motor bikes to enhance mobility. The project through component 4 will endeavour to collect gender-disaggregated data to monitor women participation in all project activities. According to the GoM Gender Policy of 40:60 of either sex will be followed but during implementation, the project will endeavour to involve as many women as possible. A detailed gender analyses including challenges/gaps and action plan is in Annex B10.

3.4 Social Impacts

The project will have strong social impact, in particular in relation to small and medium-scale entrepreneurs (SMEs) by providing support so that they are able to expand their businesses and employ other people. In some cases, the existing commercial fishing or fish farming enterprises will also be considered for training to be competitive for incubation financing in expanding their operations. In aquaculture, fish farmers in clusters or as individuals will be targeted to be self-organized as SMEs or cooperatives to expand their existing businesses. The SMEs and cooperatives will be linked to various financial institutions favorable to SME business climate to access capital and promoting their businesses. Value chain activities including supply of cold room facilities for storage and refrigerated trucks for transportation to markets will be facilitated and strengthened through public-private-partnerships and other empowerment models. The project will also provide resources for capacity building on agro-processing and value addition to ensure quality fish products and reduction of post-harvest losses paying attention to HIV, gender an AIDS responsiveness.

3.5 Involuntary Resettlement

No involuntary resettlement is foreseen by the project.

4 IMPLEMENTATION

4.1 Implementation arrangements

4.1.1 <u>Implementation Arrangements.</u> The executing agency will be the MoAIWD through the Department of Fisheries (DoF). A Project Implementation Unit (PIU) comprising a team of experts, housed in the DoF and within decentralized district offices, will undertake the operational and daily administrative tasks, procurement, financial management, monitoring and evaluation (M&E), and project implementation. The PIU will comprise the following experts: A Project Coordinator, a Fisheries Resources Management Specialist, an Aquaculture Production specialist, a Fisheries Planning and Community Development Officer,

a part-time Nutrition Officer, an Agribusiness and Value Chain Specialist, an Accountant, a Procurement Officer, a M&E officer, and necessary supporting staff. These staff positions will be recruited on a competitive basis with provisions for annual performance review. The PIU will manage the project on a day to day basis and ensure that project resources are properly accounted for and that all project targets are timely delivered. The PIU will directly report to the Principal Secretary (PS), Ministry of Agriculture Irrigation and Water Development (MoAIWD) through the Director of Fisheries and supported by the Project Technical Committee.

- 4.1.2 The Project will be governed by a Project Steering Committee (PSC) that will be chaired by the Principal Secretary (PS) of the MoAIWD and supported by other line ministries as detailed in the Technical Annex B4. A Project Technical Committee (PTC) will be established and chaired by the Director of Fisheries and composed of the Directors or their representatives from other line ministries similar to the PSC. The PTC shall provide technical advice for the Project and report to the PSC through the PS and the Director of Fisheries. At district level, there is a District Task Team consisting of key stakeholders in the district including traditional authorities and the Beach Village Committees (BVCs). For operations at district level, the project will utilize available staff from the Agricultural Development Division (ADD) and district councils based on the decentralized framework and utilizing the BVCs, District Fisheries Officers (DFOs), and other relevant specialists, program managers, and civil society groups for implementation activities. All reporting will be done through the Project coordinator (on behalf of the PIU) and in collaboration with the BVCs and the District Councils. Details on supervision are included in Annex B11.
- 4.1.3 Procurement Arrangements. All procurement of goods (including non-consultancy services), works and the acquisition of consulting services, financed by the Bank for the project, will be carried out in accordance with the "Procurement Policy for Bank Group Funded Operations", dated October 2015 and following the provisions stated in the Financing Agreement. Procurement would be carried out following Bank Procurement Methods and Procedures (BPMPs), using the relevant Bank Standard or Model Solicitation Documents (SDs) and review procedures. Unless it is sufficiently justified, BPS is not recommended due to the risks enumerated in the Technical Annex B6.
- 4.1.4 <u>Procurement Implementation Organization:</u> The Bank has reviewed the overall capacity of the sector, which includes the department, namely: Ministry of Agriculture, Irrigation and Water Development (DoF) and found their experience and capacity insufficient to discharge the procurement function in compliance with the applicable procurement rules and regulations. The procurement unit does not have the requisite capacity in terms of qualification, knowledge of Bank's procurement procedure and numbers of staff to effectively manage procurement under the project. Given the fiduciary requirements related to the AfDB financing, the project would competitively recruit a Procurement Specialist, with the requisite appropriate qualifications and experience, to primarily focus on the project-related procurement tasks spelt out in comprehensive terms of reference. The Procurement specialist would report to the Project Coordinator.
- 4.1.5 Advance Contracting: To avoid procurement delays, the Borrower/Recipient requested for the Bank's No-Objection for Advance Contracting for the recruitment of the consultants for the Project Implementation team on 1st September, 2019. Advance contracting has been cleared by the Bank. Advance Contracting will apply to the selection of the project management team members including a Project Coordinator, an Accountant and a Procurement Officer. Launching the procurement process through Advance Contracting before Board approval will contribute to minimizing procurement delays. The procurement procedures shall be in accordance with the Procurement Framework in order for the eventual contract(s) to be eligible for Fund's Financing, and the Fund shall review and provide guidance to the process. The Borrower/ Recipient undertakes such advance contracting at its own risk, and any concurrence by the Fund with the procedures, documentation, or proposal for award(s) does not commit the Fund to

provide Financing of the contract. If the contract(s) is/are signed, reimbursement by the Fund of any payments made by the Borrower/Recipient under such a contract signed prior to signature of the Financing Agreement is only permitted within the limits specified in the Financing Agreement.

