AFRICAN DEVELOPMENT BANK
ADB/BD/WP/2019/95/Approved

AFRICAN DEVELOMENT FUND
ADF/BD/WP/2019/63/Approved
17 May 2019
Prepared by: RDGS/AHWS/PGCL
Original: English

BOARD APPROVAL
Lapse-of-time Procedure
17 May 2019

FOR INFORMATION

MEMORANDUM

TO: **THE BOARDS OF DIRECTORS**

FROM: **Vincent O. NMEHIELLE**
Secretary General

SUBJECT: **MULTINATIONAL: STRENGTHENING TRANSBOUNDARY COOPERATION AND INTEGRATED NATURAL RESOURCES MANAGEMENT IN THE SONGWE RIVER BASIN**

GEF GRANT OF USD 6,392,694

The **Grant Proposal** together with the **Draft Resolution** were submitted for your **consideration on a Lapse-of-time basis**, on 3 May 2019.

Since no objection was recorded by 5.00 pm. on 17 May 2019, the said Proposal is considered approved and the Resolution **adopted**.

Attach:

Cc.: **The President**

*Questions on this document should be referred to:			
Mr. K. KAPOOR	**General Director**	**RDGS**	**Extension 2045**
Mrs. G. GICHURI	**Director**	**AHWS**	**Extension 4015**
Mr. G. PENN	**Ag. General Counsel**	**PGCL**	**Extension 3220**
Mr. N. VIJ	**Division Manager**	**RDGS2**	**Extension 3852**
Mrs. A. MECCA	**Division Manager**	**PGCL.1**	**Extension 3309**
Mr. V. KISYOMBE	**Task Manager**	**RDGS2**	**Extension 6314**

SCCD: NM

PROJECT: STRENGTHENING TRANSBOUNDARY COOPERATION AND INTEGRATED NATURAL RESOURCES MANAGEMENT IN THE SONGWE RIVER BASIN.

COUNTRY: Tanzania/Malawi

PROJECT APRAISAL REPORT

Date: August 2018

Project Preparation Team	Team Leader: : KISYOMBE, VINDA, Senior Agricultural Economist, COMW/ RDGS2 Team Members: SHOJI, HIKARU, Principal Water and Sanitation Engineer, RDGE 2 CHISESA, EMMANUEL, Senior Procurement Officer, SNFI 3 MKANDAWIRE, KALUMBA, Procurement Officer, COMW/SNFI 3 BYAMUGISHA, JOSEPH, Senior Financial Management Specialist, RDGS4 MUKUDI ANNE, Senior Gender Officer, RDGS 3 MUJA ANNAH, Senior Social Sector Development Officer, RDGS 3 OLET, EMMANUEL Consultant, PECG1 Division Manager: VIJ, NEERAJ, Division Manager, RDGS.2 Sector Director: GICHURI, WAMBUI, AHWS/AWF Director General: KAPOOR, KAPIL, DG: RDGS

Peer Reviewers	OPIO-OMODING, JAMES, Chief Agricultural Economist, ECNR0, WANYAMA, MAURICE, Senior Financial Management Officer, RDGS4 CHINOKORO, HERBERT, Water and Sanitation Specialist, RDGS2 DIALLO, AHMADOU, Senior Procurement Officer, RDGS GAHUNGA, NATHALIE, Chief Gender Officer, RDGW 2 MUSUMALI, MUSOLE, Climate Change & Green Growth, PECG2

AFRICAN DEVELOPMENT BANK GROUP

TANZANIA/MALAWI: STRENGTHENING TRANSBOUNDARY COOPERATION AND INTEGRATED NATURAL RESOURCES MANAGEMENT IN THE SONGWE RIVER BASIN

RDGS/AHWS/PGCL

May 2019

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Currency Equivalents[1]

August, 2018

[1 GBP]	=	[1.316308747 USD]
[1 EURO]	=	[1.173600321 USD]

Fiscal Year

[Fiscal year beginning – end]

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

[1] https://www.afdb.org/en/documents/document/august-2018-exchange-rate-103265/

Acronyms and Abbreviations

PS	Borrower's Procurement System
CPAR	Country Procurement Assessment Report
CSP	Country Strategy Paper
DDIPP	Detailed Design and Investment Preparation Phase
DPG Water	Development Partner Group for the water sector
ESMF	Environmental and Social Management Framework
FEWS	Flood Early Warning System
GAP	Gender Action Plan
CAG	Controller Auditor General (Tanzania)_
GEF	Global Environmental Facility
GEF CEO	CEO of the Global Environmental Facility
HPP	Hydropower plant
INRM	Integrated Natural Resource Management
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IS-SRBC	Interim secretariat of the Songwe River Basin Commission
IW	International Waters
JTE	Joint team of Experts
LCBC	Lake Chad Basin Commission
M&E	Monitoring and Evaluation
MoFP	Ministry of Finance and Planning
MIS	Management Information System
MSL	Mean Sea Level
NEPAD	New Partnership for Africa's Development
O&M	Operation and Management
PIF	Project Identification Form
PME	Participatory monitoring and evaluation
PMU	Project Management Unit
PPRA	Public Procurement Regulatory Authority
PPPD	Public Procurement Policy Division
PSPTB	Procurement and Supplies Professionals and Technicians Board
PMU	Procurement Management Units
PPAA	Public Procurement Appeals Authority
RBMP	River basin management plan
RMC	Regional Member Country
RTC	Real time control
SADC	Southern African Development Community
SLM	Sustainable Land Management
SBD	Standard Bidding Documents
SoB	State of the Basin
STAP	Scientific and Technical Advisory Panel of the GEF
SRBC	Songwe River Basin Commission
SRBDP	Songwe River Basin Development Program
S- SRBC	Secretariat of the Songwe River Basin Commission
STCINRM	Strengthening transboundary cooperation and integrated natural resource management in the Songwe River Basin
SWAp	Sector Wide Approach
TDA/SAP	Transboundary Diagnostic Analysis/ Strategic Action Planning
UNCITRAL	United Nations Commission on International Trade Law model.

Grant Information

Client's information

RECEIPIENT: Republic of Malawi & United Republic of Tanzania

EXECUTING AGENCY: Songwe River Basin Commission

Financing plan

Agency	Currency	Amount	Amount [USD]	Remarks
GEF Trust Fund	USD	6,392,694	6,392,694	Grant
Government of Malawi	USD	1,000,000	1,000,000	Grant
Government of Tanzania	USD	1,000,000	1,000,000	Grant
Climate Resilient Infrastructure Development Facility (CRIDF),	GBP	200,000	263,262	Grant (In Kind Contribution)
Stockholm International Water Institute (SIWI)	Euro	100,000	117,360	Grant (In Kind Contribution)
African Development Bank	USD	8,650,000	8,650,000	Loan (to be approved in 2019)
		Total	17,423,316	

Exchange rate August 2018[2]

ADB's key financing information

Loan / grant currency	(USD)
Interest type*	Not applicable
Interest rate spread*	Not applicable
Commitment fee*	Not applicable
Other fees*	Not Applicable
Tenor	Not applicable
Grace period	Not applicable
FIRR, NPV (base case)	Not applicable
EIRR (base case)	Not applicable
	**if applicable*

Timeframe - Main Milestones (expected)

GEF PIF approval	September 2016
Project approval (GEF IW financing)	May, 2019
Signing of Grant Agreement (GEF IW financing)	May, 2019
Effectiveness (GEF IW financing)	June, 2019
Mid-term Review (GEF IW financing)	June, 2020
Completion date (GEF financing)	March 2023
Closing date	June, 2023

[2] https://www.afdb.org/en/documents/document/august-2018-exchange-rate-103265/

P**roject Summary**

1 **Project Overview.** The Songwe River Basin (SRB) covers an estimated area of 4,200 km^2 and is part of the wider Zambezi River basin. The river forms part of the formal border between Malawi and mainland Tanzania. Increasing competition for space, water and natural resources is degrading the Songwe River Basin. Both riparian countries ratified in 2017 the convention creating the Songwe River Basin Commission (SRBC) to sustainably manage the basin natural resources and implement the Songwe River Basin Development Programme (SRBDP). The 'Strengthening transboundary cooperation and integrated natural resource management in the Songwe River Basin' (STCINRM project is critical to prepare the ground for the implementation of the ambitious SRBDP by addressing the problem of environmental degradation. (The heart of the SRBDP is a multipurpose dam (115 m high, 330 Mm3) which will supply water for a 180 MW hydropower plant, 3000 ha of irrigation scheme in each country and control floods in the lower part of the basin. It will also provide water for 86 000 dwellers. Details of the SRBDP are presented in annex 10 in the PAR Vol II technical annexes.

2. **The purpose of the STCINRM project** is to enhance basin protection, livelihoods and integrated water resources management through improved transboundary cooperation and sustained ecosystem services. The project consists of four components: i) Enhancing transboundary management and institutional capacity ii) Improving early warning, disaster risk management, and monitoring iii) Community- based demonstrations in Integrated Natural Resources Management (INRM) and conservation and iv) Knowledge, monitoring and evaluation. The cost of the project is estimated at USD 6,392,694. Country contributions are estimated at USD 1,000,000 each for the two governments of Tanzania and Malawi. The project duration is 4 years (2019-2023).

3. **The main beneficiaries from this project** are the population in the Songwe River basin estimated at 400,000, with 50% of them being women. The relevant Ministries and Departments such as water, energy, agriculture, land resources and environmental affairs in Malawi and Tanzania will also benefit from the project through capacity building and institutional support. These institutions will be key partners in project implementation. Other institutions such as the Lake Nyasa Basin Water Board in Tanzania, Malawi Northern Region Water Board, Tanzanian Meteorological Agency (TMA), Department of Climate Change and Meteorological Services (DCCMS) in Malawi, district staff, Non-Government Organizations (NGOs), Research institutes and the Zambezi River Basin Commission will also benefit and support project implementation. There will be two main bodies to strategically guide the implementation: a Council of Ministers and a Steering Committee. A stakeholder cooperation platform will guarantee inclusive involvement of local beneficiaries (districts, local communities and vulnerable groups). The same stakeholders will be involved in the implementation of the SRBDP.

4. **Needs Assessment**: The Songwe River Basin is under considerable pressure due to population growth. This has led to several transboundary environmental problems including, the degradation of agricultural land (low agricultural productivity), deforestation, enhanced water run-off and soil erosion leading to increase in the level of sedimentation, increased frequency of floods which destroy harvests and livelihoods compounded by hydrological flow variations. There are competing needs expected from the planned investments under the wider Songwe River Basin Development Program (SRBDP) which comprises multipurpose dams, irrigation development, water supply and other related investments. The project therefore seeks to strengthen the institutional framework and capacity of the Secretariat of the Songwe River

Basin Commission (SRBC) so as to ensure more sustainable use of natural resources as well as better river basin ecosystem maintenance. This will facilitate investments to exploit food production, safe and clean water, power and economic opportunities, while securing environmental sustainability. The Songwe Convention, which entered into force on 1 July, 2018, provides a basis for sustainable resources management in the Songwe River basin. The bi-national approach to address the various challenges currently facing the river basin is more cost effective and sustainable than would be the case if each of the countries acted alone.

5. **The Bank's Added Value**: The Bank has valuable knowledge and experience in working in multi-state river basins. Consistent with its strategic priorities as well as its prior experience with cross-border river basins, the Bank is supporting the preparation of the Songwe River Basin Development Program. Acting as a strategic partner of the Global Environment Facility (GEF), the Bank has mobilised GEF-International Waters (IW) funding for the project. The project is consistent with the objective of the Bank Group's Ten-Year Strategy (2013-2022) to assist its Regional Member Countries (RMCs) achieve more inclusive and green growth. Likewise, the project is consistent with Pillar 2 (adaptation) of the Bank's second Climate Change Action Plan 2016-2020 (CCAP2) one of whose goals is improved natural resources management.

6. **Knowledge Management:** Knowledge management is incorporated in all components of the project. Strengthened cooperation between the two countries will enable sharing of data, generation of knowledge and use of analytical tools like the flood forecasting and warning system to facilitate longer term development planning for improved climate resilience. Information and field guides will also be developed for sustainable agro-forestry, flood early warning and monitoring of environmental hotspots. The SRBC, relevant ministries and AfDB will disseminate results from this project as widely as possible. This will be done through International Waters (IW): LEARN, GEF's international waters learning exchange and resource network, and other partner organizations. The knowledge will also be captured through systematic monitoring and evaluation of the project outputs and outcomes, project reports, supervision missions, a mid-term review, findings of stakeholder consultations, and a project completion report at the end of the operation.

