Cover Page for Project Funding Approval Request

PILOT PROGRAM FOR CLIMATE RESILIENCE

			RESILIENCE PROGRAM OVAL REQUEST							
1. Country/Region:	Malawi		2. CIF Project ID#	: (Trustee will assign ID)						
3. Project Title:				sed Climate Resilient Water						
4. Indicate Track*:	-	n Northeri	n Malawi (Nkhata Ba	ay, Rumphi, and Chitipa)						
4. Illuicate Hack .	Security in Northern Malawi (Nkhata Bay, Rumphi, and Track 1C Grant: USD 760,000									
5. Funding Request from PPCR (in	_			•						
USD) including PPG:			Non-Grant:	0.00						
oos, meioding i i ei	Amount a	llocated f	Total:	USD 760,000						
6. Implementing MDB:	African De									
7. Other MDB Involvement	MDB: N/A	•	iit Daiik	Type of Involvement:						
8. National/[Regional] PPCR Focal	-		Ministry of Finance	Type of involvement.						
Point, if applicable:	msowoya	•	•							
9. National/[Regional] Executing	Ministry o	of Irrigatio	n and Water Develo	pment and Northern						
Agency ¹ for project:	Region W	ater Board	d							
	,		? Focal Point:	TTL: Lazarus Botomani						
10. MDB PPCR Focal Point and Task	Leandro A	-		Phiri, <u>l.phiri@afdb.org</u>						
Team Leader (TTL):	l.azevedo			Co-TTL: Emmanuel Olet,						
44 Project Promistion and Instiffed			harris@afdb.org	e.olet@afdb.org						
11. Project Description and Justificat	ion for Fun	aing:								
Project Description The proposed project seeks to develop a comprehensive Climate Resilient Water Security Framework that will enable a series of related water sector interventions. Malawi completed its Strategic Program for Climate Resilience in 2017. However, significant technical assistance is required to ensure that the strategic investment areas endorsed for the country's climate resilience vision achieve an adequate level of sectoral and regional readiness. The African Development Bank is prepared to support these activities in order to advance the priorities of Malawi's SPCR in the water sector for the northern region of the country.										
12. Objective:										
The objective is to strengthen the reyouth, in Northern Malawi (Nkhata Resilient Water Security Framewor interventions will aim to: (i) Increase planning, processes, and intervent community livelihood systems by management; (iii) Enhance learning techniques, such as marker ridges consharing on integration of climate resiliand information management for sustain	Bay, Rump k that will e the resilions for starengther by training onstructed lience into versioned clim	hi, and Clenable action and clear the community accommunity accossible the community account accossible the community account	hitipa) by developing series of related indscapes by integrated water security; reapacity in climating of security; and (iv) Enhan	ing a comprehensive Climate interventions. The related ating climate resilience into (ii) Increase resilience of ate-smart water resources oil and water conservation etiver grass; and knowledge						
13. Is the proposed TA/Project linked										
ongoing MDB project or an MDB	project	Yes 🛛		No □						
under preparation?	under preparation?									

¹ This can be a Government agency or a private sector firm.

14. If yes, which project is it linked to and	The project is linked to the ongoing Nkhata Bay Town					
what is the project status (ongoing/under preparation)? Water and Sanitation Project, the objective of vimprove the health and livelihoods of the rendered Nkhata Bay Town and surrounding areas increased access to potable and sustainable was and improved sanitation services. Details on the project are included in section V of the proposal The project has a 4-year implementation period January 2019, with financing of UA10.5 million million) from ADF Grant, UA8.344 million (Umillion) loan from OPEC Fund for Interpretation Development (OFID) being administered by AUA2.399 million (USD 3.30 million) from Gove Malawi as its counterpart contribution.						
15. Expected Date of MDB Approval:	January 2021					
16. Expected Outcomes:						
 (a) Enhanced climate resilient designs of Water planned water sector interventions (b) Increased institutional capacity for climate r (c) Improved community awareness and uptaken 	e of climate-smart water resources management					
17. Key Results and Indicators for Success (cons	-					
Result (a) Improved water security in the face of climate change and climate variability (b) Strengthened government capacity in	 Number of gender-responsive, climate-resilient tools or instruments developed (Target: 1 water security framework) Number of government officials trained in climate 					
climate risk management for water security	risk management for water security (Indicative target: 100, at least 50% of women)					
(c.i) Increased resilience of community livelihoods systems	 Number of people supported (women/men) to cope with the effects of climate change and climate variability (Indicative target: 25,000 people, at least 50% women) 					
(c.ii) Communities sensitized to climate change's impact on water management	 Number of people trained on climate resilient soil and water conservation technologies (women/men) (Indicative target: 2000, at least 50% women) Proportion of beneficiaries (women/men) reporting that they are satisfied with the enhancement of their technical knowledge on land and/or water resource usage (Means of Verification: beneficiary satisfaction assessments; Indicative target: 80% men and women) Proportion of women and/or women's groups participating in user management committee (Indicative target: At least 50% women) 					
18. Budget:						
Expenditures ²	Amount (USD) - estimates					

Expenditure categories should be provided by the MDBs based on own procedures.

Consultants for strengthening Climate

Resilient Landscape Management³

450,000

One firm will be procured. This is given the varying expertise required and spatial extent of the assignment. The Consultant will also support the Executing Agency, and train and build the capacity of the District Councils who will in turn train the local communities. All community level interventions will be undertaken/facilitated by the District Councils.