- 4.1.6 <u>Procurement Risk and Capacity Assessment (PRCA):</u> the assessment of procurement risks at the Country, Sector, and Project levels and of procurement capacity at the Executing Agency (EA), were undertaken for the project and the output have informed the decisions on the procurement regimes (BPS and Bank) being used for specific transactions or groups of similar transactions under the project. The global rating of risk assessment was Substantial with possibility of reducing to moderate after the implementation of the mitigating measures. The appropriate risks mitigation measures have been included in the procurement PRCA action plan proposed in Country's Annex B5, Para. 5.3.8.
- 4.1.7 <u>Financial Management (FM) Arrangements</u>. The Department of Fisheries will be responsible for the financial management aspects. The DoF has limited experience in the implementation of projects funded by development partners. Therefore, the proposed project will require substantial reinforcement of the financial management capacity in order to cover all the requisite aspects related to budgeting, accounting, financial reporting, external audit and internal controls and funds flow arrangements. Given the fiduciary requirements related to the AfDB financing, the project would competitively recruit an Accountant, with the appropriate qualifications and experience, to primarily focus on the project-related financial management tasks spelt out in comprehensive terms of reference. The Accountant would report to the Project Coordinator. The project would be required to prepare a financial procedures manual covering all the critical financial management operations including budgeting, budgetary controls, internal controls, accounting, financial reporting, external audit arrangements, transaction processing, payment approvals, disbursements and controls over operating expenditure. In accordance with the Bank's financial reporting and audit requirements, the project will prepare and submit annual financial statements, audited by the National Audit Office or an independent private firm, together with the auditor's opinion and management letter to the Bank not later than six (6) months after the end of the financial year. The cost of audit will be financed from the loan if carried out by a private firm.
- 4.1.8 The project would be required to prepare and submit to the Bank an unaudited interim financial report no later than 45 days after the end of each calendar quarter. The quarterly financial reports will include a statement of sources and uses of funds, with the uses of funds analysed by activities/components and categories as well as the comparison of actual versus budgeted expenditure together with the explanations of significant expenditure variances. The project would make use of the Bank's various disbursement methods including (i) Direct Payment, (ii) Special Account (SA) and (iii) Reimbursement methods. The Special Account will be used to meet the smaller eligible expenditure items while the direct payment method will be used for larger contractual payments eligible under the financing agreement. The Ministry's Internal Audit Department will perform periodic internal audit reviews. The Bank, as part of ongoing monitoring, will review the internal audit reports. The Bank will undertake a minimum of two financial management supervision missions in addition to desk reviews of financial reports in order to ensure the adequacy of financial arrangements and to recommend remedial action. The detailed FM assessment is available in the Technical Annex.

4.2 Monitoring

4.2.1 <u>Internal monitoring mechanisms:</u> The PIU will assume the main responsibility for the internal monitoring of the implementation of the activities and the assessment of their impacts. It will prepare, in the format recommended by the Bank, quarterly and annual progress reports focusing on the monitoring of results and indicators of the project's logical framework. A functional monitoring and evaluation system will

be set up. This system will be virtual and will have the tools for collecting and processing information to track physical achievements, disbursements and socio-economic and environmental impacts disaggregated by gender. It will also identify weaknesses in time and provide the appropriate solutions. The project's performance will also be judged in relation to its impacts performance indicators as shown in the Log frame. Surveys are planned at the start of the project by the M&E officer, for baseline, mid-term and project completion evaluation to assess the impacts of outputs. Monitoring by the Bank will be done through supervision missions, technical and financial audits and the mid-term review of the project.

4.2.2 External monitoring mechanisms: External monitoring will be provided by the External Project Steering Committee (PSC) that will be chaired by the Principal Secretary (PS) of the MoAIWD and cochaired by MoFEPD. The PSC will be responsible for monitoring the progress of the project, the quality of its achievements, good governance of budgetary resources. It will closely monitor both operational and fiduciary aspects and will participate in the different phases of the project cycle. It will assist in the solution of the constraints encountered by the project, ensure compliance with the agreed institutional arrangements. The PSC will hold an annual meeting where the project annual plan of action and budget will be approved. The conformity of the implementation of the ESMP will be supervised by the Ministry of Natural Resources, Energy and Environment, responsible for ensuring compliance with environmental and social standards by development projects. A focal point of the ministry will be involved in monitoring the ESMP in collaboration with the project coordinator. The SCP will guide the PIU on the implementation, monitoring the progress and quality at district level and will hold quarterly meetings and provide reports for feedback.