African Development Bank – RESULTS-BASED LOGICAL FRAMEWORK

Country and project name:	THE REPUBLIC OF MALAWI & UNITED REPUBLIC OF TANZANIA: Strengthening Transboundary Cooperation and Integrated Natural Resource Management in the Songwe River Basin project
Purpose of the project :	To enhance basin protection, livelihoods and integrated water resources management in the Songwe River Basin (SRB) through improved transboundary cooperation and sustained ecosystem services

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMPACT	1.0 Improved natural resources management in the Songwe River Basin contributes to increased household incomes in the basin	1.0 Average per capita incomes (USD)	1.1 2017: 386	1.1 2023: 400	National statistics	
OUTCOMES	2.1 The Songwe River Basin Commission (SRBC) is strengthened and effectively improving Transboundary Water Resources Management	2.1.1 Resource mobilisation strategy in place and operational and helps to mobilize resources for SAP implementation l	2.1.1.1 No strategy on resource mobilization	2.1.1.1 By Dec 2022: Resource mobilisation strategy in place and operationalised 2.1.1.2 100% financing of the core functions of the SRBC by Governments	Project Completion Report	**Risk:** SRBC is not sustainable financially **Mitigation measure:** A financing mobilisation specialist will reinforce the secretariat
		2.1.2 % of households adopting good natural resource management/agricultural practices	2.1.2 <10	2.1.2 By Dec 2022 > 90	Project Completion Report	**Risk:** Parallel commitments on the part of Governments and potential donors to ensure financial

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
	2.2 Flood damages are reduced in the basin	2.2.1 Number of persons affected by flood disasters 2.2.2 % risk reduction to loss of crops and other assets	2.2.1 TBD during baseline establishment 2.2.2 TBD during baseline establishment	2.2.1 No person is negatively affected by floods in the basin; 2.2.2 25% risk reduction of damages to crops and other assets	Quarterly Progress Reports Districts Reports on floods	sustainability beyond project life **Mitigation measures;** A financial strategy for the SRBC will be developed with measures to enhance sustainability.
	2.3 Basin degradation is reduced	2.3.1 Increased agricultural productivity (ton/ha) 2.3.2 Average incomes realized from livelihoods activities in the basin (USD)	2.3.1 Maize (2), G/nuts (0.9), Beans (0.8) & Sunflower (0.8) 2.3.2 TBD	2.3.1 By Dec 2022 (Maize (3.0), G/nuts (1.2), Beans (1.) and Sunflower (1.2) 2.3.2 By Dec 2022 (300)	Annual Agricultural production estimates	
OUTPUTS	**3.0 Component 1: Enhancing transboundary management and institutional capacity**					
	3.1 SRBC human resources built	3.1 Number of specialists recruited	3.1 0	3.1 By June 2019: 4 specialists will be recruited with at least 50% of them being female.	Minutes of meetings midterm and end of project review	**Risk:** Change of institutional priorities of local actors may lead to lack of support for the project activities. **Mitigation measures:** A dissemination strategy for results to different kinds of actors will contribute to recognition of the
	3.2 SRBC staff and Targeted District staff capacity is built	3.2 Number of SRBC staff and District Staff trained	3.2 0	3.2 By Dec 2022: SRBC staff (10) and District staff (100)	TA annual report:	
	3.3 SRBC has developed a shared planning framework	3.3.1 Transboundary Diagnosis Analysis (TDA) and Strategic Action Plan (SAP) approved	3.3.1 Songwe River basin Development Program exists	3.3.1 By Dec 2020: TDA and SAP approved	SAP signature by (at least) one Minister/ country	

RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
	Indicator (including CSI)	Baseline	Target		
	3.3.2 National and Regional Technical Task Forces/ Committees in place and fully functional	3.3.2 Expert groups (e.g. JTE/JCO) only meet sporadically	3.3.2 All committees meet regularly to address key aspects of the ecosystem based approach and IWRM.	Inter-ministerial steering committee minutes Technical group reports.	importance of the project to support sustainable management of the Songwe River Basin.
3.4 Financing sustainability strategy in place and operational and helps to mobilize resources	3.4 Financing Strategy approved	3.4 Songwe RBC Business plan in place	3.4 By June 2020: Financing Strategy approved	Financial strategy SRBC Annual reports Donor conference minutes	
3.5 A basin wide consultation framework is established	3.5 Stakeholder Consultation Platform in place and operational at Basin level	3.5 No Consultation Platform	3.5 By Dec 2019: Stakeholder Platform in place (including 50% females stakeholders)	Quarterly Progress Reports	
3.6 Effective learning and knowledge exchange at all levels underpin implementation	3.6.1 IW experience notes and policy briefs with best practices from the project produced	3.6.1 0	3.6.1 8	Frequent Publications Newsletters, Issue Briefs/Synthesis reports (e.g. on pollution, etc)	
	3.6.2 Timeliness and adequacy of annual work plans and reports (including M&E reports, financial reports)	3.6.2 No M & E system in place	3.6.2 M&E system developed and operational	Annual work plans and reports Mid-term review report Project completion report Annual audit reports	
4.0 Component 2: Improving early warning, disaster risk management, and monitoring					
4.1 Households and districts warned in case of floods	4.1.1 % of the population in the flood plain benefitting from the Flood Early Warning System (FEWS)	4.1.1 0	4.1.1 By June 2020: 90% of the population	TA monitoring reports	**Risk:** SRBC's human resources are insufficient to operate and maintain

RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
	Indicator (including CSI)	Baseline	Target		
	4.1.2 GIS-based Management Information System (MIS) operational	4.1.2 SRBDP Project GIS-Database in place	4.1.2 Information Management System created with functional GIS Shared Publicly-accessible Database	Mechanism/guidelines for data and information sharing and exchange	the system after project closure **Mitigation:** As condition to first disbursement, both governments will submit a commitment to finance a FEWS officer through their respective contributions. **Risk**: Crops may be damaged by floods **Mitigation:** Framers will be trained on flood early warning system which will enable them to avoid flood prone areas
4.2 District and households organised in case of evacuation	4.2 District disaster plans developed and evacuation exercise executed in lower floodplain	4.2 0	4.2 By Dec 2020: 2 district plans approved (Karonga and Kyela) and evacuation exercise carried out	Quarterly Progress Reports	
4.3 The SRBC is able to monitor the basin natural resources	4.3.1 Environmental Monitoring system developed and operational	4.3.1 Zambezi basin outlook 2015 in place	4.3.1 By June 2020: EMS in place and operational	Flagship Reports Songwe Basin Atlas, State of the Basin reports	
	4.3.2 Number of hydrological & metrological stations installed	4.3.2 0	4.3.2 Hydrological (6) Weather stations (5)		
5.0 Component 3: Community- based demonstrations in Integrated Natural Resources Management (INRM) and conservation					
5.1 Integrated soil and water conservation measures adopted by farmers in priority areas and up scaled in selected catchments	5.1.1 Area of cultivated land under sustainable land use in selected catchments (# ha)	5.1.1 0 ha	5.1.1 6600 ha	Annual report of INRM Technical Assistant	**Risk:** Reluctance among farmers to adopt new land use, conservation agriculture and cropping strategies
	5.1.2 Number of farmers trained in integrated soil and water conservation agricultural technologies.	5.1.2 0	5.1.2 10,565 (at least 5,282 being women)	Annual report of INRM Technical Assistant	

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
		5.1.3 % reduction of soil erosion	5.1.3 TBD	5.1.3 50% reduction of soil erosion	Annual report of INRM Technical Assistant	**Mitigation**: The capacity building and knowledge sharing programmes under component 2 and 3 will enhance uptake of technologies. Furthermore farmer to farmer trainings will increase the likelihood of other farmers adopting similar practices. **Risk:** Crops may be damaged by drought and other adverse weather conditions **Mitigation**: Farmers will be trained on sustainable management of natural resources and climate smart agriculture technologies.
		5.1.4 Deforestation rate reduced (%)	5.1.4 TBD	5.1.4 Reduce deforestation by 75 %	Annual report of INRM Technical Assistant	
		5.1.5 Area restored, or re/afforested as result of the project;	5.1.5 Bare land =8,193	5.1.5 By 2022 8,193 ha to be under forest cover	Satellite imagery, vegetation index	
	5.2 Alternative livelihoods to enhance natural resources management adopted	5.2 No. of farmers engaged in livelihood enhancement activities (Bee keeping, energy saving stoves, livestock, horticulture) adopted	5.2 Bee keeping (0); Energy stoves (0); livestock (0); fruit propagation (0)	5.2 Bee keeping (660); Energy stoves (570); goat production (360) cattle production (300); horticulture (660). For all these targets at least 50% will be women.	Annual progress reports	

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
	5.3 Comprehensive land use planning enhanced	5.3.1 % of villages engaged within the catchments 5.3.2 % of Villages with by laws enacted and enforced to safeguard the instituted village land use.	5.3.1 TBD 5.3.2 TBD	5.3.1 >90 5.3.2 > 90	Annual report of INRM Technical Assistant	
	5.4 Integrated soil and water conservation measures adopted by farmers in priority areas and up scaled in selected catchments	5.4.1 Number of women groups establish and practicing water conservation in catchment areas. 5.4.2 Number of women group trained in Integrated soil and water conservation	5.4.1 0 5.4.2 0	5.4.1 20 5.4.2 20	Quarterly Progress Reports	
ACTIVITIES	Components			GEF Contribution, USD	Governments Contribution, USD	Total Contribution, USD
	Component 1: Enhancing transboundary management and institutional capacity			3,086,904		3,086,904
	Component 2: Improving early warning, disaster risk management, and monitoring			1,414,820	-	1,414,820
	Component 3: Community- based Integrated Natural Resources Management			1,600,970	-	1,600,970
	Component 4: Project Management Cost Subtotal (PMC)			290,000	2,000,000	2,290,000
	Total			6,392,694	2,000,000	8,392,694

Project Implementation Schedule

	Year	2019				2020				2021				2022				2023	
	Task	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
A	**Project start**																		
	Internal procedures and approval GEF and AfDB																		
	Signing of grant agreement																		
B	**Component 1: Institutional strengthening**																		
	Advance contracting TDA/SAP consultant																		
	Acquisition of equipment computers, tools and software																		
	Hiring staff																		
	TDA/SAP																		
	Preparation and monitoring of capacity building program																		
	Capacity building (training of staff)																		
C	**Component 2: FEWS and environmental monitoring**																		
	Advance contracting Technical assistance FEWS																		
	Flood early warning system: design and installation																		
	Flood early warning system: maintenance and operation																		
	Environmental monitoring																		
	Advance contracting Technical assistance FEWS																		
	Management Information System: design and installation																		
	Management Information System: maintenance and operation																		
	Knowledge and replication activities																		
D	**Component 3: INRM programme**																		
	Advance contracting Technical assistance FEWS of international consultant based on ToR																		
	Pilot design and implementation																		
	Upscaling and replication																		
	Community engagement and training																		
E	**Project management**																		
	Management, monitoring and evaluation																		
	Annual progress reports																		
	Steering committee meetings																		
	Final Report																		

REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARDS OF DIRECTORS ON A PROPOSED GRANT TO THE REPUBLIC OF MALAWI AND THE UNITED REPUBLIC OF TANZANIA FOR THE STRENGTHENING TRANSBOUNDARY COOPERATION AND INTEGRATED NATURAL RESOURCE MANAGEMENT IN THE SONGWE RIVER BASIN PROJECT

Management submits the following Report and Recommendation for implementation of the **Global Environmental Facility (GEF) - International Waters (IW) grant of US Dollars 6,392,694** to finance the 'Strengthening Transboundary Cooperation and Integrated Natural Resource Management in the Songwe River Basin Project' in the United Republic of Tanzania and the Republic of Malawi.

1. STRATEGIC THRUST & RATIONALE

1.1. Project linkages with country strategy and objectives

1.1.1. The Project is in line with the current country strategy papers (CSPs) of both Malawi and Tanzania. The CSP for Tanzania 2016-2020 specifies 2 main pillars, namely (i) infrastructure development for inclusive and green growth, and (ii) strengthening governance and accountability. Pillar 1 specifically aims at enhancing rural incomes and food security by addressing lack of production and management skills by farmers – one of the main components in this project. This project is also aligned with the national priorities defined by the country's Water Sector Development Program (2005-2025), the Water Resources Management Programme (WRMP), the Water Resources Management Act (2009) and the National Water Policy (2002). The latter identifies transboundary water resources as one of four critical 'water resources issues' along with high variability and depletion of water resources, and assigns a priority for sharing water quantity to meet international obligations. The project interventions contribute to adaptation strategies such as sustainable water management to boost food crop production and the strengthening of integrated water resources management and the Tanzanian national development vision 2025. As part of the larger Songwe River Basin Development Program (SRBDP), the project is one of the pipeline projects in the current CSP.

1.1.2 The CSP for Malawi 2018-2022 identifies 2 main pillars, namely: (i) Investing in infrastructure development through energy and transport to remove bottlenecks and investment constraints that otherwise increase the cost of business while improving competitiveness and overall functioning of the public sector industry, businesses and households and (ii) Investing in economic transformation by strengthening agricultural value chains and developing water infrastructure to boost economic diversification, build resilience and to underpin creation of jobs. The project through strengthening the SRBC and management of natural resources in the basin will enhance efficient use of energy, sustainable transport infrastructures and increase agricultural productivity and production and access to sustainable water infrastructures. This is in line with the country strategy paper pillars as defined above. Malawi has included the SRBDP in the current 2018-2022 for which the current GEF funded project is one of the preparatory projects to enhance the sustainability of the planned investments.