Workshops/seminars towards Strengthened	240,000						
livelihood-based climate-resilient water							
resources management and documentation,							
dissemination and uptake of lessons learned ⁴							
Contingencies (max. 10%)	70,000						
Operational Costs. MDB Project	38,000						
Implementation Service Fees							
Total Cost	798,000						
Co-Financing⁵:	Amount (USD million):	Type of contribution:					
Government	USD 3.30 million	Counterpart contribution					
• MDB	USD 14.4 million	ADF Loan					
Private Sector							
Others (please specify)	USD 11.48 million	OFID Loan					
Co-Financing Total	USD 29.18						

19. Project Timeframe

February 2021 – July 2022 (18 months)

20. Role of other Partners involved in project⁶:

<u>Government of Malawi – Recipient of Grant</u>

The Ministry of Irrigation and Water Development / Northern Region Water Board — Executing Agency NRWB will execute the project in cooperation with the Ministry of Natural Resources and Environmental Affairs. The NRWB will be responsible for the timely delivery of inputs and outputs and for coordination of all other stakeholders, including other relevant agencies and local government authorities. NRWB will appoint a Project Coordinator who will manage a Project Coordination Unit (PCU)

21. Implementation Arrangements (incl. procurement of goods and services):

The recipient of the Technical Assistance Grant will be the GoM through Ministry of Finance, Economic Planning and Development (MoFEPD), and the MoAIWD and the NRWB will be the Executing Agencies (EA). The Project has a Task Force that coordinates activities with the various agencies of the Government and provides guidance to project implementation.

<u>Procurement Arrangements.</u> Procurement will be carried out by the Executing Agency, MoAIWD, in line with the Nkhatabay Town Water Supply and Sanitation Project procurement arrangements. For each contract to be financed by the Grant, the different procurement methods or consultant selection methods; estimated costs; prior-review requirements; and time frame that have been agreed between the Grantee and the Bank will be provided in the updated Procurement Plan for the project.

<u>Financial Management.</u> Financial management for the grant will be similar to the initial Nkhatabay Town Water and Sanitation Project arrangement. The NRWB, as the Project Executing Agency, shall continue to coordinate project implementation and manage the specific activities and financial management including planning and budgeting, record keeping, accounting and reporting.

<u>Monitoring and Evaluation.</u> The Monitoring and Evaluation Plan will be consistent with that of the original project but will further include results monitoring and reporting to the CIF. The Executing Agency will prepare progress reports on a quarterly basis, which will highlight the progress towards meeting the project's targets as reflected in the project result-based logical framework. Additionally, a terminal evaluation will be conducted before project closure.

22. Other Information:

*Track 1A: Develop innovative private sector initiatives with a climate resilience focus (maximum \$5 million)

Track 1B: Support Technical Assistance for Ministries of Finance, Planning and other key line ministries, to mainstream climate risk management and resilience into economic planning and development (maximum \$1 million)

Track 1C: Provide project preparation grants for projects identified in SPCRs which remain unfunded and/or critical technical assistance grants to pursue the objectives of the SPCRs of PPCR pilot countries. (maximum \$1 million)

⁴ This will cater for the extensive stakeholder consultations and feedback sessions to facilitate and ensure the preparation of an inclusive climate resilient water security framework.

⁵ This includes in-kind contributions (monetary value), MDB loan or grant, parallel financing, etc.

Other local, national and international partners to be involved in implementation of the project.

AFRICAN DEVELOPMENT BANK GROUP



WATER DEVELOPMENT AND SANITATION DEPARTMENT

CLIMATE INVESTMENT FUNDS – PPCR BUSINESS DEVELOPMENT FOR RESILIENCE PROGRAM

Technical Assistance Proposal for Catchment-Based Climate Resilient Water Security in Northern Malawi

(Nkhata Bay, Rumphi, and Chitipa)

OCTOBER 2020

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1. INTRODUCTION

Malawi is a land-locked country located in south-eastern Africa along a section of the East African Rift Valley. The country covers a total geographical area of 118,480 km² and shares borders with Mozambique, Tanzania and Zambia. The major physiographic regions of the country are the Nyika and Viphya Plateau in the north, the plains of the central region and the Shire Highlands in the south. Between these high plateau areas and the lakeshore zone below lies the Escarpment zone traversed by numerous rivers and streams. About 20% of the country is covered by surface water resources dominated by Lake Malawi (Lake Malawi, Malombe, Chilwa and Chiuta are the largest water bodies in Malawi).

Rainfall is the most important source of water resources in Malawi, where annual precipitation varies between 800 mm in low lying areas of the extreme south to well over 3000 mm in the highlands and the lakeshore areas of the extreme north. Consequently, water resources are at the center of Malawi's socioeconomic development - key sectors including agriculture, tourism, transport, and fisheries, among others, are largely dependent on the availability of water resources. Climate change is expected to result in rainfall variability across the region, further increasing the risk of water shortages. Water security in Malawi is compromised by a highly variable climate with significant inter-annual and intra-annual variability. Water stress could therefore undermine the achievement of key development goals, such as the SDG targets on access to water and sanitation.

With support from the Climate Investment Funds (CIF), Malawi completed its Strategic Program for Climate Resilience in 2017. However, significant technical assistance is still needed to ensure that the strategic investment areas endorsed for the country's climate resilience vision achieve an adequate level of sectoral and regional readiness. The African Development Bank is prepared to support these activities in order to advance the priorities of Malawi's SPCR in the water sector for the northern region of the country.

The technical assistance is linked to a baseline project, the ongoing Nkhata Bay Town Water and Sanitation Project, the objective of which is to improve the health and livelihoods of the residents of Nkhata Bay Town and surrounding areas through increased access to potable and sustainable water supply and improved sanitation services. The baseline project's main outcomes and targets are: (i) increased percentage of people with access to potable water from 37% to 90%; (ii) increased percentage of people having improved access to basic sanitation from 45% to 85% and (iii) sustained availability of reliable water. The project was identified as Category 2 (AfDB, Climate Safeguards system), potentially vulnerable to climate risk, which could have a bearing on asset performance and sustainability of intended outcomes. The main climate concerns relate to increased intensity and frequency of extreme events. Structural measures proposed to address the potential negative impacts of flooding and excessive rise in lake water levels include locating critical infrastructure such as the treatment plant in a vicinity that is most likely to avoid damage from inundation. Water conservation and catchment protection activities are also integrated into the project design.