4.2.3 Indicative project implementation schedule

Table 9: Milestones and the Monitoring process/Feedback loop

Timeframe	Milestone	Monitoring Process/feedback Loop
September 2019	Loan and Grant Negotiations	AfDB/Government of Malawi
September 2019	Loan and Grant Approval	ADF Approval/ Bank letter to Government of Malawi
October 2019	Loan and Grant Signature	Government of Malawi
November, 2019	Loan ratification by Parliament	Legal opinion from the Attorney general
December 2019	Loan and Grant Effectiveness	AfDB/Bank letter to Government of Malawi
December, 2019	First Disbursement	AfDB/Government of Malawi Loan Fulfilment
January, 2020	Project Launch Mission	AfDB/Government of Malawi
June 2022	Mid-Term Review	AfDB/Government of Malawi
December 2024	Project Completion Report	Government of Malawi//Bank

4.3 Governance

GoM has been implementing a number of reforms to enhance governance, transparency and accountability. In the MoAIWD, there have been major reforms, which included the, development of a national agriculture investment plan, national agricultural policy, the revised National Fisheries and Aquaculture Policy (2016) and recently enacted the Land Legislation (2016). The policies provide an enabling environment for implementation of the project. The project governance arrangements are elaborated in section 4.1. The project will employ a multilevel governance approach to monitoring, which ensures that partners take timely corrective measures when required and enables joint accountability for achieving the project objectives. The project will use a web-enabled, MIS to manage information and report progress. The database will be available on an open-access basis, to support greater transparency, collaboration and improved project

governance. The outcomes will be presented at multiple management and M&E platforms. The Bank will follow up on governance through supervision missions, audit and progress reports and procurement plans.

4.4 Sustainability

- 4.4.1 The economic sustainability of the project investments is demonstrated by the economic analysis carried out (FIRR: 19% NPV (base case) is 42,754,142 MK and EIRR: 21% NPV (base case) is 53,561,221 MK). The project design incorporates elements that will enhance financial sustainability, such as mainstreaming the project into government institutions and sectoral programs and supporting capacity building programs. At district level, the support to reduce pressure on capture fisheries (through rehabilitation of landing sites), the promotion of aquaculture and reduction of degradation through watershed management and climate adaptation measures will complement ongoing local government reforms, aimed at enhancing revenue collections to sustain the operations of the rehabilitated facilities. The project seeks to improve environmental aspects through enhanced knowledge base (Fisheries Research Units), analytical frameworks on the blue economy, and improved climate resilience, and training on restoration and watershed management plans.
- 4.4.2 The project will enhance social sustainability through community driven development approaches, participatory engagement with stakeholders through various platforms, like the BVCs and Natural Resources Committees, which are responsible for fisheries co-management and improved public access to information. The project also focuses on poverty reduction, jobs, particularly in rural disaster prone areas like Karonga. Investments will provide livelihood opportunities for youth in the short term (during construction where focus is on local employment) and longer-term livelihoods improvements. At district and community levels, project interventions will be implemented through the existing local government structures such as the District Councils whose DDPs will integrate activities on co-management, fish value chains, and watershed management through BVCs and District Fisheries offices. The project will include natural resources conservation and livelihood improvement interventions and skills development. The benefits will provide incentives to maintain their existing subprojects and upscale these activities.
- 4.4.3 A stronger engagement and ownership of project initiatives that link fisher cooperatives and SMEs to specific financial needs towards enhanced value chains with DDPs. The project will facilitate linkages between fishers associations, cooperatives and financial institutions as well as guarantees and lines of credit from other development partner projects will mutually contribute to the sustainability of the investments. The significant roles for various stakeholders such as LUNAR, the Malawi Bureau of Standards and Malawi Investment Trade Centre will guarentee appropriate investment opportunities through innovation and knowlegde hubs to enhance sustained benefits beyond the project cycle.
- 4.4.4 Knowing the challenges of repairs and maintenance of fish processing and marketing infrastructure, it is strongly advised that treasury funds be utilized to provide ownership at multiple government levels.

4.5 Risk management

No	Risk	Level of	Mitigation
		Occurrence	
1	Climate changes impacts could affect	High	Activities developed will be climate resilient,
	essential infrastructure, water quality,		integration of best practices of climate proofing
	productivity, and supply chains		and sensitization done as part of capacity building.
2	Sustainability of the fisheries co-	Low	Project will seek to promote institutional
	management model and the role of		mechanisms to sustain activities, maintain buy-in,
	BVCs in catalysing SMEs		and seek market linkages with PPPs and SMEs.
3	Long-term training could affect full	Low	There is a good gender platform nationally that
			requires local level implementation, which will be

No	Risk	Level of	Mitigation
		Occurrence	
	participation and gender and youth		fully financed with sensitization in agri-business
	discrimination and exclusion		
4	Conflicts amongst value chain actors	Low	Training workshops and capacity building for
			addressing value chain bottlenecks and building
			trusts and collective action will be undertaken.
6	Technical design of the project: The	Medium	Ensuring use of qualified technical expertise,
	project is complex, involving multiple		building capacity, focusing on attaining specific
	stakeholders across various sectors.		results, involving stakeholders during preparation
			and implementation
8	Fish landing sites are not properly	Medium	The Project will support SMEs and PPPs through
	managed or operated, so that the		DDP and to assist in identifying upakers and
	infrastructure lose intended benefits		operators from the private sector.