1.1.3 The project is consistent with the Malawi Government's Growth and Development Strategy II (MGDS II) 2017-2022, in which climate change, natural resources and environmental management are key features. In addition, the project is in line with the country's National Adaptation Programmes of Action (NAPA) which seeks to enable communities to better cope with climate change to ensure food security, reduce poverty, and ensure proper utilization of natural resources. Lastly, the project is consistent with the Malawi water policy (2007) which promotes more effective water resources development and management and as a

result of which the Government of Malawi is in the process of establishing a Water Resources Management Authority to oversee decentralised water resources management. The project is also consistent with the Tanzanian's Development Vision 2025 which aims at achieving high quality livelihoods, peace, security and unity; good governance, well-educated and learning society and strong and competitive economy. It is also in line with the water sector policy whose objectives are universal water supply and sustainable management of water resources and National Agriculture Policy aiming to achieve modernized, commercially, highly productive and profitable agriculture that utilizes the natural resources in a sustainable manner.

1.1.4 Elsewhere, the project fits also within the Bank Group's long-term strategy whose twin objectives of assisting regional member countries achieve more inclusive and green growth, including through improved natural resources management. The project is also aligned with three of the five current operational priorities of the Bank: (i) *Feed Africa*, through improved management of natural resources in the basin and improved agricultural productivity, (ii) *Integrate Africa*, through transboundary cooperation between Tanzania and Malawi; and (iii) *Improve the Quality of Life of Africans*, by enhancing agricultural productivity and incomes through improved natural resource management, early warning systems and economic livelihoods activities and improved water quality through reduction of sediments.

1.2. Rationale for Bank's involvement

1.2.1. The Songwe River Basin lies in the southwest of Tanzania and north of Malawi and covers an area of 4,243 km^2. Endowed with fertile alluvial soil and abundant water resources, it is home to a population of over 341,000 people who rely on the land for their livelihoods. The Songwe River itself forms 200 km of the international border between Tanzania and Malawi. Because the river is characterized by meandering and course changes, these natural shifts in the river's course over time causes much flooding and land loss. This issue is further amplified as 80% of the basin's population are rural and living in poverty. Rapid population growth over recent years has also put significant pressure on the local environment and led to severe degradation of basin natural resources on which much of the population relies. Erosion and other adverse ecological impacts lead to reduced agricultural production and ultimately result in increased poverty, inequality and loss of livelihoods.

1.2.2 The Songwe River Basin can be characterized as highly mountainous with elevations in the basin varying between 2,400 m above mean sea level (MSL) in the highest areas in the basin to approximately 500 m above MSL at the delta near Lake Malawi/Nyasa. Due to the slopes, land use and soil type the basin is susceptible to erosion of agricultural lands and vulnerability of forest to logging, slash and burn practice. In both Malawi and Tanzania the population increase is leading to an increasing demand for land and water for agriculture and a need for a secure food supply and economic development. This has resulted into communities cultivating in marginal lands. The sustainable land management practices such as conservation, forestry/agro-forestry and INRM principles and practices are well understood, but that appropriate adaptive community engaging options/approaches/ actions information is lacking. Agriculture in downstream areas is threatened by flooding destroys In addition competing needs of space, water and natural resources are expected due to planned investments under SRBDP (refer to Annex 10). Developments could also increase land degradation, deterioration of water quality, ecosystems and biodiversity. The impact may be damage to the natural environment (e.g. algal blooms) and/or damage to human welfare (e.g. health problems). Lastly, climate change and its effects (in terms of cause and impact) need to be well understood to ensure that future interventions are both resilient and adaptive given the expected temperature increase and more extreme rainfall. The lack of sustainable land management practices upstream leads to land degradation, deforestation and erosion. In addition, the rudimentary transboundary coordination and management, lack of reliable information on floods and flood

impacts, deterioration of water quality and no mainstreaming of sustainable land and water management practices are of the root causes of environmental degradation. The planned investments in the basin can only be sustainable if these root causes of environmental degradation are addressed. It is with this background that this project is designed to build capacity and strengthen the secretariat of SRBC (S-SRBC) to sustainably manage the natural resources and water in the basin and mitigate the threats. Alternative farming practices need to be introduced in the river basin to stop the increasing land degradation. A flood warning system is also very important in order to have reliable flood forecast and ensure effective communication and actions plan for the threatened communities. Lastly, reliable information and environmental monitoring for a fact based river basin and natural resources management is needed.

1.2.3 The SRBDP aims to implement a multi-sectoral solution to capitalize on the opportunities available in the basin and enhance adaptation to climate change, mitigating its adverse environmental impacts and the resulting effects on food production. The Program is part of the Southern African Development Community (SADC) Regional Strategic Action Plan for international water resource management, aimed at fostering cooperation and equitable sharing of benefits of the shared watercourses in Tanzania and Malawi. SRBDP's objectives are framed within overall sustainable and climate-resilient interventions for both countries, and include contributing to economic growth, reducing poverty, improving health and livelihoods, enhancing food and energy security for the entire basin, and reducing the socio-economic impacts of the meandering river on communities in the flood plain.

1.2.4 Building the capacity of the Secretariat of the Songwe River Basin Commission (SRBC) is thus pivotal in addressing the various challenges to be addressed under the SRBDP. In particular, the SRBC needs to have the technical capacity to balance the needs of the various stakeholders involved.

1.2.5 The Bank has been actively involved in supporting the preparation of SRBDP and enhancing the transboundary management of natural resources with the Songwe River Basin. The Bank has actively facilitated funding and technical support to riparian countries to develop strategies for cooperation and financing for the development and implementation of the SRDBP. This project presents another opportunity for the Bank (and GEF) to build on its experience with the Songwe River Basin, and transboundary water management, to assist the riparian countries (Malawi and Tanzania) in building the capacity of the SRBC which will implement the SRBDP.

1.2.6 Over the years, the Bank has acquired valuable knowledge and experience in working in multi-state river basins and developing river basin authorities. Today, it is financing projects in Lake Tanganyika, Lake Victoria, Lake Chad, transboundary area of Nigeria and Niger, Senegal River, Okavango River, Volta River, etc. Malawi and Tanzania are party to a number of conventions that promote sustainable natural resources such as Ramsar Convention and the South African Development Community- Protocol on shared water courses. Key issues addressed under this are equitable and reasonable utilisation of shared water resources; obligation not to cause significant harm to co-riparian's and information sharing. The knowledge and experience gained from implementation of these projects, including best practices in water resources management and watershed management will be useful in this project.

1.3. Donor coordination

1.3.1. The Bank has a strategic partnership with a number of development partners who participated in the preparation of the SRBDP from the ground upwards. The Bank's

coordination with other donors in both countries of Malawi and Tanzania, occurs within the framework of the consultative group for mobilization of resources (reinforced at sectoral level by roundtable consultations).

1.3.2. There is a well-established structure for dialogue between the Government of Tanzania and its Development Partners (DPs), particularly at sector level. The country's development cooperation landscape includes 4 multilateral organizations, 16 United Nations agencies and 18 bilateral Development Partners (DPs). The Bank is active in all key sectors at both national and sectoral levels, with a strong presence in infrastructure development, including the water sector. Water sector coordination is conducted through the Development Partners Group for Water (DPG-W). The DPG Water aims to enhance the harmonization of the Development Partners, support the implementation of the Sector Wide Approach (SWAp) and promote Government leadership.

1.3.3. In Malawi, there is likewise a long tradition of donor coordination between the government and its Development Partners at both national and sectoral levels. In particular, there is strong collaboration among the Water and Sanitation Sector Development Partners in the country who regularly meet to discuss critical sector issues, including the financing of identified projects and programmes, and the production of requisite economic sector work (ESWs). Among other things, there are annual Joint Sector Reviews (JSR) informed by Sector Performance Reports (SPRs). Currently, the most active DPs in the water sector include, the AfDB, the World Bank, UNICEF, European Union (EU), European Investment Bank (EIB), JICA, UK's DfID, Water Aid, the Australian Aid Program (AusAID), the Canadian International Development Agency (CIDA), the Netherlands, the UN Children's Fund (UNICEF), the UN Development Programme (UNDP) and the Japan International Cooperation Agency (JICA).

1.3.4. The preparation phase of this project was jointly financed by the African Water Facility (AWF) and the New Partnership for Africa's Development-Infrastructure Project Preparation facility (NEPAD-IPPF) both housed at the AfDB. The Climate Resilient Infrastructure Development Facility (CRIDF), provided support for the feasibility study on opportunities for Public Private Partnership (PPP) for the SRBDP. CRIDF will additionally provide co-financing estimated at GBP 200,000.00 mainly towards strengthening the Interim Secretariat (IS-) of the SRBC through advisory support in creating a benefit sharing framework, financial/resource mobilization and preparation of social infrastructure for enhanced community based rural livelihoods (rural water supply etc.), and ecosystems in the basin. For its part, the Stockholm International Water Institute (SIWI) will also provide co-financing estimated at EURO 100,000.00, through their Africa-EU Water Partnership Project. The support will go towards strengthening the capacity of IS-SRBC institutions as regards financing mobilization for the irrigation development component of the wider SRBDP.

2. PROJECT DESCRIPTION

2.1. Project Description

2.1.1. The 'Strengthening Transboundary Cooperation and Integrated Natural Resource Management in the Songwe River Basin Project' (STCINRM-SRBP) aims at addressing the challenges of the basin and the SRBC. The objective is to enhance basin protection, livelihoods and integrated water resources management through improved transboundary cooperation and sustained ecosystem services. The project consists of 4 components which include: (i) Enhancing transboundary management and institutional capacity (ii) Improving early warning and disaster risk management (iii) Community- based integrated natural resources management

and conservation and (iv) Project management and coordination. A description of the Project components is given in section 2.1.2, while detailed activities, quantities and costs are given in the Technical Annexes section A2 and B2.

2.1.2. Project Components

Table 1: Project Components (detailed activities, quantities and costs are given in Technical Annexes)

Component	**(USD)**	**Component Description**
Component 1 Enhancing transboundary management and institutional capacity	3,086,904	This component aims at strengthening the capacity of the SRBC and ensure that the river basin commission is effective, well-functioning and can fulfil its core functions. Activities include: • Transboundary diagnostic analysis undertaken and strategic action plans updated • Operationisation of the Songwe Convention through Inter-ministerial Steering Committees and thematic taskforces • SRBC action plan, annual and periodic work plans developed • Strengthening the institutional capacity of the S-SRBC and basin level agencies by recruiting 4 additional staff, i.e. hydrologist/FEWS expert, ICT/GIS/MIS expert, environmental /agro/ forestry expert, and the financing mobilisation/M&E expert (iii) Strengthening financial sustainability through resource mobilisation • Capacity building program on IWRM and ecosystem-based approaches • Creation of basin stakeholder cooperation platform/partnerships with Zambezi Watercourse Commission (ZAMCOM) and SADC Water Division and the Lake Malawi/Nyasa IUCN project) • Strengthening financial sustainability through resource mobilisation • Gender mainstreaming strategy and action plan prepared • Participatory result based monitoring and evaluation system in place • Knowledge exchange and dissemination including contribution to IW experience learning (IW: LEARN)
Component 2: Improving early warning, disaster risk management, and monitoring measures	1,414,820	This component will strengthen the capacity of the secretariat of the SRBC and agencies in the two partner states through the following activities: • Basin hydro-meteorological observation Infrastructure Installed • Basin-wide flood forecasting and early warning system prepared • District level disaster risk management (DRM0 plans for areas affected by floods prepared • Flood risk awareness • Strengthened service delivery and dissemination of warnings [alert systems, in the flood plains and refuge platforms] • Transboundary basin environmental monitoring system (EMS) prepared and operationalised

Component	(USD)	Component Description
		• Management Information System (MIS) and Integrated basin knowledge base and information management system designed and operationalised • Strengthened data and information sharing and exchange building on the "Rules and Procedures for Data and Information Sharing related to the Management & Development of the Zambezi Water Course" [2016] • Strengthened collaborations of National Hydrologic and Meteorological Services (NHMS) in the Songwe River Basin • Strengthened capacity of staff at the basin level (water resources modelling etc.)
Component3. Community-based demonstrations in Integrated Natural Resources Management and Conservation	1,600,970	Contribute towards counter land degradation, in order to reduce pollution and sedimentation into the Songwe river basin and improve agricultural productivity. Activities include: • Integrated SWC and forestry management to protect the supporting and regulating services of forests (6,600 ha) • Capacity building in integrated natural resources management (INRM) at district level: gender sensitive trainings in participatory land use planning and ecosystem-based management • Harmonisation and dissemination of INRM guidelines for the Songwe River Basin building on best practice at national/regional levels • Funding mobilized for scaling up the conservation and sustainable agriculture. • Best practice guidelines for INRM developed.
Component4 Project management and Coordination	2,290,000	This component consists of activities to ensure smooth and timely implementation of the proposed interventions. Activities include: • Annual financial and technical audits; Procurement of vehicles, ICT equipment • Operation costs (staff salaries, office spaces, fuel, vehicle maintenance, staff travel expenses, steering committee meetings etc.).
Total project cost	**8,392,694**	

2.2. Technical solution retained and other alternatives explored

2.2.1. During the project definition phase, appropriate interventions were considered. Two alternatives were considered: (a) developing the Project as a regional project/program and (b) developing individual country programs. The option of developing the Program as a regional project/program was retained.