The Northern Region Water Board (NRWB), which is the implementing agency for the baseline project, however, doesn't have adequate institutional capacity to deal with climate risks, which is a key barrier to achieving water security. This is made worse by inadequate databases, tools and information systems, which are unable to factor the risks of climate change into the design of both the "hard" and "soft" infrastructural foundation (Malawi SPCR 2017).

The proposed technical assistance therefore seeks policy level support to mainstream climate adaptation into water sector investments beyond the scope of the baseline operation through the preparation of a

comprehensive Climate Resilient Water Security Framework. The support will also strengthen participatory processes with local stakeholders, as well as institutional capacity and resilience of communities, particularly women and the youth, in Northern Malawi (Nkhata Bay, Rumphi, and Chitipa) to better anticipate and respond to climate-induced water insecurity.

2. STRATEGIC THRUST AND RATIONALE

2.1. Climate Rationale

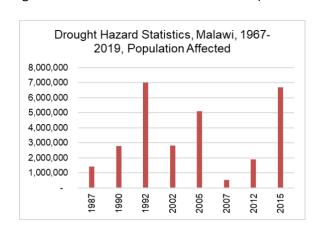
Climate impacts that the technical assistance will address

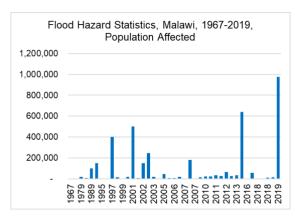
Malawi is particularly prone to adverse climate hazards that include dry spells, seasonal droughts, intense rainfall, riverine floods, and flash floods. The Malawi Climate Change Vulnerability Assessment (2013) notes that the impacts of climate change on water availability in Malawi have become evident - "erratic rains, extended dry periods, and increased evaporation have combined with population growth and increased water demand to rapidly turn Malawi's historical water abundance into water scarcity." Climate change, coupled with high population growth, rapid deforestation, and widespread soil erosion, poses a serious challenge to Malawi's predominantly agriculture- and fisheries-based economy. Increases in temperatures and increased variability and unpredictability of rainfall patterns lead to increased frequency and intensity of floods and droughts, which severely impact the ecosystems, agricultural landscapes, water services and livelihoods among the rural populations in Northern Malawi.

Vulnerability and risks of these impacts to human well-being

Droughts and floods, the most severe of these hazards, have increased in frequency, intensity, and magnitude over the past twenty years, with dire consequences on food and water security, water quality, energy resources, and the livelihoods of the most rural communities. The frequency of natural hazard characteristics for Malawi is shown in Figure 1.

Figure 1: Disaster hazard characteristics (data Source EM-DAT | The international disasters database)

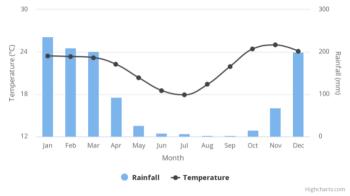




According to the Malawi Drought Post-Disaster Needs Assessment for the 2015- 2016 drought events, the water and sanitation sector experienced US\$11.8 million in damages and US\$ 7.4 million in losses. In the inland districts of Nkhata Bay, Rumphi and Chitipa, which lie in the rain shadow area of Viphya and Nyika Plateaus, the frequent droughts are due to erratic rainfalls. Water resource distribution varies dramatically both by season and by geographic region with almost 90% of the runoff in major rivers occurring between December and June. The impact of the droughts is felt severely during the dry months of July to October, when rivers and shallow wells used for drinking water dry up completely (Figure 2).

⁷ EM-DAT | The international disasters database.

Figure 2: Average monthly temperature and rainfall in Malawi from 1901-2016

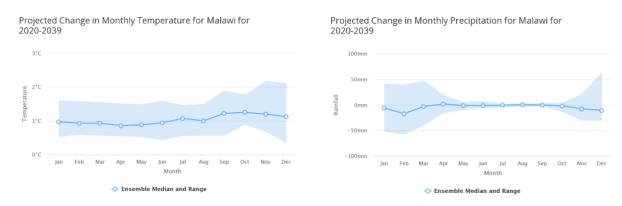


Floods often damage water infrastructure and contaminate ground and surface water sources in the region. The 2012/13 and 2014/15 floods damaged water pipe networks and boreholes in the districts of the Northern Region, leading to contaminated water supplies. In low-lying areas of the lakeshore, such as Karonga, Salima, Nkhotakota, Bwanje Valley, communities are subjected to frequent flooding with the resultant loss of animals and crops, and sometimes human life. Recurring floods lead to pollution of water sources and put vulnerable communities without access to clean water or sanitation at greater risk of vector-borne diseases like cholera. According to the Malawi Climate Change Vulnerability Assessment (2013) report, the increasing frequency and intensity of droughts and floods disrupts water availability, and quality. Water shortages also often occur during flood events when water pipes burst and dams silt⁸.

<u>Projected climate change impacts on the water infrastructure</u>

Increased drought due to higher temperatures (mean annual temperature is projected to increase by 1.1 to 3.0°C by the 2060s) and variable rainfall (Figure 3) are expected to lower water levels in Lake Malawi. Future projections suggest that by 2030, the north of the country will become more prone to flooding and the south to drought⁹. Changes in the seasonality of precipitation patterns may affect the reliable yields from surface water such as rivers. Direct changes in precipitation patterns and indirect changes in land use within the catchments could also negatively impact surface water and groundwater availability.