4.6 Knowledge building

The Project follows a previous bank financed program the "Lake Malawi Artisanal Fisheries Development Project (2002)" with sustainability lessons learned incorporated into the design and implementation arrangements. Moreover, the results from the various studies undertaken by other development partners, such as the USAID funded Fisheries Integration of Society and Habitats (FISH), will inform the stakeholders on how to put the acquired knowledge into practical use for better results-oriented achievements and sustained benefits. Specialized technical institutions, such as the Monkey Bay Fisheries Research Unit, LUANAR, Malawi Colleage of Fisheries and the National Aquaculture Center in Zomba, will receive support to improve their in-house knowledge management to inform fisheries policy development and reforms as well as employment opportunities. At the project level, the project implementation review, quarterly progress reports, audit, sector M&E, ESMP monitoring, etc will also provide information on various aspects of the project for further diagnosis and improvement. The knowledge obtained will be shared with other development partners and RMCs.

5 LEGAL INSTRUMENTS AND AUTHORITY

5.1 Legal Legal instruments

The project will be financed using (i) ADF Loan Agreement between the Republic of Malawi (as "Borrower"), and the African Development Fund (the "Fund"). and (ii) ADF Grant Agreement signed between the Republic of Malawi (as "Recipient"), and the Fund.

5.2 Conditions associated with Fund 's intervention

5.2.1 Conditions Precedent to Entry into Force:

- a) The ADF Loan Agreement will enter into force upon fulfilment by the Borrower of the provisions of Section 12.01 of the General Conditions applicable to the Fund Loan Agreements and Guarantee Agreements (Sovereign Entities).
- b) The ADF Grant Agreement shall enter into force upon signature by the Recipient and the Fund.
- 5.2.2 <u>Conditions Precedent to First Disbursement under the ADF Grant and ADF Loan Agreements</u>: The obligation of the Fund to make the first disbursement of the Loan/Grant shall be conditional upon the entry into force of the Loan/Grant Agreement and the satisfaction of the following conditions by the Borrower/Recipient:
 - a) Submission of evidence of the appointment of, at least, an interim Project Coordinator and an interim Project Financial Management Expert (Accountant), to the Project Implementation Unit (PIU) with qualifications and terms of reference acceptable to the Fund; and

- b) Submission of a list of sites for works and proposed (indicative) scope of activities.
- 5.2.3 <u>Conditions Precedent to Disbursements for Works</u>. In addition to the satisfaction of the Conditions Precerent for Entry into Force and First Disbursement, the obligation of the Fund to disburse the Loan/Grant for works that involve the use of Environmental Social Management Framework (ESMF) shall be subject to the satisfaction of the following additional conditions by the Borrower/Recipient:
 - a) Submission of site-specific Environmental and Social Impact Assessment ("ESIA") and Environmental and Social Management Plan ("ESMP") prepared in accordance with the ESMF and the Fund's Safeguards Policies, in form and substance satisfactory to the Fund; and
 - b) Submission of evidence of approval of the site-specific ESIA and ESMP by the responsible national authority of the Borrower/Recipient.

5.2.4 Other Conditions:

The Borrower / Recipient shall:

- a) Make timely provision of the resources required as counterpart in-kind contribution to financing of the Project to facilitate timely implementation of the Project; and
- b) Within six (6) months of the signing of the Loan and Grant Agreements, submit to the Fund a Memorandum Agreement entered into between the Borrower/Recipient and WorldFish, based on an existing Memorandum of Understanding with WorldFish for scientific and technical cooperation and for collaborative activities that require disbursements such as in Component 2 of the Project; and
- c) Within six (6) months of the first disbursement of the Loan/Grant, submit evidence of the establishment of a full substantaive Project Implementation Unit (PIU) housed in the Department of Fisheries (DoF) and within decentralized district offices, and the competitive recruitment of the following experts for the PIU, with qualifications and terms of reference acceptable to the Fund: a Project Coordinator, a Fisheries Resources Management Specialist, an Aquaculture Production Specialist, a Fisheries Planning & Community Development Officer, a part-time Nutrition Officer, an Agribusiness and Value Chain Specialist, a Financial Management Expert (Accountant), a Procurement Officer, and a Monitoring & Evaluation Officer, and other necessary support staff(drivers and secretaries).

5.2.5 Undertakings: The Borrower / Recipient undertakes to:

- a) Prepare and submit to the Fund an Environmental and Social Management Plan (ESMP) in respect of any works under the Project whose implementation may result hitherto unforeseen displacement and/or resettlement of Project Affected Persons;
- b) Carry out the Project in accordance with the ESMP and the Bank Group Safeguards Policies, and the applicable national legislation in a manner and in substance satisfactory to the Fund;
- c) Prepare and submit to the Fund reports on the implementation of the ESMP, including any deficiencies identified and the corrective measures thereto; and
- d) Refrain from taking any action which would prevent or interfere with the implementation of the ESMP, including any amendment, suspension, waiver, and/or voidance of any provision thereof, whether in whole or in part, without the prior written concurrence of the Fund.

5.3 Compliance with Bank Policies

This project complies with applicable Bank policies.