Table 2: Project alternatives considered and reasons for rejection

Alternative name	Brief description	Reasons for rejection/Selection
Developing individual country projects/ programs	The option of developing individual country programs involved two different Projects in each of the	The option was not favoured, since it will be difficult to forge cooperation in the management of shared transboundary natural resources. Individual national programs would not address the transboundary issues or the need for

	member states for the Songwe River Basin	systematic and coordinated data and knowledge exchange for basin land and water management. Preparation of two separate national programs would be costly and result in duplication and inconsistencies.
Developing the Project as a regional project/program;	This option involves development of a Joint River basin management program, and implementation through a strengthened secretariat under the Songwe River Basin Commission	The option of developing the project as a regional program was chosen mainly because it provides a platform for dialogue and harmonization of policy, legislation, and regulatory frameworks for transboundary natural resources. In addition, a regional project provides opportunities for adopting cooperative management frameworks for the shared transboundary natural resources, equitable benefit sharing and reduce conflicts.

2.3. Project type

2.3.1. This project will be implemented as a stand-alone operation by the S-SRBC with grant financing from the GEF-IW. The project focusses on strengthening basin institutions, information and capacity to sustain basin-wide transboundary integrated water resources management (IWRM). The project will make a strong contribution to the initial implementation of the SRBDP.

2.4. Project cost and financing arrangements

2.4.1. The total cost of the Project for the components defined above is estimated at USD 8,392,694 including contingencies but net of taxes and duties which will be financed by (i) GEF grant of USD 6,392,694 (76%) in foreign currency for component 1, 2 and 3 and (ii) Governments of Tanzania and Malawi contribution in local currency of USD 2,000,000.00 (24%) with each government contributing USD 1,000,000.00. The funding of both Government focusses on the core functions of the SRBC and is complementary to the support provided by the GEF IW funding. The project will also benefit from (GBP 200,000.00) in kind from the Climate Resilience Infrastructure Development Facility (CRIDF) and Euro 100,000.00 from the Stockholm International Water Institute (SIWI). ADF resources amounting USD 8,650,000.00 allocated to capacity strengthening and environmental measures sub-component of the SRBDP will be the baseline project. The SRBDP is planned to be taken to the Board in 2019. GEF CEO endorsed the project in August 2018 (refer to annex B2 for the GEF financing details)

2.4.2. The AfDB, co-financing, conditioned to board approval, is estimated at US$ 8,650,000, primarily through concessional loan finance as a part of the overall SRBDP. The ADB loan will only come in when the bigger project starts in 2019.

2.4.3. GEF Project Budget overview

Table 3: Program Cost Estimates by Component (US$) (net of taxes and duties)

#	Component	Foreign Exchange (USD)	Local Currency (USD Equivalent)	Estimated cost (USD)	Foreign Currency %	Local Currency %	%Total
1	Enhancing transboundary management and institutional capacity	3,086,904	0	3,086,904	100%	0%	100%
2	Improving early warning, disaster risk management, and monitoring measures	1,414,820	0	1,414,820	100%	0%	100%
3	Community-based demonstrations in INRM and conservation	1,600,970	0	1,600,970	100%	0%	100%
4	Project management and Coordination	290,000	2,000,000	2,290,000	13%	87%	100%
	Total	6,392,694	2,000,000	8,392,694	76%	24%	100%

Table 4: Sources of Financing in USD

#	Source	Foreign Exchange[USD]	Local Currency (USD Equivalent)	Total	%	Instrument
1	GEF/IW	6,392,694		6,392,694	76%	Grant
2	Government of Malawi		1,000,000	1,000,000	12%	Grant
3	Government of Tanzania		1,000,000	1,000,000	12%	Grant
	Total	6,392,694	2,000,000	8,392,694	100%	

Table 5: Summary of the Project Cost by Category of Expenditure

#	Category of Expenditure	GEF Contribution (USD)	Government of Malawi (USD)	Government of Tanzania (USD)	Total (USD)
1	Works	220,000	0	0	220,000
2	Services	2,564,600	0	0	2,564,600
3	Goods	1,172,100	0	0	1,172,100
4	Operating Costs	2,035,327	920,000	920,000	3,875,327
5	Physical Contingency	243,450	55,200	55,200	353,850
6	Price Contingency	157,217	24,800	24,800	206,817
	Total	6,392,694	1,000,000	1,000,000	8,392,694

Table 6: Expenditure Schedule by Component in million USD

#	Component	2019	2020	2021	2022
1	Enhancing transboundary management and institutional capacity	617,381	926,071	1,234,762	308,690
2	Improving early warning, disaster risk management, and monitoring measures	141,482	565,928	565,928	141,482
3	Community- based demonstrations in INRM and conservation	320,194	480,291	640,388	160,097
4	Project management and Coordination	572,500	572,500	572,500	572,500
	Total	1,651,557	2,544,790	3,013,578	1,182,769

2.5. Project's target area and population

2.5.1. This project target area is the Songwe River Basin in Malawi and Tanzania (see appendix 4). The Songwe River Basin is part of the wider Zambezi River basin. Its 4,243 km2 catchment is home to approximately 341,104 people. The basin is located within 5 districts of Tanzania and 2 districts of Malawi. The population density varies in the basin, but is higher in the lower parts of the basin, for instance in the district of Kyela. The districts, their areas within the river basin and the populations per district are specified in the table below.

Table 7: Districts, population and areas in river basin (source: Final Project Report SRBDP)

Country	District	Area		Population (2013)	
		Total km^2 in basin	% of district in basin	Total population in basin	Population density (people/km^2)
Malawi (45 % of total area)	Chitipa	1,590	37 %	99,698	63
	Karonga	335	10 %	31,401	94
Tanzania (55 % of total area)	Kyela	118	9 %	32,993	280
	Mbozi	484	14 %	46,156	95
	Momba	80	1 %	12,405	155
	Mbeya Rural	136	6 %	15,852	116
	Ileje	1,500	79 %	102,599	68
Total		4,243		341,104	125

Given the population data is dating back to 2013, the current population numbers have increased since then. An average growth rate 3 % is assumed based on the Tanzania census in 2012 (prepared by the Tanzania National Bureau of Statistics, reporting growth rates between 2,5 % and 3,3 %) and on the Malawi Population. Data Sheet 2012 (prepared by Ministry of Economic Planning and Development of Malawi, reporting growth rates between 3.1 and 3.9 %, the current population is estimated at approximately 400,000 people.

2.5.2. Although the River is part of the formal border between Tanzania and Malawi, its river bed is not fixed. Important agricultural areas are located in the catchment, mainly in the flood plains and forests in the upper catchment. In addition, the river flows into Lake Malawi/Nyasa providing much needed inflow of fresh water and migration routes for fish. Due to population increase, changing land use, climate change and other factors the Songwe catchment is threatened by environmental degradation, flooding and loss of fertile land.

2.5.3. The land use in the river basin is divided in the following categories: (i) -Forests:3 % (ii) Miombo woodland: 58 %, biggest cover in the upper catchment areas like the district Ileje (iii) Bushland: 18 % (iv) Grass Land: 8 % (v) Agricultural: 8 %, largest areas located downstream in districts Kyela and Karonga and (vi) Burnt and Bare: 5 %, most prominently in districts of Chitipa and Ileje. The economy of the Songwe River Basin is primarily based on rain fed agriculture and forestry, making land and water the most important resources.

2.6. Participatory process for project identification, design and implementation

Consultations with relevant stakeholders in Malawi and Tanzania, including project beneficiaries, line ministries, District Councils, Traditional Authorities, and NGOs took place during project preparation and appraisal. A consultative workshop was held in Mbeya, and was attended by over 50 participants. A number of agencies were further consulted during project appraisal. The list of agencies and people consulted is shown in Annex C-3. At the start of the project preparation, a stakeholder participation plan was prepared, which guided the consultation process. The project has already been endorsed by GEF with the total amount of USD **6,392,694.** The project is now undergoing the Bank's processes to approve the appraisal report and Board approval is secured, the project will be ready for implementation. The stakeholders will further be consulted during the launching of the project. During the implementation phase the project will engage more stakeholders, particularly the private sector, in integrated river basin management. The Secretariat for the SRBC will play a crucial role in this stakeholder engagement process. A stakeholder participation platform and inter-ministerial committees are part of the project. Being involved from the outset will allow mutual understanding in the approaches to be applied from various stakeholders.

2.7. Bank Group experience, lessons reflected in project design

2.7.1 The Bank's active portfolio in Tanzania is UA 1,103.9 million (as at November, 2018) distributed as follows: water and sanitation (12%), energy (10%), transport (51%), agriculture (8%), education (4%), finance (9%) and multi-sector (6%). The Malawi's active portfolio as at 26th July, 2018 is UA 223 million distributed as follows: transport (29%) social sectors (29%), agriculture (20%), water and sanitation (16%) and multisector (6%). Both countries have neither problematic projects nor potentially problematic projects with an average portfolio performance of 3.1 and 3.0 (on a scale of 1to 4) for Tanzania and Malawi respectively. In both countries key portfolio indicators such as disbursement ratio, aging projects and time taken form approval to disbursements have improved. The portfolio issues in both countries are focussed on weak capacities for financial management resulting into delays in submission of audit reports and justification of expenditures, non-adherence to agreements on counterpart funding, poor contract management, and delay in procurement of works, goods and services and preparing designs during project implementation phase. In addition, the Bank has also

drawn lessons from the previous projects implemented in both countries and these lessons include (i) Ownership and participation of beneficiaries to improve sustainability of project benefits; (ii) The use of existing institutional arrangements/country structures ensures seamless coordination and also builds sustainable capacity in the institutions (iii) Environmental benefits are strongly linked to improved livelihoods for communities (iv) Effective Sustainable Land Management depends on multi-stakeholder partnerships that integrate the multi-dimensional land degradation issues (at multiple scales) (v) Capacity development at all levels, community, district, national level is critical for long term sustainability (vi) Improving monitoring and evaluation capacity for tracking gender and social results and enhancing accountability is key to measuring project success and (vii) Community awareness, mobilization and sensitization prior to implementing community based interventions and program sustainability is a an important requirement for project success.

2.7.2 The lessons learnt have informed the project design by focussing on institutional strengthening and capacity building for the Secretariat for SRBC, District Staff and Village Committees to enhance ownership, implementation and sustainability. In addition, to the staff recruited for the SRBC the two Governments have also seconded staff to the commission in order to enhance sustainability of the project activities beyond the project period. The project design has also included support to economic activities that could provide alternative livelihoods to the population in the basin. The project design has included strengthening the Stakeholder Consultation Platform to make it more operational at basin level and will establish a robust monitoring and evaluation (M&E) systems, management information systems in order to effectively track social and technical issues on the project. The project also took into account the portfolio challenges highlighted in the 2.7.1 by engaging a consultant who conducted a feasibility study which informed the project design, inclusion of advance procurement to minimize delays and ensuring that there are specific staff designated to manage finances for the project. Details on lessons learnt have been presented in Annex B1.

2.8. Key performance indicators

2.8.1. The project will be monitored using Key Performance Indicators (KPIs) indicated in the project log frame which are in-line with Core Sector Indicators (CSIs) as well as the national M&E frameworks. Key indicators are: (i) Songwe River Basin strategic action plan (SAP) finalized and endorsed at ministerial level; (ii) Financial sustainability strategy in place and operational; (iii) Flood early warning system (FEWS) and management information system (MIS) developed and operational; (iv) Hectares of cultivated land and forest sustainably used and managed; and (v) Number of women participating in each of the key outputs. The indicators will be monitored by the staff at the SRBC. This will take place at least twice a year and reported to the Steering Committee in annual progress report. Short consultancies will be commissioned to collect and validate baseline data and at project closure to collect end-line data. This will facilitate reporting on project results. The project financing mobilisation/M & E expert, will be responsible for collecting, analysing and monitoring performance indicators, including those for gender. An independent evaluation report will be done mid-term and at the end of the project. All reports will be shared with both countries, the Bank and other partners involved in order to inform future designs of the projects and policy reforms in both countries.

3. PROJECT FEASIBILITY

3.1. Economic and financial performance

3.1.1. A cost effectiveness analysis was applied in assessing project interventions in the Songwe River Basin. This is given the fact that benefits which include: capacity development freshwater systems, extreme weather events, and biodiversity and ecosystem services are difficult to express in monetary terms. Project costs are shown in Table 4. Component 1 is

designed to strengthen the SRBC capacity to ensure long term (financial) sustainability for transboundary basin planning and management. Jointly addressing the basin threats is more cost effective than individual actions by each of the countries. Long-term financial sustainability to mobilise resources for operational programs and for projects after the project is part of the scope.