Figure 3: Projected changes in monthly temperature and precipitation information for Malawi for the period 2020-2039 for Representative Concentration Pathway (RCP) 4.5 (medium-low emission)(Ibid).



The institutional capacity to deal with the current or future climate risks in Malawi is limited. This is made worse by inadequate databases, tools and information systems, which are unable to factor the risks of

⁸ https://climateknowledgeportal.worldbank.org/country/malawi/impacts-water

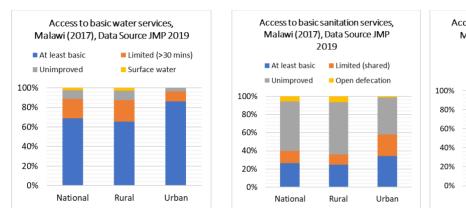
⁹ https://climateknowledgeportal.worldbank.org/country/malawi/climate-data-projections, accessed August 21, 2020

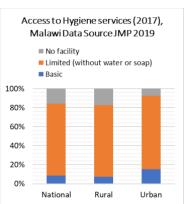
climate change into the design of both the "hard" and "soft" infrastructural foundation (Malawi SPCR, 2017). Establishing a Climate Resilient Water Security framework is thus a key response to addressing the uncertainties brought about by climate variability and change in the water sector. This is consistent with Malawi's SPCR, which emphasizes the importance of climate-smart water resource management, and the implementation of catchment conservation, as a priority area for a climate resilient future (SPCR, 63-64).

2.2. COVID-19 Rationale

Strengthening water security is essential for managing, preventing and combatting future pandemics. An urgent need exists for improved water forecasting and monitoring and management of supplies to guide the planning of water projects in response to accelerating climate change. Such planning is of particular importance for COVID-19, because allocation of water resources must prioritise those at greatest risk, such as communities in informal settings. According to the WHO/UNICEF Joint Monitoring report (2019)¹⁰, despite improvements, access to basic water services in Malawi remains at 69% (at National level); while access to basic sanitation has remained low at 26% (National) and access to basic hygiene services remains dismal at 9% (National). The low access rates to WASH services (Figure 4) create several challenges for combatting transmission of COVID-19 and preventing/suppressing future pandemics. In rural northern Malawi, for instance, many areas remain without boreholes because of the difficulty in finding good aquifers. As water usage increases to meet growing population needs, groundwater reserves are also being depleted due to unsustainable consumption and the effects of climate change.

Figure 4: Access to water, sanitation and hygiene services in 2017 (Data Source JMP, 2019)





Preparing for future pandemics will require sustainable supplies of acceptable quality water. This will involve supporting storage, supply and treatment solutions, and, resilient water management, as well as increasing affordable and sustainable access to WASH. Strengthening the resilience of WASH services and managing the links between upstream and downstream water resources and users, will therefore contribute towards saving lives in the short term and protecting populations from the health impacts of climate change in the medium to longer term, in addition to the impacts of climate shocks more generally.

2.3. Social, Environmental, and Governance Issues

The social and economic burden of inadequate WASH lies disproportionately on women and the youth (e.g. lost opportunities for work or education due to water collection tasks) in more than 88% of Malawian households. These inequalities may make it harder for women, girls and the youth to take preventative measures during pandemics and lead to greater exposure to infection. Climate change is also expected to

¹⁰ Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on inequalities. New York: United Nations Children's Fund (UNICEF) and World Health Organization, 2019

exacerbate water quality degradation as a result of higher water temperatures, reduced dissolved oxygen, and thus a reduced self-purifying capacity of freshwater bodies in the region.

Common gender issues in the water sector include a gender-biased division of labour in supplying water for domestic use, sanitary care, lack of ownership and unequal participation of men and women in decision-making related to water and sanitation. During the dry season, for example, productive activities of women can be sacrificed, with water and firewood-fetching becoming their primary responsibilities. In a public health crisis such as COVID-19, the increased demand for water at the household level needed to take care of the sick can mean 2-3 additional trips for women, and therefore an increase on time spent fetching water. Moreover, the existence of dysfunctional water infrastructure and unresilient water management can also force women to walk longer distances to fetch water and spend more time than the average estimates.

In Malawi, subsistence agriculture is typically the domain of women, who undertake several agricultural activities in order to provide food security for their family. Women's contribution to agriculture in Malawi is significant, and yet their access to and control of production and support services is often very poor. Women farmers in Malawi suffer declining soil fertility, increased soil degradation, and heavy dependence on rain-fed agriculture. They work not only to produce food crops (maize, legumes, groundnuts) fields, but are also involved in some activities for cash crop production and processing. They often work on the family plot, and for some, on their own plots. The dual labour system creates a heavy burden on women, which is intensified by the migration of men to seek casual labour on large tobacco estates or other forms of casual employment.

Decision-making at the household level is another constraint to women's productivity in agriculture and related water security issues. In Northern Malawi, men are typically the decision-makers on a wide range of topics, such as a female household member's ability to apply for a loan. Other decisions that promote family welfare and ensure food security are normally taken by women. It is important therefore to consider efforts that broaden women's access to decision-making by engaging with both male and female members of the communities, as well as local leaders on these issues.

While due consideration of the social and governance issues raised will greatly benefit the components of the TA, so will environmental issues. Indeed, climate change undermines progress on the elimination and control of WASH-related diseases. Climate change is also expected to exacerbate water quality degradation as a result of higher water temperatures, reduced dissolved oxygen, and thus a reduced self-purifying capacity of freshwater bodies in the region. Furthermore, there are strong, evident links between high rates of land degradation and exposure to climate and disaster risks in lower lying areas. The severe degradation of catchments is driven by several interconnected factors. The main drivers of degradation include: (i) human population pressure on water resources and wetlands; (ii) agricultural expansion and intensification; (iii) unplanned settlements and cultivation by the poor; (iv) limited information about water resources management combined with a lack of funding and limited institutional and technical capacities; (v) deforestation through uncontrolled burning and agricultural expansion, and (vi) the lack of clarity of water resource allocations, rights and responsibilities (Malawi SPCR, 2017). These drivers, if not checked and properly managed, are likely to exacerbate the impacts of climate change on water security.