6 RECOMMENDATION

The Management recommends that the Board of Directors approve an ADF Loan of Six Million, Five Hundred and Ten Thousand Units of Account (UA 6,510,000) and ADF grant of Three Million and Fifty Thousand Units of Account (UA 3,050,000) to the Republic of Malawi, to finance the Project, under the terms and conditions set forth in this report.

ANNEX I: MALAWI COMPARATIVE SOCIO-ECONOMIC INDICATORS

Malawi

COMPARATIVE SOCIO-ECONOMIC INDICATORS

Basic Indicators	Year	Malawi	Africa	Develo- ping Countries	Develo- ped Countries	
	2010	110	20.067	02.017	40.000	GNI Per Capita US \$
Area ('000 Km²) Total Population (millions)	2018	118 19.2	30,067	92,017	40,008	2500
Urban Population (Millions)	2018 2018	16.9	1,286.2 42.5	6,432.7 50.4	1,197.2 81.5	
	2018	200.1	42.5	71.9	31.6	2000
Population Density (per Km²)						
GNI per Capita (US \$)	2017	320	1 767	4 456	40 142	
Labor Force Participation *- Total (%) Labor Force Participation **- Female (%)	2018	81.1	65.9	62.1	60.1	500 17 1 2 2 1 1 1 1 1 1
Sex Ratio (per 100 female)	2018 2018	81.5 98.2	55.5 99.8	47.6 102.3	52.2 99.3	
Human Develop. Index (Rank among 189 countries)	2017	171				2017 2016 2016 2014 2013 2012 2017 2007
Popul. Living Below \$ 1.90 a Day (% of Population)	2007-2017	71.4	***	11.9	0.7	00
1 opus Elving Below \$ 1.30 a Bay (18 of 1 opusation)	2007-2017	/ 1.7		11.3	0.1	e e
Demographic Indicators						
Population Growth Rate - Total (%)	2018	2.9	2.5	1.2	0.5	
Population Growth Rate - Urban (%)	2018	4.3	3.6	2.3	0.7	
Population < 15 years (%)	2018	43.7	40.6	27.5	16.5	Population Growth Rate (%)
Population 15-24 years (%)	2018	20.8	19.2	16.3	11.7	3.5
Population >= 65 y ears (%)	2018	2.9	3.5	7.2	18.0	3.0
Dependency Ratio (%)	2018	92.1	79.2	53.2	52.8	2.5
Female Population 15-49 years (% of total population)	2018	24.2	24.1	25.4	22.2	2.0
Life Expectancy at Birth - Total (years)	2018	64.1	63.1	67.1	81.3	1.5
Life Expectancy at Birth - Female (years)	2018	66.6	64.9	69.2	83.8	1.0
Crude Birth Rate (per 1,000)	2018	36.1	33.4	26.4	10.9	0.5
Crude Death Rate (per 1,000)	2018	7.0	8.3	7.7	8.8	0.0
Infant Mortality Rate (per 1,000)	2017	38.5	47.7	32.0	4.6	2018 2016 2016 2014 2013 2012 2007
Child Mortality Rate (per 1,000)	2017	55.4	68.6	42.8	5.4	0 7 2 3 4 5 6 7 8
Total Fertility Rate (per woman)	2018	4.4	4.4	3.5	1.7	
Maternal Mortality Rate (per 100,000)	2015	634.0	444.1	237.0	10.0	
Women Using Contraception (%)	2018	60.6	38.3	61.8		
 Health & Nutrition Indicators						
Physicians (per 100,000 people)	2010-2016	1.9	33.6	117.8	300.8	
Nurses and midwives (per 100,000 people)	2010-2016	28.3	123.3	232.6	868.4	Life Expectancy at Birth (years)
Births attended by Trained Health Personnel (%)	2010-2017	89.8	61.7	78.3	99.0	
Access to Safe Water (% of Population)	2015	90.2	71.6	89.4	99.5	80 70
Access to Sanitation (% of Population)	2015	41.0	39.4	61.5	99.4	60
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2017	9.6	3.4	1.1		40
Incidence of Tuberculosis (per 100,000)	2016	159.0	221.7	163.0	12.0	30 20
Child Immunization Against Tuberculosis (%)	2017	89.0	82.1	84.9	95.8	10
Child Immunization Against Measles (%)	2017	83.0	74.4	84.0	93.7	20 20 20 20 20
Underweight Children (% of children under 5 years)	2010-2016	11.7	17.5	15.0	0.9	2018 2017 2016 2015 2014 2013 2012 2007 2000
Prevalence of stunding	2010-2016	37.1	34.0	24.6	2.5	
Prevalence of undernourishment (% of pop.)	2016	26.3	18.5	12.4	2.7	
Public Expenditure on Health (as % of GDP)	2014	6.0	2.6	3.0	7.7	
Education Indicators						
Gross Enrolment Ratio (%)	0040.554=	4				
Primary School - Total	2010-2017	139.9	99.5	102.8	102.6	Infant Martality Data
Primary School - Female	2010-2017	142.4	97.4	102.0	102.5	Infant Mortality Rate (Per 1000)
Secondary School - Total	2010-2017	38.1	51.9	59.5	108.5	
Secondary School - Female	2010-2017	37.0	49.5	57.9		120
Primary School Female Teaching Staff (% of Total)	2010-2017	42.0	48.7	53.0		100
Adult literacy Rate - Total (%) Adult literacy Rate - Male (%)	2010-2017	62.1	65.5	73.1		80
Adult literacy Rate - Maie (%) Adult literacy Rate - Female (%)	2010-2017 2010-2017	69.8 55.2	77.0 62.6	79.1 67.2		
Percentage of GDP Spent on Education	2010-2017	4.7	4.9	4.1	5.2	╎ ᄵᆌ┠┪┠┪┠┪┠┦┠┦┠┦┠╂╏┢┰┠┲╬╢
or overlage or our open of Education	2010-2010	4.1	4.3	4.1	5.2	╸ ²⁰ ┩┞┪┡┪┞┪┞┪┞┪┞┪┞┪┞┪
Environmental Indicators						0
	2016	40.3	8.0	11.3	10.4	20 17 20 16 20 15 20 13 20 13 20 12 20 11 20 17 20 17
II and Use (Arable I and as % of Lotal I and Area)	2010	40.0	0.0	11.3		7 1 2 3 4 5 6 7
Land Use (Arable Land as % of Total Land Area) Agricultural Land (as % of land area)		61.4	38.2	37.8	36.5	l l
Agricultural Land (as % of land area)	2016	61.4 33.2	38.2 22.0	37.8 32.6		Barr Barr
,		61.4 33.2 0.1	38.2 22.0 1.1	37.8 32.6 3.5	27.6	Box Box