3.1.2 Component 2 delivers a FEWS and related measures to minimise the cost, casualties and impact of floods. The FEWS will form part of any flood risk management scheme in the river basin and is seen as a first step in protecting people in the absence of more expensive structural measures like the planned Lower Songwe Dam. The FEWS will be needed to manage residual risk even after the lower Songwe dam is constructed. The MIS, will provide a data base management system for enhanced decision making and the FEWS. It will provide information on land and water management as well as information on financial and project management. The measures require little in the way of construction of physical infrastructure and are less costly and quicker to implement than structural measures.

3.1.3 Component 3 provides benefits by enhancing socio-economic and environmental gains at the local and river basin scale. The catchment was analysed as regards the main concerns: land and ecosystem degradation, erosion and sedimentation and agro-forestry practices. Improvement in water quality will contribute to health benefits and improved livelihoods at community level. Investments will increase land productivity, enhance food security, and contribute to the stabilization of rural incomes.

3.2. Environmental and Social impacts

3.2.1. **Environment**. The project was validated as Category 3 on February 08, 2018, in line with the Bank's Environmental and Social Assessment Procedures. This corresponds to operations with negligible adverse environmental and social risks- according to the AfDB Integrated Safeguards System[3]. Category 3 projects do not directly or indirectly affect the environment adversely and are unlikely to induce adverse social impacts. Component 2 which comprises non-structural flood management measures such as flood forecasting and warning; and disaster prevention, preparedness and response mechanisms; has limited environmental consequences. Interventions with environmental effects are limited to soil and water conservation (agroforestry) pilot projects. The pilot projects involve alternative farming, using farmer to farmer training and exchange and agroforestry techniques like intercropping, crop rotation, fallowing, and conservation farming, targeting both erosion prevention as well as alternative income generation. Positive impact on biodiversity is expected from intercropping and agroforestry practices.

3.2.2. **Climate Change.** According to the Bank's Climate Safeguards System, the project is classified as Category 3. The project aims to enhance institutional capacity/readiness to respond to the potential impacts of climate variability and change (like flooding) on the development and management of transboundary water resources. Investing in strengthening the SRBC institutional capacity (under component 1), strengthening the capacity of the SRBC and participating countries and institutions to respond to weather and water related hazards (hydro meteorological observation system and flood risk management) and climate risks via the FEWS (under component 2) and strengthening catchment management (component 3) are adaptation measures that will be at the core of building resilience, because it is these investments that will help economic, livelihood, and ecological systems to adapt and evolve into new and more sustainable states. The measures are aligned with the Bank's Climate Change Action Plan (2016

[3] https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/December_2013_-_AfDB'S_Integrated_Safeguards_System_-_Policy_Statement_and_Operational_Safeguards.pdf

– 2020) and adaptation priorities articulated in the nationally determined contributions (NDCs) for both Malawi and Tanzania. Capacity building in IWRM has also been identified as an area of priority in both countries' NDCs to the Paris Agreement. The project has secured climate finance of over USD 6.4 Million from the GEF which will count towards the corporate target on "Amount of climate finance externally mobilized".

3.2.3. ***Gender.*** Gender mainstreaming has been an important aspect in the project design. Preparation of the Project has been guided by Bank policies and strategies including the Gender Strategy (2014-2018) and the GEFs policy on gender equality. In the preparation study of the SRBDP, a significant gender bias was identified: inequitable distribution of land and property, affecting women and youth. The SRBDP will endeavour to actively involve women and ensure that they benefit throughout the Project and bridge the gaps that were identified during the preparation phase and the stakeholder's consultative meetings during the appraisal mission.The objective of the project is to enhance basin protection, livelihoods and integrated natural resource management through transboundary cooperation and sustained ecosystem services. The design of the Project has been informed by national gender priorities and mechanisms for better mainstreaming gender into the project for both Malawi and Tanzania and the AfDB gender strategy (2014-2018). Therefore, the project's gender impacts are closely tied to component 3 of the project. The Project's component 3 is set to ensure community benefit and participate in the project; it will also ensure that gender is well mainstreamed in the project. A Gender Action Plan has been developed for effective implementation and monitoring of gender based outcomes and indicators.

3.2.4. Social. The project interventions are focussed on providing positive and inclusive socio-economic impact. The institutional strengthening in component 1 will ensure that the (S)-SRBC is effective and focussed on inclusive socio-economic development. The FEWS will have direct social-economic benefits in reduction of vulnerability to climate variability and climate-related risks, and increased ecosystem resilience, through reduction of the flood risk in the lower Songwe River Basin. The integrated natural resources management interventions are focused on providing local and national socio-economic benefits leading to sustainable and long-term oriented management of natural resources. They are designed to generate more income for the communities by creating socio-economic benefits of sustainable agro-forestry: increased yields, better vegetation cover, and erosion reduction.

3.2.5. Involuntary resettlement. Operational safeguard 2 – Involuntary resettlement: land acquisition, population displacement and compensation will not be triggered under this project, given its category 3 classification. The project identified sites do not require land acquisition. The interventions and pilot projects of the INRM programme of component 3 do not require land acquisition.

4. IMPLEMENTATION

4.1. Implementation arrangements

4.1.1 The S-SRBC will be the implementing agency for all components. There will be two main bodies to strategically guide implementation as defined in the SRB Convention (i) the Council of Ministers, which is charged with policy and decision making and (ii) the Joint Steering Committee (JSC) which is responsible for implementing council decisions. These Council of Ministers and Joint Steering Committee have been defined as follows: Council of Ministers: The Council comprises a delegation of each party consisting of not more than six (6) permanent members. A Council delegation shall be the Minister or a Deputy Minister from the Ministries responsible for i) Water, ii) Lands, iii) Energy, iv) Irrigated Agriculture; and v) Local Government. The Council delegation shall be empowered to make policy decisions on behalf

of their governments. The Joint Steering Committee: the committee comprises six (6) members from each Party. The Committee members shall be at Head of Department level from the Ministries that constitute

4.1.2 The S-SRBC supports the Council and the Joint Steering Committee with technical and administrative services. Each country has a focal point officer who plays an essential role in carrying out the mission of the SRBC at the national level. In addition the stakeholder cooperation platform with representation of local stakeholders like the Lake Nyasa Basin Water Board, Northern Region Water Board in Malawi, the District Councils and communities will provide the SRBC with bottom-up, local feedback. The AfDB will provide strategic implementation support throughout implementation.

4.1.3 The S-SRBC will be the Executing Agency for all project components. The project management unit (PMU) of the S-SRBC will include an Executive, Secretary, Procurement Officer, Financial Management Officer and support staff. The two countries are in the process of recruiting the social infrastructure and community development experts, in support of community development interventions in the basin. The S-SRBC is mandated to promote and coordinate sustainable development and management of the Songwe River Basin by the Songwe Convention. The S-SRBC functions in the partner states through the designated National Focal Point Officers, who are senior officials in the designated National Focal Point Ministries (NFPMs). The S-SRBC will be responsible for the coordination of the project regionally, and implementing regional activities.

4.1.4 Institutional capacity assessment was undertaken during project preparation. Although the SRBC exists, the institutional arrangements, to monitor, regulate and provide advisory services with respect to water management and basin measures are inadequate. The SRBC (with only one technical staff) therefore still lacks the institutional depth to respond to the increasing and emerging demands placed on the institution (e.g. strategic planning, resource mobilization, or responding to basin management issues, such as climate change). Formalised mechanisms for stakeholder engagement, promoting gender equality and community involvement in decision making are not in place. The solution sought by the project is to strengthen the institutional framework and capacity of the SRBC to ensure the conjunctive use of water resources and maintenance of ecosystem functions in the river basin. The first component of the GEF project aims at enhancing transboundary management and institutional capacity to ensure the establishment of a skilled river basin commission with a clear mandate. GEF support will finance costs of key personnel to strengthen the SRBC in implementing the project. The following staff will be hired to support the project implementation: (i) hydrologist/ FEWS expert; (ii) ICT/GIS and Management Information expert; (iii) Environmental / agro-forestry expert; and (iv) Resource Mobilization expert (Refer to Annex 11) for the terms of reference for the service providers. As part of the sustainability strategy, the incremental staff will after the project duration be financed by the two governments as part of the SRBC core functionality.

4.1.5 A stakeholder cooperation platform will be formed comprising representation from the local stakeholders like the Lake Nyasa Basin Water Board, Northern Region Water Board in Malawi, the District Councils, Civil Society and communities. The AfDB will provide strategic implementation support throughout implementation.

4.1.6 For individual components specific stakeholders will be engaged during implementation. For components 2 and 4, the Tanzanian Meteorological Agency (TMA) Office, Malawi Department of Climate Change and Meteorological Services (DCCMS) will be involved. For the river gauging stations the Lake Nyasa Basin Water Board (Tanzania) and Malawi Ministry of Agriculture, Irrigation and Water Development (MOAIWD) will be

involved. Memorandums of Agreement for customizing of data and information sharing of the Zambezi river basin commission (ZAMCOM) will be used as basis for preparation of the agreements. Component 3 will be implemented by Malawi and Tanzania district staff (agriculture, forestry & environment officers) under the aegis of IS-SRBC staff.

4.2. Implementation Schedule

4.2.1. The project will be implemented over a period of 48 months. The project will be implemented effective June 2019, with an anticipated project completion date is December 2022.

4.3. Financial Management and Disbursement Arrangements

4.3.1. Financial Management: The S-SRBC is already in place and has prior experience in implementing projects financed by various development partners and its predecessor entity managed the Detailed Design and Investment Preparation Project funded by the Africa Water Facility, the New Partnership for African Development - Infrastructure Project Preparation Facility (NEPAD-IPPF). The IS-SRBC will be formally commissioned as a permanent SRBC in due course. The financial management functions of the SRBC fall under the Finance and Accounts Section. The finance function comprises the Programme Accountant and Programme Cashier that both possess adequate experience and qualifications to execute the financial management tasks under the project. The Programme Accountant will have primary responsibility for the financial management aspects and report to the Head of the SRBC Secretariat. The Head of the Secretariat would be ultimately responsible for ensuring the appropriate utilization of project resources to meet the project objectives and ensure comprehensive oversight of the Finance function. The overall conclusion of the assessment is that SRBC's capacity to handle all the FM aspects of the project, satisfies Bank minimum requirements as laid out in the Bank's FM guidelines. The residual FM risk for the project is assessed as Moderate.

4.3.2. Disbursement arrangements: The project would make use of the Bank's various disbursement methods including (i) Direct Payment, (ii) Special Account (SA) and (iii) Reimbursement methods in accordance with Bank rules and procedures as laid out in the Disbursement handbook as applicable. 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 Bank will issue a Disbursement Letter and its contents will be discussed and agreed during negotiations. Detailed FM and disbursement arrangements are also included in the Technical Annex.

4.3.3. Reporting and External Audit: In line with the Bank's financial reporting and audit requirements, the project will be required to prepare and submit a quarterly progress report to the Bank not later than forty-five (45) days after the end of each calendar quarter. The project will prepare and submit annual financial statements, audited by the Malawi's Auditor General or an independent private audit 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 detailed auditing arrangements are included in the Technical Annex B4 and B 6.

4.4. Procurement Assessment

4.4.1 Procurement of goods and 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. Specifically, Procurement would be carried out following:

- **BPS – Borrower Procurement System:** Specific Procurement Methods and Procedures (PMPs) under BPS, comprising its Laws and Regulations, will be carried out following the Public Procurement Act 2011, updated as (Amendment) Act 2016 and Regulations 2013, updated as (Amendment) Regulations 2016 of the United Republic of Tanzania, *using National Standard Bidding Documents (NSBDs) or any acceptable revision made to the Act, its regulations and/ or NSBDs acceptable to the Bank*. agreed during project negotiations with the following thresholds; each contract for civil works valued below USD3,000,000.00; each contract for goods and non-consulting services below USD300,000.00 and each contract for consulting services below USD150,000.00 (for firms) and USD45,000.00 (individual consultants). Details of procurement arrangement is found in Annex B.5.

- **Bank Procurement Methods and Procedures (PMPs)** will be used following the relevant Bank Standard or Model Solicitation Documents (SDs), for contracts that are either: (i) above the above-captioned thresholds, or (ii) in case BPS is not relied upon for any category of procurement.

4.4.2 Procurement Risks and Capacity Development: Country, Sector, Executing Agency (EA), and Project procurement risk assessments were undertaken for the project and the output have informed the decisions on the procurement regimes (BPS and the Bank) and the PMPs being used for specific transactions or groups of similar transactions under the project. Mitigation measures are proposed, as found essential, at four (4) different levels comprising: i) the country procurement system, ii) the sector capacity including capacity of the local industry, iii) procurement complexity and design, and iv) institutional capacity of the Executing Agency (EA) and the findings are presented in detailed in Annex B.5.2.