The Northern Water Board currently protects its forest reserves by deploying Malawi Defence Force soldiers to guard catchment areas supplying water to the cities; however, a holistic approach is needed to ensure sustainable management of water resources and bring about the water security envisioned in Malawi's SPCR and other national development plans. Knowledge and capacity building for institutions like the Northern Water Board is needed to support good water governance.

2.4. Strategic Thrust

The technical assistance will contribute towards the Government of Malawi's overarching medium-term development strategy MGDS-III (2017-2022), the broad objective of which is to reduce poverty through sustainable socio-economic growth and infrastructure development. With a theme of "Building a productive, competitive and resilient nation", MGDS-III focuses on five priority areas: (i) Agriculture, Water Development and Climate Change Management; (ii) Education and Skill Development; (iii) Energy, Industry and Tourism Development; (iv) Transport and ICT Infrastructure; and (v) Health and Population.

The technical assistance is consistent with Malawi's Strategic Program for Climate Resilience (Malawi SPCR 2017), which sets out a level of ambition and strategic vision that will help to put the country on a resilient trajectory in the face of a changing climate, as well as with the National Climate Change Investment Plan (NCCIP) (GOM, 2016). It is also consistent with Malawi's National Water Policy (2005), which aims to achieve 100% water supply access in the country by the year 2025. It is also consistent with Malawi's Nationally Determined Contributions (2015) submission to the UNFCCC, where integrated natural resources and catchment management is prioritised for addressing climate uncertainty.

The technical assistance is aligned to the Bank Group's Ten-Year Strategy (2013 – 2022) with its twin objectives of inclusive growth and transitioning to green growth. It promotes green growth by improving catchment management while ensuring inclusiveness of vulnerable people as beneficiaries of the potable water supply and improved sanitation services. It is also aligned to the High 5 on improving the quality of lives of the people (i.e. "every African") and the Bank's 2018-2022 Malawi Country Strategy Paper, the Bank's Second Climate Change Action Plan (2016-2020), the Bank Policy on Water (2020) and the Urban Development Strategy (2011) by integrating resilient environmental management with water use.

The proposed technical assistance will support and address climate change-related impacts. The project will promote integrated climate resilient investment planning, including institutional capacity building to reduce land degradation and build resilience to climate risks in natural landscapes. Overall, the project will increase the capacity, skills and livelihood options, which will in turn diversify and stabilize local economies, thus creating new possibilities for sustainable growth under changing climatic conditions.

3. PROJECT DESCRIPTION

3.1. Project Development Objective

The objective is to strengthen the resilience and water security of communities, particularly women and the youth, in Northern Malawi (Nkhata Bay, Rumphi, and Chitipa) by developing a Climate Resilient Water Security Framework that will enable the mainstreaming of climate resilience into water sector planning focusing on the most vulnerable communities. The interventions will aim to:

- (i) Increase resilience of landscapes through integration of climate resilience into planning, processes, and interventions for strengthened water security;
- (ii) Increase resilience of community livelihood systems through strengthening their capacity in climatesmart water resources management;
- (iii) Enhance learning by training communities on proper soil and water conservation techniques, such as marker ridges constructed across the slopes, planting of trees, and vetiver grass, and knowledge-sharing on the integration of climate resilience into water security;
- (iv) Enhance institutional coordination and information management for climate risk management

3.2. Project Beneficiaries

Strengthening water security will have several benefits beyond public and human health, including increasing resilience to climate change, and supporting livelihoods, food security and economic productivity. The technical assistance is expected to strengthen benefits of the baseline operation, which aims at improving access to climate resilient Water Supply and Sanitation services, targeting approximately 25,000 people (at least 50% women). Local communities will also benefit from strengthened capacity for application of climate resilient soil and water conservation technologies (women/men) (Indicative target: 2000, at least 50% women). The project will enhance learning and knowledge-sharing on the integration of climate resilience into water security and strengthen resilience to water-related shocks. Local authorities, service providers and their staff will benefit from technical assistance and the climate-resilient water management instrument to be developed (Target: 1 water security framework). Lastly, the trained groups are expected to become more proactively engaged in sustainable water management, which will in turn lead to improved water security outcomes.

3.3. Project Components and Activities

Component 1. Strengthening Climate Resilient Landscape Management. This component focuses on increasing the resilience of landscapes in the three districts of Northern Malawi (Nkhata Bay, Rumphi, and Chitipa). The component will also focus on strengthening the technical, organizational and environmental actors with respect to: (a) environmental skills; (b) water resources; and (c) environmental monitoring.

- (i) Activity 1-1: Develop gender-responsive Landscape Management Strategies and Plans for 3 landscapes in the three districts as part of the water security resilience framework. This will follow the Malawi National Guidelines on Integrated Catchment Management and Rural Infrastructure.
- (ii) Activity 1-2: Design gender-responsive training manuals on ecosystem-based adaptation and its application for community-based organizations, NGOs, and government extension services;
- (iii) Activity 1-3: Develop appropriate gender-responsive knowledge products, including photo stories, presentations and briefing notes, for use in policy advocacy activities;
- (iv) Activity 1-4: Prepare a policy-based assessment report that provides recommendations for up-scaling and mainstreaming climate resilience into water security planning both at national and district level;
- (v) Activity 1-5: Undertake gender-responsive training at national, sub-national, and local levels for strengthened resilient watershed management across the landscapes, to enable various line agencies under the Northern Water Board to more effectively carry out their respective roles in the Program.