Sources: AfDB Statistics Department Databases; World Bank: World Development Indicators;

UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.

Note: n.a.: Not Applicable; ...: Data Not Available. * Labor force participation rate, total (% of total population ages 15+)

** Labor force participation rate, female (% of female population ages 15+)

last update :

Febuary 2019

ANNEX II: TABLE OF BANK'S ACTIVE OPERATIONS IN MALAWI, AS AT 16TH AUGUST 2019

	Loan		Funding		Approval	Final Disburseme	Amount	Disbursed	Disbur	Age (years	IP (Impl.Progre	DO (Dev. Objectives	Overall Performanc
#	Number	Project Name	Window	Status	Date	nt Date	Approved 101,502,87	Amount	. Rate*)	ss))	e Status
		AGRICULTURE SECTOR					8	30,217,362	29.77	1.6			
	2100155024			0.0	2/12/2012	20.00.2010	252.000	212.050					
	516 5570155000	SMALLHOLDER IRRIGATION AND VALUE ADDITION	[ADF] [GAFSP	OnGo	3/13/2013	30.09.2019	253,000	212,069	83.82				
1	151	PROJECT (SIVAP/FUN	TF]	OnGo	3/13/2013	30.09.2019	28,839,011	28,432,716	98.59	6.4	3	4	NPPP
		AGRICULTURAL											
2	2100150035 995	INFRASTRUCTURE & YOUTH AGRIBUSINESS PROJECT	[ADF]	OnGo	9/28/2016	30.06.2022	16.000.000	1,572,577	9.83	2.9	3	3	NPPP
	2100150040	AGRIBUSINESS I ROJECT	[ADI [*]]	Olido	9/20/2010	30.00.2022	10,000,000	1,372,377	9.03	2.9	3	3	NIII
	548		[ADF]	APVD	12/4/2018	30.06.2023	20,000,000	0	0.00	0.7			
	2200160002 239		[NTF]	APVD	12/4/2018	30.06.2023	4,500,000	0	0.00	0.7			
	6540654001	SHIRE VALLEY	[NII]	AFVD	12/4/2016	30.00.2023	4,300,000	U	0.00	0.7			
3	382	TRANSFORMATION PROJECT	OPEC	APVD	4/12/2019	31.08.2024	10,923,867	0	0.00	0.3			
4		MULTINATIONAL: STRENGTHENING TRANSBOUNDARY COOPERATION & INTEGRATED NATURAL RESOURCES MANAGEMENT IN THE SONGWE RIVER BASIN	GEF	APVD	5/17/2019	30.03.2023	4,647,000			0.3			
5	2100155039 919	MULTINATIONAL-POST CYCLONE IDAI EMERGENCY RECOVERY	ADF	APVD	6/5/2019	30.06.2024	16,340,000	0		0.2			
	717	TRNASPORT SECTOR	TIDI	TH VE	0/3/2019	30.00.2021	90,850,000	50,753,582	55.87	4.11			
6	2100150030 794	MULTINATIONAL: NACALA ROAD CORRIDOR PROJECT PHASE IV (LIWONDE- MANGOCHI) MA	[ADF]	OnGo	12/3/2013	31.12.2020	42,360,000	29,302,203	69.17	5.72	3	3	
	2100150028	MZUZU-NKHATA BAY ROAD											
7	743	REHABILITATION PROJECT MULTINATIONAL: NACALA	[ADF]	OnGo	3/13/2013	31.12.2019	21,890,000	21,451,379	98.00	6.45	4	4	NPPP
8	2100150041 793	ROAD CORRIDOR DEVELOPMENT PROJECT PHASE V	ADF	APVD	6/19/2019	30.12.2024	26,600,000	0	0.00	0.16			
		WATER SUPPL/SANIT					58,287,064	31,613,510	54.24	2.43			
	2100150031 195	SUSTAINABLE RURAL WATER	[ADF]	OnGo	4/30/2014	31.12.2019	15,000,000	12,758,306	85.06		3	3	
9	2200160001 289	& SANITATION INFRASTRUCTURE FOR IM	[NTF]	OnGo	4/30/2014	31.12.2019	5,000,000	4,416,752	88.34	5.31			NPPP