4.5. Monitoring

4.5.1. The objective of M&E is to assist implementing agencies and other stakeholders in assessing project performance based on the indicators outlined in the project log frame. Monitoring will consist of continuous and/or periodic review and surveillance of activities with respect to management, and the implementation of the work plans. The project's M&E will focus on three aspects: (i) project implementation, i.e. monitoring project management aspects and delivery of outputs; (ii) project performance, i.e. assess the project's effectiveness, focusing mainly on outcomes; and (iii) project impact and sustainability, i.e. evaluation of the project's impacts, resulting from its interventions

4.5.2. The logical results framework will provide the basis for monitoring of the project. During project inception, site visits will be conducted to establish and verify the baseline of the indicators. Furthermore a workshop will be conducted to understand and take ownership of the project's goals and objectives. This will include reviewing the log frame (indicators, means of verification, assumptions) and finalize it in consistency with the expected outcomes for the project. Additionally, the purpose of the inception workshop will be to inform the project team on project related budgetary planning, budget reviews, and budget rephrasing.

4.5.3. A Management Information System (MIS), will be established to serve as a tool for enhancing transparency, rigorous standards, supervision, and auditing to ensure accountability. The MIS will strengthen the monitoring of progress in implementation of various project components. An MIS is essential for fact based management (master) planning, monitoring, evaluation, organization, control and cooperation of the river basin and is linked to all components. The design of the MIS is based on data collection on weather, water levels and ground water; retaining data, maps and reports in databases and GIS systems; presentation, collation of information such as maps, graphs and tables and access data sharing tablets,

smartphones and other computers. The development of the MIS will be coordinated by the IS SRBC, with substantial involvement of the Partner States.

4.5.4 Besides the S-SRBC, several stakeholders will be involved in the preparation of the reports that form part of the monitoring process. The objective will be to determine progress of output, outcomes and monitor global benefits. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learnt. The full M&E plan is described below.

Table 8: Monitoring and Evaluation Plan

M & E Activity	Timing/Frequency	Responsibility
Project Inception report (including harmonizing data gathering and analyses procedures, methods, standards, tools and protocols among countries)	Within first two months of the project start-up	S-SRBC, Governments
Establish baseline and refine outcome- and site- specific indicators	Within first three months of the project start-up	S-SRBC
Periodic M & E Visits to project area (to develop annual project reports and quarterly progress reports)	Quarterly	S-SRBC
Field based impact monitoring	Continually, but annual analysis prior to progress report, PIR and annual work plan preparation	S-SRBC
Technical Reports (periodic thematic reports)	when called for by AfDB, GEF or implementing partner	S-SRBC
External Audit Reports	Annually	External Consultant. Governments, Bank
Independent Mid Term Review	End of Year 2	External Consultant. Governments, Bank
Independent Project Completion Review (PCR)	End of Year 4	External Consultant. Governments, Bank
Terminal Report	End of Year 4	S-SRBC, Governments, Bank

4.6. Governance

4.6.1. The governance is guided by national and international frameworks. The Songwe riparian states are part of the SADC. The SADC Protocol on Shared Watercourses is the regional framework agreement dealing with the management of shared watercourses[4]. Of

[4] The SADC Revised Protocol, 1995 and revised in 2000, aims to foster closer cooperation among Member States for protection, management, and use of shared watercourses in the region. Member States agree to

relevance for the project is the adoption of the internationally-accepted "ecosystems approach" to environmental protection of shared watercourses. The convention creating the SRBC was ratified by both countries in 2017 and came into force in June, 2018.

4.6.2. The main barrier hampering the implementation of the SRBDP is the weak institutional governance for managing transboundary water resources systems of the basin. Inadequate long funding mechanisms for the S-SRBC and SRBDP is a main barrier as well. Important challenges are insufficient institutional capacity, inadequate enforcement of regulations, and insufficient capacity to implement the environmental regulations on land use and water management and inadequate measures for the control of pollution.

4.6.3. A strengthened S-SRBC is essential for management of competing needs and ensuring the continued environmental integrity of the natural resources in the shared basin. Capacity building will focus on good governance, transparency and accountability and on IWRM related topics. Furthermore the project provides support for the governance process: periodically stakeholder engagement platforms, inter-ministerial committees, steering committees will be organised. Lastly, long term resource mobilisation is part of the scope.

4.7. Sustainability

4.7.1. There is strong, high-level government commitment in Malawi and Tanzania to the outcomes of this project and financially sustaining them beyond the life of the project. The riparian states have demonstrated their political commitment with the establishment of a permanent S-SRBC secretariat at Kyela—Tanzania and the appointment of a full-time executive secretary, and financial contribution to the S- SRBC from each state.

4.7.2. Financial sustainability[5]. The two countries have committed to provision of an estimated US$ 2,000,000 over a 4 year period, as part of efforts to sustain the operations of the S-SRBC. The agreed regular budget suffices to fulfil the defined and agreed regular or minimum functions. Building partnerships and leveraging more resources from other donors or private investors in order to fully operationalize and implement the SRBDP is also included in the scope of this project. Part of this scope will be to secure resources for long term global environmental benefits.

4.7.3. At the regional and national levels, institutional sustainability is likely to be achieved because the project will be implemented through the existing institutions of the Songwe River Basin and participating countries, and because commitment to the objectives of the Project is articulated in regional and national development strategies and budgets. Environmental sustainability is likely for all components.

4.7.4. Component 1 and 2 will benefit from the long term resource mobilisation previously described, linkages with ministries and agencies, existing initiatives involved in water and natural resources management, hydromet and enviromental monitoring. Component 3 will be rooted locally in the sistricts and local communities by building capacity, promoting economic livelihoods activities, creating nurseries resulting in local economic benefits, improved yields and reduced land degradation.

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cooperate on projects and exchange information on shared watercourses, consulting with each other and collaborating on initiatives that balance development of watercourses with conservation of the environment.

[5] During project preparation lessons learned in other GEF projects are that this is particularly challenging and difficult in projects dealing with regional-scale issues. Desired benefits are unlikely to be achieved without improved management capacity and financial sustainability

4.8. Risk management

4.8.1. Pro-active risk management is important during all phases of a project. In this section project risks have been identified, ranked and mitigation measures have been proposed. The details can be found in the table below.

Table 9: Risks and mitigation measures

Risk	**Level (L/M/H)**	**Mitigation measures**
Parallel commitment on the part of Governments and potential donors to ensure financial sustainability beyond the life of the Project.	H	A financial strategy for the SRBC will be developed with measures to enhance sustainability.
Institutional priorities of local actors change which may lead to a lack of support for the activities of the Project.	M	A dissemination strategy for results to different kinds of actors will contribute to recognition of the importance to support sustainable management of the Songwe River Basin
Reluctance among farmers to adopt new land-use and cropping strategies, leading to Low uptake of methods for the management of natural resources in the Songwe River Basin	M	The capacity building and knowledge sharing programmes under components 2 and 3 will enhance uptake of best practices. Furthermore, farmer-to-farmer trainings will increase the likelihood of other farmers adopting similar practices.
Lack of capacity in government staff and community-based basin organizations to undertake project activities and sustainability	L	Government staff and other stakeholders at national and basin levels involved in capacity building, site-specific demonstration and well-designed and effective knowledge management/learning activities
Strong and high-level government commitment is not sustained –	L	Project includes financing for frequent meeting of governance instances to ensure prioritisation of the project in the governments agenda
Crops may be damaged by floods and drought conditions	M	Farmers will be trained to adopt sustainable water management systems, good agricultural practices which includes flood prone areas and flood early warning system

4.9. Knowledge building

4.9.1. Knowledge management is incorporated in all components of the project. Information products will be developed from this knowledge base, both to reflect the value of natural ecosystems to the hydrology and economy of the Songwe River Basin, and to provide field guides and interpretive materials on environmental hotspots. The SRBC, relevant ministries and AfDB will disseminate results from this project as widely as possible. Throughout the project implementation, all materials and experiences will be documented, shared on-line and assessed for further use by stakeholders beyond the Songwe River Basin. This will be done through IW: LEARN and other partner organizations. Experience notes on lessons learned will be drafted to be shared with practitioners through on-line forums, social media platforms and other internet and in person based knowledge and experience exchanges.

4.9.2. Beyond reducing flood risks, strengthened cooperation between the two countries will enable sharing of data, generation of knowledge and use of analytical tools like the flood forecasting and warning system to facilitate longer term development planning for improved

climate resilience. Knowledge from hydro-meteorological monitoring and prediction systems will provide critical early warning capacity to protect livelihoods and infrastructure from increasing hydrological variability, increasing floods in the lower Songwe River Basin. Shared information will help the two countries to develop a common understanding of water management issues facing the basin at present and in the future.

4.9.3. Under various capacity development interventions, participants from other organizations (ministries, metrological institutes, water boards, etc.) will join specific trainings. In the FEWS and MIS system (component 2) all data collected in shared with the relevant regional and national entities of Malawi and Tanzania (see institutional set-up). During the pilot program (component 3) several workshops will be organized to disseminate all results and insights gained. Furthermore, a manual of best practices will be developed and shared. Lastly, component 4 contains specific knowledge sharing and replication activities.

5. LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

The legal instrument for financing the Project will be a Protocol of Agreement between the Republic of Malawi (as Recipient), and the Bank and the Fund (as Executing Agencies of the GEF) *The Republic of Malawi will be recipient on behalf of itself and the United Republic of Tanzania – pursuant to the provisions of Article V of the MOU between the Republic of Malawi and the United Republic of Tanzania, on the Implementation of Phase Three of the Songwe River Basin Development Programme (Implementation Phase), dated 18th May 2017.*

5.2. Conditions associated with the Bank's intervention

Conditions Precedent to Entry into Force of the Grant.

The Protocol Agreement shall enter into force on the date of its signature by the Recipient and the Bank and the Fund.

5.3. Compliance with Bank Policies

This Project complies with applicable Bank Group policies.

6. RECOMMENDATION

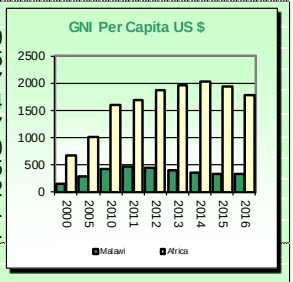
Management recommends that the Boards of Directors approve the implementation of the Project financed through the GEF grant of **USD 6,392,694** under the terms and conditions stipulated in this report.

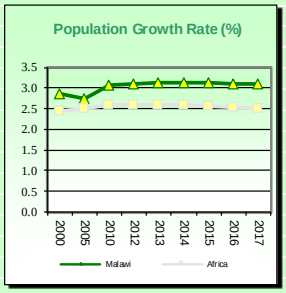
Appendix I. Country's comparative socio-economic indicators