Component 2: Strengthening livelihood-based climate-resilient water resources management. This component will strengthen the resilience of community livelihoods (including women and youth) through diversification of opportunities and building capacity for sustainable land and water management.

(i) Activity 2-1. Hands-on training for climate resilient soil and water conservation technologies, including sustainable land and water management (e.g. climate-smart water resources management, land and water conservation techniques, planting of trees, agroforestry, climate-smart agriculture, reforestation and livelihood development for strengthened resilience and water security. This includes enhancement of the capacity of field officers and catchment management committees to provide technical advisory services on watershed management, with special attention to women and youth groups on tree nursery development (targeting at least 50% of women).

Component 3: Effective knowledge management results in informed decision-making at all levels. This component will focus on activities that contribute to knowledge-sharing and awareness-raising and, therefore, upscaling and replication of the project interventions. Specific activities include:

- (i) Activity 3-1 Conducting policy advocacy activities and local-level forums to disseminate lessons learned throughout the life of the project, including at relevant national and regional events;
- (ii) Activity 3-2: Undertaking community-level knowledge and awareness events. Knowledge-sharing and awareness-raising events will be conducted across the three districts targeting different stakeholders including relevant women's groups. Field visits will be undertaken to expose non-beneficiary communities and extension officers from non-target districts to effective climate change adaptation solutions being implemented in the project communities.

In order to strengthen the TA's overall gender responsiveness, the Project Team will: (i) Engage with Malawi's Ministry of Gender, Children and Community Development (Department of Gender Affairs) and gender focal points within relevant sectoral line ministries (irrigation/water, agriculture, environment etc); (ii) Engage with women's organizations and gender-related groups during the activities at local, national, and regional levels where lessons learned will be shared; and (iii) Include targets for outreach to women during community-level knowledge and awareness-raising events in non-beneficiary communities.

3.4. Project Cost and Financing

The Technical Assistance is estimated to cost \$760,000, financed through the CIF-PPCR Funds. A summary of the expenditure is shown in Table 1. Detailed expenditure is presented in Appendix 2.

Table 1: Project Cost and Financing Table for the Technical Assistance

Nr	Item	Qty	Amount in applicable Total			Disbursement		
			year			Category		
			2021	2022				
1	Component 1. Strengthened Climate Resilient	LS	270,000	180,000	450,000	Services		
	Landscape Management							
2	Component 2: Strengthened livelihood-based	LS	72,000	48,000	120,000	OP/Workshops		
	climate-resilient water resources management							
3	Component 3: Effective knowledge management	LS	24,000	96,000	120,000	OP/Workshops		
	results in informed decision-making at all levels							
	Sub-Total		366,000	324,000	690,000			
	Contingency		42,000	28,000	70,000			
	Total		408,000 352,000		408,000 352,000		760,000	

Eligible expenditures include: (i) consultant services; (ii) non-consultant costs for local training and workshops and (iii) operating costs essential to carry out the technical assistance, such as justified vehicle rental. The government will provide counterpart staff. The technical assistance consultants and housing accommodation, particularly in the field; data and information access; office supplies; secretarial assistance; and other in-kind contributions will be built into the cost of their services.

3.5. Lessons Learned and Reflected in the Project

The design of the project considers lessons learned from other national projects and programs, as well as comparable projects in other countries in Africa. The lessons reflected in project design can be summarized as follows: (i) issues relating to climate resilient water security are wide ranging, complex, involve every sector of the economy, and can be grouped under three key headlines: land management, water management, and human resource management and (ii) project design needs to be based on a realistic assessment of the Borrower's existing and potential future institutional capacity.

4. PROJECT FEASIBILITY

4.1. Cost Effectiveness

The project's strong focus on Cost-Effectiveness and Efficiency manifests in several elements. The Project includes an optimized mix of interventions for a paradigm shift towards a climate-resilient water sector: water efficiency, support for integration of water security into investment programming, and broad communication and awareness activities. This combination with interventions under the baseline operation will allow for increased resilience and optimisation of synergies and the minimization of costs.

4.2. Gender

The impact of the acute drinking water crisis in Malawi is borne disproportionately by women and youth, who traditionally are responsible for collecting water. Climate change therefore threatens to exacerbate the inequalities between women's and men's relationship to water. Community engagement will facilitate and emphasize the participation of women and youth along with enhancing opportunities of other vulnerable groups (e.g. self-targeting measures) in strengthening measures to address water security. Through trainings, women and youth will be able to share important perspectives about the threats facing the catchments, deliberate with other sector stakeholders from the public and private sectors, and influence key decision-makers. Their involvement also promises to be an entry point to influential public-service positions in future, while serving as an example for other women and youth in their communities. Beyond capacity-building/ liaison to participation in local-level consultations, the TA will also support representatives from local women's groups and/or other female representatives to participate in formal planning processes for the Water Security Framework or related efforts, through liaison with the NRMB and other key agencies, so that local women serve as active participants and sources of information from the field upwards into strategic deliberations at higher levels. The baseline Project Implementation Team has a Gender Expert who will ensure proper gender mainstreaming in all relevant aspects of the project.

5. IMPLEMENTATION ARRANGEMENTS

5.1. Implementation Arrangements

The project will use the same implementation arrangements as the baseline project, which utilizes existing GoM systems and structures. The recipient of the technical assistance grant will be the GoM—i.e. Ministry of Finance, Economic Planning and Development (MoFEPD)—and the MoAIWD and the NRWB will be the Executing Agencies (EA)). The MoAIWD provides sector policy direction to the NRWB. The NRWB was established in 1996 following the enactment of the Waterworks Act No. 17 of 1995. MoFEDP will pass the resources to the NRWB through a subsidiary financing agreement, which exists under the existing Nkhatabay Town Water and Sanitation Project and for which all terms and conditions are already acceptable to the Bank. The Board is responsible for the provision of water supply and waterborne sanitation services to the town and urban centers in the Northern Region of Malawi, including Nkhata Bay Town. The NRWB has established a Project Implementation Unit (PIU) as a regular unit within its structure, recognizing the need for special skills to deliver projects under the oversight of the Infrastructure Development Department. This project will therefore be implemented by an existing and well-staffed PIU.