	5800155001		rpwiggr	0.0	1/20/2011	21.12.2010	2 020 024	2.1.51.202					
	352	ADDITIONAL FINANCING TO	[RWSSI]	OnGo	4/30/2014	31.12.2019	2,830,821	2,161,293	76.35				
1	5550155001	SUSTAINABLE RURAL WATER											
0	651	& SANITATI	GEF	APVD	5/10/2019	30.09.2022	1.925.149	0	0.00	0.27			
0	2100150034	C D/HVII/III	GEI	711 112	10/23/201	30.07.2022	1,723,147	Ů	0.00	0.27			
	143	MZIMBA INTEGRATED URBAN	[ADF]	OnGo	5	31.12.2019	3,600,000	2.809.400	78.04	3.83			
1	6540654001	WATER AND SANITATION	,		12/18/201		. , ,	, ,			3	3	
1	032	PROJECT	[OPEC]	OnGo	5	31.12.2020	10,692,000	9,416,135	88.07	3.67			NPPP
	2100155038				10/24/201								
	416		ADF	OnGo	8	30.06.2023	10,500,000	51,624	0.49	0.81			
1		MZUZU-NKHATA BAY WATER			12/18/201								
2		SUPPLY PROJECT	[OPEC]	OnGo	8	30.06.2022	8,739,094	0	0.00	0.66			
		SOCIAL SECTOR					8,770,071	1,914,528	21.83	2.70			
	2100150036												
	497		[ADF]	OnGo	12/7/2016	31.12.2020	7,520,000	1,367,791	18.19				
1	2100155033												
3	671	JOBS FOR YOUTH MALAWI	[ADF]	OnGo	12/7/2016	31.12.2020	1,250,071	546,737	43.74	2.70	3	3	NPPP
		MULTI_SECTOR					8,488,258	1,665,620	19.62	1.99			
1	5700155002	MALAWI NACALA RAIL & PORT											
4	752	VALUE ADDITION	[FAPA]	OnGo	5/23/2017	31.12.2020	728,258	178,086	24.45	2.24	3	3	NPPP
1	2100155035	2016 MALAWI ECONOMIC											
5	316	CENSUS	[ADF]	OnGo	7/5/2017	31.12.2019	760,000	759,786	99.97	2.12	3	3	NPPP
	210015505	PROMOTING INVEST. &											
1	2100155036	COMPETITIVENESS IN	f ABEI	0.0	1/11/2010	21/12/2021	7,000,000	333.54 0	10.40	1.60	2		MDDD
6	422	TOURISM	[ADF]	OnGo	1/11/2018	31/12/2021	7,000,000	727,748	10.40	1.60	3	4	NPPP
		TOTAL					267,898,27	116,164,60	43.4	2.6	3.1	3.3	
		Note: Ratings (1-4): Highly Unsatisfac	towy — 1. IImaa	tiafaatam.	- 2. Catiafaat	our - 2. Highly	Catiafactom	4 NDD- Nor					ts and DDD —

Note: Ratings (1-4): Highly Unsatisfactory = 1; Unsatisfactory = 2; Satisfactory = 3; Highly Satisfactory = 4 NPP= Non Potentially Problematic Project; PP = Problem Project; and PPP = Potentially Problematic Project

^{*} Cumulative disbursement rate doesn't include projects that were approved recently and not yet effective for disbursement.