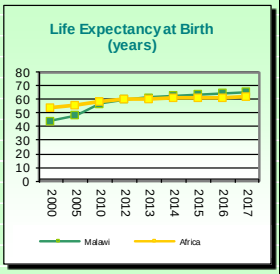
Malawi

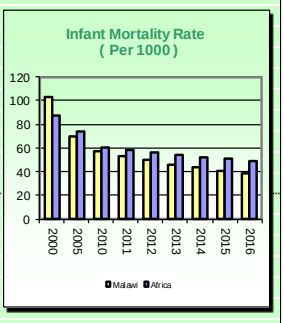
COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Malawi	Africa	Develo-ping Countries	Develo-ped Countries
Basic Indicators					
Area ('000 Km²)	2017	118	30,067	80,386	53,939
Total Population (millions)	2017	18.3	1,184.5	5,945.0	1,401.5
Urban Population (% of Total)	2017	16.7	39.7	47.0	80.7
Population Density (per Km²)	2017	194.1	40.3	78.5	25.4
GNI per Capita (US $)	2016	320	2 045	4 226	38 317
Labor Force Participation *- Total (%)	2017	81.1	66.3	67.7	72.0
Labor Force Participation **- Female (%)	2017	81.5	56.5	53.0	64.5
Sex Ratio (per 100 female)	2017	99.8	0.801	0.506	0.792
Human Develop. Index (Rank among 187 countries)	2015	170	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2010	70.9	39.6	17.0	...
Demographic Indicators					
Population Growth Rate - Total (%)	2017	3.1	2.6	1.3	0.6
Population Growth Rate - Urban (%)	2017	4.1	3.6	2.6	0.8
Population < 15 years (%)	2017	44.7	41.0	28.3	17.3
Population 15-24 years (%)	2017	20.4	3.5	6.2	16.0
Population >= 65 years (%)	2017	3.4	80.1	54.6	50.5
Dependency Ratio (%)	2017	92.9	100.1	102.8	97.4
Female Population 15-49 years (% of total population)	2017	23.3	24.0	25.8	23.0
Life Expectancy at Birth - Total (years)	2017	65.5	61.2	68.9	79.1
Life Expectancy at Birth - Female (years)	2017	66.4	62.6	70.8	82.1
Crude Birth Rate (per 1,000)	2017	37.7	34.8	21.0	11.6
Crude Death Rate (per 1,000)	2017	6.9	9.3	7.7	8.8
Infant Mortality Rate (per 1,000)	2016	38.9	52.2	35.2	5.8
Child Mortality Rate (per 1,000)	2016	55.1	75.5	47.3	6.8
Total Fertility Rate (per woman)	2017	4.9	4.6	2.6	1.7
Maternal Mortality Rate (per 100,000)	2015	634.0	411.3	230.0	22.0
Women Using Contraception (%)	2017	59.8	35.3	62.1	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2009	1.8	46.9	118.1	308.0
Nurses and midwives (per 100,000 people)	2009	33.6	133.4	202.9	857.4
Births attended by Trained Health Personnel (%)	2016	89.8	50.6	67.7	...
Access to Safe Water (% of Population)	2015	90.2	71.6	89.1	99.0
Access to Sanitation (% of Population)	2015	41.0	51.3	57	69
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2016	9.2	39.4	60.8	96.3
Incidence of Tuberculosis (per 100,000)	2016	159.0	3.8	1.2	...
Child Immunization Against Tuberculosis (%)	2016	86.0	245.9	149.0	22.0
Child Immunization Against Measles (%)	2016	81.0	84.1	90.0	...
Underweight Children (% of children under 5 years)	2014	16.7	76.0	82.7	93.9
Prevalence of stunding	2014	42.4	20.8	17.0	0.9
Prevalence of undernourishment (% of pop.)	2015	25.9	2 621	2 335	3 416
Public Expenditure on Health (as % of GDP)	2014	6.0	2.7	3.1	7.3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2016	139.3	106.4	109.4	101.3
Primary School - Female	2016	141.3	102.6	107.6	101.1
Secondary School - Total	2016	37.4	54.6	69.0	100.2
Secondary School - Female	2016	35.3	51.4	67.7	99.9
Primary School Female Teaching Staff (% of Total)	2015	42.0	45.1	58.1	81.6
Adult literacy Rate - Total (%)	2015	62.1	61.8	80.4	99.2
Adult literacy Rate - Male (%)	2015	69.8	70.7	85.9	99.3
Adult literacy Rate - Female (%)	2015	55.2	53.4	75.2	99.0
Percentage of GDP Spent on Education	2016	4.7	5.3	4.3	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2015	40.3	8.6	11.9	9.4
Agricultural Land (as % of land area)	2015	61.4	43.2	43.4	30.0
Forest (As % of Land Area)	2015	33.4	23.3	28.0	34.5
Per Capita CO2 Emissions (metric tons)	2014	0.1	1.1	3.0	11.6









Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports. *last update : May 2018*

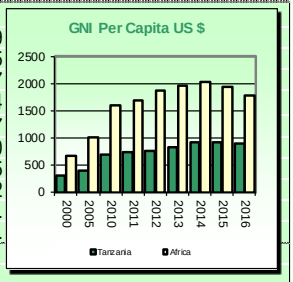
*Note : n.a. : Not Applicable ; ... : Data Not Available. * Labor force participation rate, total (% of total population ages 15+)*

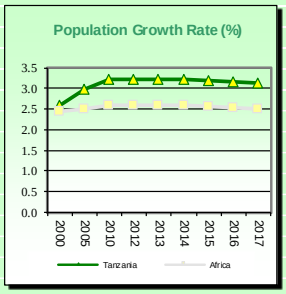
*** Labor force participation rate, female (% of female population ages 15+)*

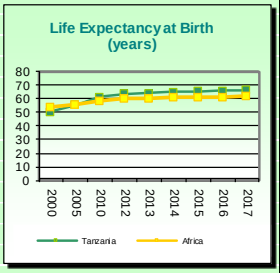
Tanzania

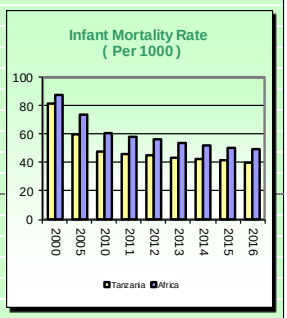
COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Tanzania	Africa	Develo-ping Countries	Develo-ped Countries
Basic Indicators					
Area ('000 Km²)	2017	947	30,067	80,386	53,939
Total Population (millions)	2017	56.9	1,184.5	5,945.0	1,401.5
Urban Population (% of Total)	2017	32.2	39.7	47.0	80.7
Population Density (per Km²)	2017	64.2	40.3	78.5	25.4
GNI per Capita (US $)	2016	900	2 045	4 226	38 317
Labor Force Participation *- Total (%)	2017	78.5	66.3	67.7	72.0
Labor Force Participation **- Female (%)	2017	74.0	56.5	53.0	64.5
Sex Ratio (per 100 female)	2017	98.9	0.801	0.506	0.792
Human Develop. Index (Rank among 187 countries)	2015	151	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2011	49.1	39.6	17.0	...
Demographic Indicators					
Population Growth Rate - Total (%)	2017	3.1	2.6	1.3	0.6
Population Growth Rate - Urban (%)	2017	5.2	3.6	2.6	0.8
Population < 15 years (%)	2017	45.0	41.0	28.3	17.3
Population 15-24 years (%)	2017	19.2	3.5	6.2	16.0
Population >= 65 years (%)	2017	3.2	80.1	54.6	50.5
Dependency Ratio (%)	2017	93.2	100.1	102.8	97.4
Female Population 15-49 years (% of total population)	2017	23.1	24.0	25.8	23.0
Life Expectancy at Birth - Total (years)	2017	66.4	61.2	68.9	79.1
Life Expectancy at Birth - Female (years)	2017	67.7	62.6	70.8	82.1
Crude Birth Rate (per 1,000)	2017	37.6	34.8	21.0	11.6
Crude Death Rate (per 1,000)	2017	6.4	9.3	7.7	8.8
Infant Mortality Rate (per 1,000)	2016	40.3	52.2	35.2	5.8
Child Mortality Rate (per 1,000)	2016	56.7	75.5	47.3	6.8
Total Fertility Rate (per woman)	2017	5.0	4.6	2.6	1.7
Maternal Mortality Rate (per 100,000)	2015	398.0	411.3	230.0	22.0
Women Using Contraception (%)	2017	40.7	35.3	62.1	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2014	2.2	46.9	118.1	308.0
Nurses and midwives (per 100,000 people)	2014	41.6	133.4	202.9	857.4
Births attended by Trained Health Personnel (%)	2016	63.7	50.6	67.7	...
Access to Safe Water (% of Population)	2015	55.6	71.6	89.1	99.0
Access to Sanitation (% of Population)	2015	15.6	51.3	57	69
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2016	4.7	39.4	60.8	96.3
Incidence of Tuberculosis (per 100,000)	2016	287.0	3.8	1.2	...
Child Immunization Against Tuberculosis (%)	2016	99.0	245.9	149.0	22.0
Child Immunization Against Measles (%)	2016	90.0	84.1	90.0	...
Underweight Children (% of children under 5 years)	2011	13.6	76.0	82.7	93.9
Prevalence of stunding	2011	34.8	20.8	17.0	0.9
Prevalence of undernourishment (% of pop.)	2015	32.3	2 621	2 335	3 416
Public Expenditure on Health (as % of GDP)	2014	2.6	2.7	3.1	7.3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2015	80.7	106.4	109.4	101.3
Primary School - Female	2015	82.0	102.6	107.6	101.1
Secondary School - Total	2013	31.7	54.6	69.0	100.2
Secondary School - Female	2013	30.3	51.4	67.7	99.9
Primary School Female Teaching Staff (% of Total)	2014	51.5	45.1	58.1	81.6
Adult literacy Rate - Total (%)	2015	77.9	61.8	80.4	99.2
Adult literacy Rate - Male (%)	2015	83.2	70.7	85.9	99.3
Adult literacy Rate - Female (%)	2015	73.1	53.4	75.2	99.0
Percentage of GDP Spent on Education	2014	3.5	5.3	4.3	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2015	15.2	8.6	11.9	9.4
Agricultural Land (as % of land area)	2015	44.8	43.2	43.4	30.0
Forest (As % of Land Area)	2015	52.0	23.3	28.0	34.5
Per Capita CO2 Emissions (metric tons)	2014	0.2	1.1	3.0	11.6









Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports. *last update : May 2018*

*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+)*

Appendix II. Table of ADB's portfolio in Tanzania and Malawi

Tanzania ADB Projects Portfolio

SN	SECTOR	SOURCE OF FINANCE	APPROVAL DATE	CLOSING DATE	APPROVED AMOUNT	DISBURSED AMOUNT (MUA)	DISB RATE (%)	AGE (Yrs)
	TANZANIA: PORTFOLIO BASIC DATA, 31 MARCH 2018							
	A. NATIONAL OPERATIONS:							
	AGRICULTURE							
1	Marketing Infrastructure, Value Addition and Rural Finance Program	ADF Loan	29-Jun-2011	30-Sep-2018	40.00	35.68	89.2	6.8
2	Agriculture Development Bank	ADF Loan	13-Dec-2016	31-Dec-2018	67.27	33.64	50.0	1.3
	SUB-TOTAL				**107.27**	**69.32**	64.6	**4.05**
	TRANSPORT							
3	Tanzania Road Sector Support Project I	ADF Loan	2-Dec-2009	15-Dec-2018	152.00	134.87	88.73	8.3
4	Tanzania Road Sector Support Project II	ADF Loan	5-Apr-2012	31-Dec-2018	140.00	120.71	86.22	5.9
5	Dar es Salaam Rapid Bus Transit Project	ADB Loan	30-Sep-2015	31-Dec-2020	71.60	0.86	1.20	2.5
		AGTF Loan	30-Sep-2015	31-Dec-2020	32.60	0.20	0.62	2.5
6	Transport Sector Support Program	ADB Loan	26-Nov-2015	30-Oct-2021	199.20	15.23	7.65	2.4
		ADF Loan	26-Nov-2015	30-Oct-2021	54.00	4.49	8.31	2.4
	SUB-TOTAL				**649.40**	**276.36**	**42.56**	**4.78**
	WATER SUPPLY/SANITATION							
7	Zanzibar Urban Water & Sanitation	ADF Loan	19-Dec-2012	31-Dec-2018	14.00	6.86	49.00	5.3
8	Arusha Urban Water Supply Improvement Porject	ADB Loan	16-Sep-2015	31-Dec-2020	105.60	3.43	3.24	2.5
		ADF Loan	16-Sep-2015	31-Dec-2020	18.00	2.10	11.67	2.5
		AGTF Loan	16-Sep-2015	31-Dec-2020	30.90	0.59	1.91	2.5
	SUB-TOTAL				**168.50**	**12.97**	**7.70**	**3.90**
	ENERGY							
9	Iringa-Shinyanga Transmission Line	ADF Loan	26-Oct-2010	31-Oct-2018	45.36	24.50	54.01	7.4
10	Scaling-Up Renewable Energy Program	SCF Grant	20-Dec-2013	30-Jun-2018	0.50	0.50	100.53	4.3
	SUB-TOTAL				**45.86**	**25.00**	**54.52**	**5.85**
	SOCIAL							
11	Alternative Learning and Skills Development	ADF Loan	29-Jun-2011	15-Dec-2018	15.00	5.17	34.47	6.8
12	Support to Technical Vocational Education and Training & Teacher Education	ADF Loan	2-Apr-2014	31-Dec-2019	34.00	3.10	9.12	4.0
	SUB-TOTAL				**49.00**	**8.27**	**16.88**	**5.40**
	MULTISECTORAL							
13	Institutional Support Project for Good	ADF Loan	3-Feb-2016	31-Dec-2018	12.00	4.02	33.50	2.2
14	Institutional Support Project for DRM and Natural Resources Governance	ADF Loan	31-Mar-2017	31-Dec-2019	19.58	0.21	1.07	1.1
15	Kikonge Multipurpose Dam, HEP and Irrigation Feasiblitv Studv	TF	27-Jun-2016	31-Dec-2018	1.60	0.00	0.0	1.8
16	Humanitarian Emmergency Assistance for Kagera	ADF Grant	12-Jan-2017	31-Mar-2018	0.70	0.70	100.00	1.3
	SUB TOTAL				33.88	4.93	14.55	1.28
	FINANCE							
17	TZS Line of Credit to FNB Subsidiary in TZ	ADB Loan	12-Dec-2012	31-Dec-2017	31.05	14.32	46.12	5.2
18	Line of Credit to CRDB Bank Ltd	ADB Loan	18-May-2016	1-Aug-2024	11.00	0.00	0.00	1.9
	Line of Credit to CRDB Bank Ltd	ADB Loan	18-May-2016	30-Nov-2017	88.20	66.15	75.00	1.9
	SUB-TOTAL				**130.25**	**80.47**	**61.78**	**2.37**
	NATIONAL Operations				**1184.16**	**477.33**	**40.31**	**4.60**
	B. MULTINATIONAL OPERATIONS:							
19	Arusha-Holili/Taveta-Voi Road Project	ADF Loan	16-Apr-2013	31-Dec-2018	79.90	37.74	47.2	5.0
20	Regional Rusumo Hydropower	ADF Loan	27-Nov-2013	31-Aug-2019	22.41	0.86	3.84	4.4
21	EAC Centres of Excellence for Skills and Tertiary Education	ADF Loan	3-Oct-2014	31-Dec-2019	6.25	0.97	15.52	3.4
22	Kenya -Tanzania Interconnection	ADF Loan	18-Feb-2015	31-Dec-2019	75.29	10.34	13.73	3.1
23	Lake Victoria Maritime and Transport Project	ADF Loan	24-Oct-2016	31-Dec-2019	3.77	0.00	0.00	1.5
	SUB TOTAL				**187.62**	**49.91**	**26.60**	**3.5**
	NATIONAL + MULTINATIONAL				**1371.8**	**527.2**	**38.4**	**3.9**