The project has a task force that coordinates activities with the various agencies of the government and provides guidance to project implementation. The task force comprises (i) directors from various ministries, including the Ministry of Agriculture, Irrigation and Water Development, Ministry of Finance, Economic Planning and Development, Ministry of Local Government and Rural Development, Ministry of Justice and Constitutional Affairs, Ministry of Natural Resources, Energy and Mining, Ministry of Lands, Housing and Urban Development, Ministry of Health and Population, Ministry of Education, Science and Technology and Ministry of Gender, Children, Disability and Social Welfare; (ii) a director from Nkhata Bay District Council; and (iii) the Principal Secretary for MoAIWD as the chair person. This task force will guide activities for this technical assistance with additional representation from Nkhata Bay, Rumphi and Chitipa

District Councils. In addition, the Board of Directors of the NRWB will oversee the overall operations of the NRWB, including infrastructure development projects.

5.2. Implementation Schedule

The technical assistance will be implemented over a period of 18 months effective February 2021. The activity implementation schedule is attached as Appendix 3.

5.3. Procurement

Procurement will be carried out by the Executing Agency, NRWB, in line with the baseline Nkhatabay Town Water Supply and Sanitation Project procurement arrangements. For each contract to be financed by the grant, the corresponding procurement methods and consultant selection methods; estimated costs; priorreview requirements; and timeframe that have been agreed between the Grantee and the Bank will be provided in the updated procurement plan for the project.

5.4. Financial Management

Financial management for the grant will be similar to the baseline Nkhatabay Town Water and Sanitation Project arrangement. The NRWB, as the project's Executing Agency, shall continue to coordinate project implementation and manage the specific activities and financial management, including planning and budgeting, record keeping, accounting and reporting. Disbursement of the grant funds for the Technical Assistance for Catchment-Based Climate Resilient Water Security in Northern Malawi (Nkhata Bay, Rumphi, and Chitipa) will follow AfDB guidelines. The Executing Agency will open a special account in United States Dollars (USD) with the Reserve Bank of Malawi with the corresponding local currency operating accounts at a local commercial bank. The grant financing will be audited, by the Auditor General or his appointee, according to Terms of Reference agreed with the Bank. The audit report will be submitted to the Bank 6 months after the end of the financial year.

5.5. Results Monitoring and Evaluation

The Monitoring and Evaluation Plan will be consistent with that of the baseline operation, and will now also include annual results reporting of such PIU and Bank-monitored results data to the CIF Administrative Unit, in line with the requirements of AfDB as implementing entity for the CIF's Business Development for Resilience Program of the Pilot Program for Climate Resilience. The Executing Agency will prepare progress reports on a quarterly basis, which will highlight the progress towards meeting the project's targets listed in the project's result-based logical framework. Quarterly supervision visits and review meetings (by the Project Task Force and PSC), and semi-annual Bank missions will track implementation progress, and strategically plan the way forward. Upon completion of the technical assistance, the Bank Task Manager will prepare a simplified Project Completion Report, within one month of project closure, which will recap the various interventions carried out during the technical assistance.

5.6. Sustainability

The technical assistance is designed to reduce climate-induced natural resource and environmental sustainability threats. This will be accomplished through sustainable land and water management interventions based on the water security framework, which in turn reflects stakeholder participation, priorities, and scientific inputs. Improved catchment planning is expected to reduce conflicts caused by a depleting resource base and promote cohesion among communities within the sub-catchments. Capacity strengthening at various levels, including district and community level training, is envisaged under the technical assistance, which will contribute to social sustainability by improving and developing new skills.

5.7. Stakeholder Engagement Approach

This project will be implemented at the local level in targeted landscapes in the three districts of Nkhata Bay, Rumphi, and Chitipa. Implementation will involve stakeholders from government (Northern Water Resources Board and the District Local Governments), local communities, and civil society. Two levels of engagement with national stakeholders are envisaged: (i) disseminating information in a timely manner and (ii) seeking stakeholder views during project interventions. The management arrangements for the baseline project are designed to provide for coordination and close collaboration among project partners and key stakeholders, and to ensure alignment with ongoing initiatives. Regular feedback and communication on project implementation progress will be maintained through the Task force, Project Management Unit (PMU) reporting structures, and community structures at landscape level.

5.8. Knowledge Building

The implementation of this project will result in the development of skills and knowledge for the Northern Region Water Board (NRWB) and the district councils in climate-resilient catchment protection and management practices. Knowledge will be captured and disseminated through reporting from the executing agency, supervision reports and project-specific reports.

6. KEY RISKS AND MITIGATION MEASURES

The key risks to the project are related to capacity (rated high): The implementing agencies have weak technical capacity in terms of knowledge base, availability of competent technical staff at the district level, and the ability to conduct climate related technical functions. Technical support will be provided by consultants to make sure that certain specialized tasks are delivered successfully. Government staff will be involved in all activities and receive training to build capacity to maintain appropriate support to project activities and sustainability after the technical assistance and project are completed.