ANNEX III: SIMILAR PROJECTS FINANCED BY THE BANK AND OTHER DEVELOPMENT PARTNERS IN MALAWI

Donor/Agency	Project Title	Project Coverage	Budget USD m	Implementing Organization
African Development Bank	Agriculture Infrastructure Support Project (AISP)	KK, NE, NS, CK	22.0	ASWAp Secretariat
	Competitiveness & Job Creation Project for Private Sector	MZ, KU, NT, DA, LL, DZ, ZA, CZ, TO & MJ		MoIT
	Smallholder Irrigation and Value Addition Project (SIVAP)	KA, SA, MHG, CK, KK,	39.00	MoAIWD
	Agriculture Infrastructure and Youth in Agribusiness	KK & NB	22.00	MoAIWD
	Shire Valley Irrigation Project - Preparation Phase	CK & NE	1.90	MoAIWD
European Union (EU)	Food Security program	Country wide	22.06	PIU
•	Farm Income Diversification Program (FIDP)	KA, CP, MZ, NB, KK, LL, SA, DA, TO, CZ, BLK and RU	25.53	Government (MoAFS)
	Support to the Implementation of Agriculture Sector Wide Approach (ASWAp) and Green Belt Initiative (GBI)	Country Wide		MoAIWD
	Planning for Climate Change Project	Country Wide		MoAIWD through TA
World Bank	Shire Valley Irrigation Project - Preparation Phase	CK & NE	6.0	PIU - MoAIWD
	ASWAp-SP (Agricultural Sector Wide Approach - Support Project)	Country Wide	68.00	Government (MoAFS)
	Shire River Basin Management Project	CK, NE, NU, MH, BLK, MN, NENO, BT, CZ, PE, MJ	131.00	Government (MoWDI)
	Malawi Drought Recovery Programme (MDRP)	NE, CK, BT, NN, MN, CZ, PE, MJ, TO, ZA, MHG, MH, BLK, NU, DZ, LL, DA, KU, MC, NS, KK, SA, MZ & RU	104.0	MoFEPD through PIU
	Malawi Floods Emergency Recovery Project (MFERP)	NE, CK, BT, CZ, PE, MJ, TO, ZA, MHG, MH, BLK, NU, SA, RU & KA	80.0	MoFEPD through PIU
Arab Bank for Economic Development in Africa (BADEA)	Small Farms Irrigation Project – Phase II	NB & MH	10.0	MoAIWD
Global Environment Fund (GEF)	Enhancing the Resilience of Agro-ecological Systems Project (ERASP)	CP, KA, RU, NB, MHG, ZA, CZ, PE	8.0	Government through PIU
International Fund for	Programme for Rural Irrigation Development (PRIDE)	CP, KA, RU, NB, MHG, ZA, CZ, PE	60.0	Government through PIU
Agriculture Development	SAPP	CK, KK, LL, CZ, BT, BLK	45.70	MoAFS/ASWAp
(IFAD)	RLEEP	DZ, MC, NS	16.70	MLGRD/PIU
	RLSP	TO, NS, CZ	14.80	MLGRD/PIU
US Aid for International	Integrating Nutrition in Value Chains (INVC)	MC, LL, DZ, NU, MH, MHG, BLK	24.6	Development Alternatives Inc.
Development (USAID)	Wellness and Agriculture for Life Advancement (WALA)	MJ, CK, ZA, MHG, NE, BLK, TO	80.93	Catholic Relief Services (CRS)
Irish Aid	Conservation Agriculture Project	KA, RU, MZ, KK, NE, LL, NU, BLK, MC, ZA, MJ	1.57	NASFAM
	Agroforestry Food Security Programme	SA, DZ, NU, LL, CK, MJ, KA, MHG, TO, NS, MZ	3.14	World Agroforestry Centre (ICRAF)
	Malawi Seed Industry Development Project	KA, MZ, MC KU, LL.	3.76	International Crops Research for the

Donor/Agency	Project Title	Project Coverage	Budget USD m	Implementing Organization
				Semi-Arid Tropics- ICRISAT
Norway	ASWAp-SP	Country Wide	11.20	MoAFS
	NASFAM	Country Wide	15.80	NASFAM
Flemish International	GDCP/MLW/001/FLA	KU, MZ	5.41	UN-FAO
Cooperation Agency (FICA)	MMPA	Central & Northern Malawi	0.66	Malawi Milk Producers Association
	MZCPCU	CP, RU, MZ, NB	0.66	Mzuzu Coffee Planters Cooperative Union
	STP	KU, MZ	0.69	FUM, NASFAM, TAPP, Microloan, MOGA, DAMRA, MEJN
	SAETS	KU, MZ	8.40	DAES, DAHL, Bunda College, NRC, SSLPP
	ASWAp-SP	Country wide	6.61	Government
Japan International Cooperation Agency (JICA)	Partnership on Community Based Irrigation Management Project to Dedza	DZ	0.37	Government - Department of Irrigation
	Sustainable Land Management Promotion Project	RU, MZ, NB	2.76	Government - Department of Land Resources
	Project for Enhancement Capacity for Medium Scale Irrigation Scheme Development, Operation and Maintenance	DA & MZ	0.80	Government - Department of Irrigation
Food and Agriculture Organisation of the United Nations (FAO)	FAO-UNJPs Projects: (i) Cassava Commercialization and value addition: UNJP/MLW/046/EDF (ii) Reduction of Post-Harvest Losses through construction of Community Managed Grain Banks (Small stock production, Climate change & NRM	KK, SA	6.45	PMU/FAO Contract Staff/MoAFS/Min of Youth
	FAO-ECU-Conservation Agriculture Coordination and Advocacy in Southern Africa	RU, KK, BLK, CK	0.12	PMU/FAO Contract Staff and MoAFS
	FAO-GDCP-FLANDERS- Improving Food Security and Nutrition Policies and Program Outreach	MZ, KU	5.30	PMU/FAO Contract Staff and District Assemblies
	FAO-GCP/INT/139/EC: Climate Smart Agriculture: Capturing the synergies between Mitigation, Adaptation and Food Security	Country wide	2.23	PMU/FAO/MoAFS-LRCD/Bunda College
United Nations Development Programme	Sustainable Land Management	NE, MN, BLK, BT	2.50	Ministry of Environment and Climate Change Management
World Food Programme	Purchase for Progress	NS, MZ, MC, DZ, NU, ZA, KU, DA	17.59	WFP/GoM
World Bank	Agricultural Productivity Programme for Southern Africa	Through out the country	29.8	MoAIWD

ANNEX IV: MAP OF PROJECT AREA MALAWI