Malawi ADB Projects Portfolio As at end of December 2017

#	Project Name	Approval Date	Effective 1st Disbursement Date	Final Disb Date	Amount Approved	Disbursed Amount	Disbursement Rate	Age (years)	IP (Impl.Progress)	DO (Dev. Objectives)	Overall Performance Status
	AGRICULTURE SECTOR				**71,654,986**	**48,604,068**	**67.83**	**3.5**			
1	FOOD CRISIS RESPONSE BUDGET SUPPORT PROGRAMME	11/11/2016	12/29/2016	31.12.2017	12,000,000	11,809,045	98.41	1.1	3	3	NPPP
2	SMALLHOLDER IRRIGATION AND VALUE ADDITION PROJECT (SIVAP/FUN	3/13/2013	10/4/2013	31.12.2018	253,000	212,069	83.82				
	SMALLHOLDER IRRIGATION AND VALUE ADDITION PROJECT (SIVAP/FUN	3/13/2013	10/4/2013	31.12.2018	28,036,986	21,350,318	76.15	4.8	3	3	NPPP
3	FEASIBILITY STUDY ON THE ESTABLISHMENT OF AN AGRICULTURE COO	12/11/2015	8/23/2016	30.04.2018	365,000	30,689	8.41	2.0			
4	AGRICULTURE DEVELOPMENT PROGRAMME - ISP	9/9/2009	9/20/2010	30.05.2017	15,000,000	14,995,500	99.97	8.3	2.54	2	NPP/NPPP
5	AGRICULTURAL INFRASTRUCTURE AND YOUTH AGRIBUSINESS PROJECT	9/28/2016	3/21/2017	30.06.2022	16,000,000	206,447	1.29	1.2			
	TRNASPORT SECTOR				**64,250,000**	**18,843,148**	**29.33**	**4.39**			
6	MZUZU-NKHATA BAY ROAD REHABILITATION PROJECT NACALA ROAD CORRI	3/13/2013	2/13/2014	31.12.2018	21,890,000	12,205,864	55.76	4.76			
7	NACALA ROAD CORRIDOR PROJECT PHASE IV (LIWONDE-MANGOCHI) MA	12/3/2013	3/26/2015	31.12.2018	42,360,000	6,637,284	15.67	4.03			
	WATER SUPPL/SANIT				**37,153,146**	**8,831,666**	**23.77**	**2.58**			
8	SUSTAINABLE RURAL WATER AND SANITATION INFRASTRUCTURE FOR IM and	4/30/2014	5/20/2015	31.12.2019	15,000,000	3,346,500	22.31				
	SUSTAINABLE RURAL WATER AND SANITATION INFRASTRUCTURE FOR IM	4/30/2014	5/20/2015	31.12.2019	5,000,000	3,474,000	69.48		3	3	
	SUSTAINABLE RURAL WATER AND SANITATION INFRASTRUCTURE FOR IM	4/30/2014	6/10/2015	31.12.2019	2,873,304	1,332,926	46.39	3.62			NPPP
9	MZIMBA INTEGRATED URBAN WATER AND SANITATION PROJECT	10/23/2015	2/25/2016	31.12.2019	3,600,000	678,240	18.84	2.13	3	3	
	MZIMBA INTEGRATED URBAN WATER AND SANITATION PROJECT	12/18/2015	3/9/2016	31.12.2020	10,679,842	0	0.00	1.98			NPPP
	POWER SECTOR				**2,000,000**	**1,733,414**	**86.67**	**4.72**			
10	KOLOMBIDZO HYDRO POWER PROJECT FEASIBILITY STUDY	3/25/2013	12/3/2013	31.12.2017	2,000,000	1,733,414	86.67	4.72			
	SOCIAL SECTOR				**45,270,071**	**25,724,922**	**56.83**	**4.29**			
11	SUPPORT TO HIGHER EDUCATION SCIENCE & TECHNOLOGY & TECHNICAL, JOBS	2/8/2012	7/23/2012	30.06.2018	9,050,000	6,298,500	69.60				
	SUPPORT TO HIGHER EDUCATION SCIENCE & TECHNOLOGY & TECHNICAL	2/8/2012	7/23/2012	30.06.2018	10,950,000	7,315,695	66.81	5.85			
	SUPPORT TO HIGHER EDUCATION SCIENCE & TECHNOLOGY & TECHNICAL	2/8/2012	7/23/2012	30.06.2018	6,500,000	3,554,200	54.68		3	3	NPPP
12	COMPETITIVENESS AND JOB CREATION SUPPORT PROJECT	12/16/2011	6/26/2012	31.12.2017	10,000,000	8,355,000	83.55	6.00	3	3	NPPP
13	JOBS FOR YOUTH MALAWI	12/7/2016	6/1/2017	31.12.2020	7,520,000	119,415	1.59				
	JOBS FOR YOUTH MALAWI	12/7/2016	6/1/2017	31.12.2020	1,250,071	82,112	6.57	1.01			
	MULTI_SECTOR				**6,324,141**	**3,698,975**	**58.49**	**1.85**			
14	PUBLIC FINANCE MANAGEMENT INSTITUTIONAL SUPPORT PROJECT	10/8/2013	3/24/2014	31.12.2017	2,980,000	2,695,319	90.45	4.18	3	3	PPP
15	PUBLIC FINANCE MANAGEMENT INSTITUTIONAL SUPPORT PROJECT-PHA	9/10/2015	12/2/2015	30.09.2018	1,860,000	1,003,656	53.96	2.25	3	3	NPPP
16	MALAWI NACALA RAIL AND PORT VALUE ADDITION PROJECT	5/23/2017		31.12.2020	719,181		0.00	0.55			
17	2016 MALAWI ECONOMIC CENSUS	7/5/2017			764,960		0.00	0.43			
	TOTAL				**226,652,344**	**107,436,193**	**47.40**	**3.55**	**3**	**3**	

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

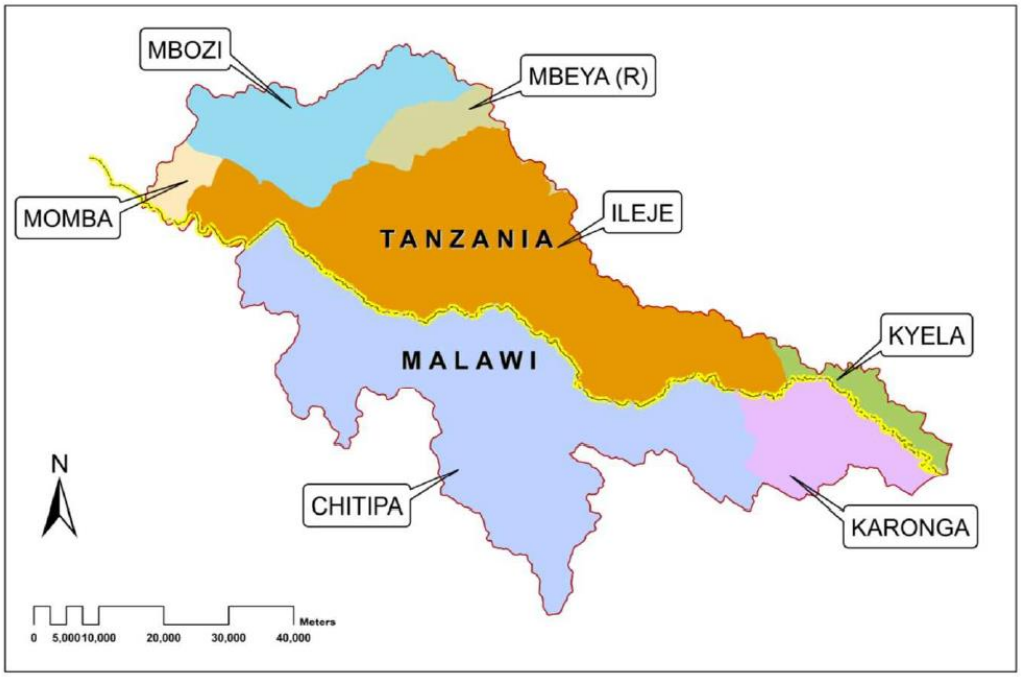
Appendix III. Key related projects financed by the Bank and other development partners

III.2.1. During project preparation several related projects have been identified of which two were deemed key related. The first is "Scaling up of Modernized Climate Information and Early Warning Systems in Malawi". This project was approved for funding by the Green Climate Fund in 2015. This project will be linked to the GEF component 2 (FEWS) and the GEF component 4 (MIS). There are many similarities and possible linkages. Expansion of networks that generate climate-related data and dissemination platforms and products are important outputs of project. These ensure fact- and data-based disaster management, similar to the needs in the Songwe River Basin. In this project the platforms and products are linked to capacity building. Furthermore the project focusses on climate risk management on a community level. Important lessons can be learnt about choosing the appropriate communication media and adequate messaging to communicate disaster warnings for different sectors and communities.

III.2.3 Another initiative with which this project will connect is the Zambezi Watercourse Commission (Zamcom). The Songwe river basin is part of the larger Zambezi river basin. The Zambezi Water Resources Information System (ZAMWIS) presents all gauging, water level and rainfall stations within the Zambezi river basin. For the Songwe river basin the gauging station and rainfall station at Mwandenga are included. Other river level, gauging and rainfall stations in the Songwe river basin are not included in the ZAMWIS. The Management Information System (MIS) of the SRBC shall be compatible (able to exchange data) with the ZAMWIS and knowledge exchange and collaboration activities are foreseen between the SRBC and Zamcom.

Appendix IV. Map of the Project Area

Songwe River Basin with District Boundaries



AFRICAN DEVELOPMENT BANK AFRICAN DEVELOPMENT FUND

BOARDS OF DIRECTORS

Resolution N° B/Z1/2019/31 - F/Z1/2019/18

Adopted by the Boards of Directors of the Bank and the Fund on a lapse-of-time basis, on 17 May 2019

Grant to the Republic of Malawi from the Resources Approved by the Global Environment Facility, to Finance Part of the Costs of the Strengthening Transboundary Cooperation and Integrated Natural Resources Management in the Songwe River Basin

THE BOARDS OF DIRECTORS,

HAVING REGARD to: (i) Articles 1, 2, 10, 12, 13, 17, 32 and 37 of the Agreement Establishing the African Development Bank (the "Bank"); (ii) Articles 1, 2, 11, 12, 13, 14, 15, 16, 26 and 30 of the Agreement Establishing the African Development Fund (the "Fund"); (iii) the Memorandum of Understanding dated 9 February 2005 between the Bank, the Fund and the Secretariat of the Global Environment Facility (the "GEF") (the "MOU"); (iv) the Financial Procedures Agreement between the Bank and the International Bank for Reconstruction and Development as Trustee of the GEF, dated 30 June 2010, as amended (the "FPA"); and (v) the grant proposal contained in document ADB/BD/WP/2019/95/Approval - ADF/BD/WP/2019/63/Approval (the "Appraisal Report");

RECALLING:

(i) That the GEF was established to provide funding for projects designed to improve the global environment; and

(ii) That pursuant to the MOU and the FPA, the Bank is one of the GEF executing agencies;

NOTING that the GEF Chief Executive Officer in a letter dated 26 September 2018 endorsed a proposal or a grant of an amount not exceeding Six Million, Three Hundred and Ninety-Two Thousand, Six Hundred and Ninety-Four United States Dollars (USD 6,392,694) out of the resources of the GEF Trust Fund, to the Republic of Malawi, to finance part of the costs of the Strengthening Transboundary Cooperation and Integrated Natural Resources Management in the Songwe River Basin (the "Project");

HEREBY DECIDE as follows:

1. To award to the Republic of Malawi, (the "Recipient"), from the resources approved by GEF, a grant of an amount not exceeding Six Million, Three Hundred and Ninety-Two Thousand, Six Hundred and Ninety-Four United States Dollars (USD 6,392,694) (the "Grant") to finance part of the costs of the Project;

2. That procurement of goods, services and works using the proceeds of the Grant shall be open to all countries including those that are not Member States of the Bank;

3. To authorize the President to conclude a protocol of agreement amongst the Bank, the Fund and the Recipient (the "Protocol of Agreement") on terms and conditions specified in the

General Conditions Applicable to Protocols of Agreement for Grants of the African Development Fund, the MOU, the FPA and the Appraisal Report;

4. The President may cancel the Grant if the Protocol of Agreement is not signed within ninety (90) days from the date of approval by these Boards; and

5. This Resolution shall become effective on the date above-mentioned.