7. RATIONALE FOR BDRP FINANCING/INVESTMENT CRITERIA

This proposal seeks to advance one important component of Malawi's underlying climate resilience priorities from its 2017 Strategic Program for Climate Resilience (SPCR), which has to date remained unfunded. The SPCR was elaborated based on alignment principles with the country's Vision 2020, National Climate Change Management Policy, Malawi Growth and Development Strategy, and Nationally Determined Contributions, and seeks to address the following main themes, among others: "Strengthen climate resilience of communities in rural areas through integrated and sustainable management of major watersheds through improved catchment protection and water supply, storage, and utilization" and "Enhance institutional capacity in climate change coordination and mainstreaming" (Malawi SPCR, 2017).

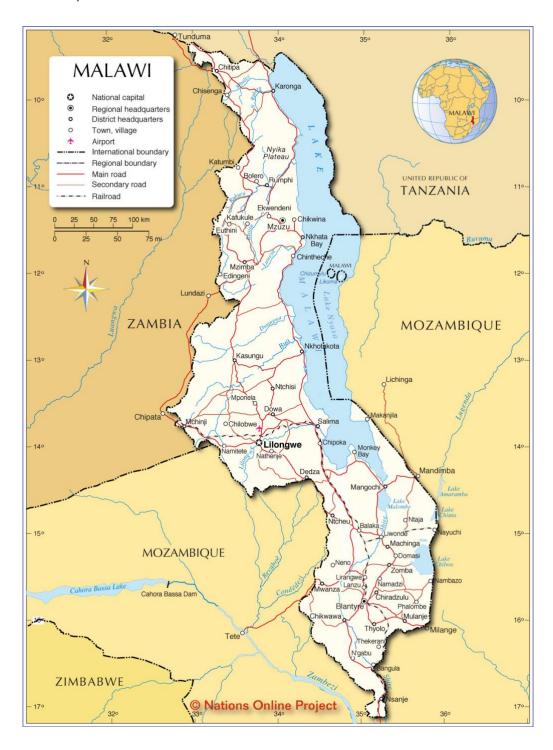
By facilitating an integrated, climate-responsive approach to water security and water resource management in the Northern Region, the proposal supports Track 1C of the BDRP funding window, namely to "Provide...critical technical assistance grants to pursue the objectives of the SPCRs of the PPCR pilot countries." This technical assistance also meets the overarching criteria of the BDRP funding window in terms of an advanced level of readiness, as Bank engagement in the project area has been well established through the baseline operation. Moreover, the proposal will support co-benefits for Track 1B of the BDRP funding window —"Support technical assistance for Ministries of Finance, Planning, and other key line ministries to mainstream climate risk management and resilience into economic planning and development"—given the proposed activities to further mainstream climate resilient water security within Malawi's Northern Region Water Board, as well as through the policy-orientated sub-components that will be implemented from local to national level with a wide range of government ministerial partners in the task force that will also serve to better inform other economic planning and development activities.

8. CONCLUSIONS

Climate change negatively impacts drinking water availability and quality, and the performance of WASH services within the Northern Malawi (Nkhata Bay, Rumphi, and Chitipa) districts in Malawi. This technical assistance is therefore timely and will provide incremental adaptation benefits by promoting good governance, building capacity in water security, and building more resilient communities.

APPENDICES

Appendix 1: Map of Malawi 11



 $^{11}\,https://images.app.goo.gl/EULCzNpzNZGsebUy5$

Appendix 2: Project Cost and Financing

Output	Activities	Inputs	Units	Quantity	Rate	Amount
Component 1. Strengthened Climate Resilient Landscape Management	Activity 1-1: Develop Landscape Management Strategies and Plans for 3 landscapes as part of the water security resilience framework.	Consultant	Months	12	15,000	180,000
	Activity 1-2: Design training manuals on ecosystem-based adaptation	Consultant	Months	2	15000	30000
	Activity 1-3: Develop appropriate knowledge products, including photo stories, presentations and briefing notes, for use in policy advocacy activities;	Consultant	Months	2	15000	30000
	Activity 1-4: Prepare a policy- based assessment report for mainstreaming resilience into water security planning	Consultant	Months	2	15000	30000
	Activity 1-5: Facilitate training at sub national, and local levels for strengthened resilient watershed management	Consultant	Months	2	15000	30000
		Re-imbursable costs				30000
		Consultation/capacity development Workshops (District)	No	6	20000	120000
		Sub total				450000
Component 2: Strengthened livelihood-based climate-resilient water resources management.	Activity 2-1. Provision of hands- on training for climate resilient soil and water conservation technologies for strengthened resilience and water security	Community level Capacity development workshops and field schools	No	6	20000	120000
		Sub total				120000
Component 3: Effective knowledge management results in informed decision-making at all levels	Activity 3-1 Conduct policy advocacy activities and local level forums to disseminate lessons learned throughout the life of the project	District level Capacity development workshops	No	3	20000	60000
	Activity 3-2: Undertake community level knowledge and	Community level capacity building	No	6	10000	60000
	awareness events.	workshops Sub total				120000
		Contingency 10%				70000
	MDB Project Implementation Service Fees	Operational Costs			38000	38000
		Total				798000

Appendix 3: TA Implementation Schedule

Output	Activity	2020 Qter3				2021							2			2022			
				er3 Qt		Qter1		Qter2		Qter3		r3 Qter		Qter4		Qter1		Qter2	
	Activity 1-1: Develop Landscape Management Strategies and Plans for 3 landscapes as part of the water security resilience framework.																		
Activity 1-2: Design training manuals on ecosystem- based adaptation																			
Component 1. Strengthened Climate Resilient Landscape Management	Activity 1-3: Develop appropriate knowledge products, including briefing notes, for use in policy advocacy activities;																		
	Activity 1-4: Prepare a policy-based assessment report for up-scaling and mainstreaming climate resilience into water security planning																		
	Activity 1-1: Develop Landscape Managemen Strategies and Plans for 3 landscapes as part of water security resilience framework. Activity 1-2: Design training manuals on ecosyst based adaptation Activity 1-3: Develop appropriate knowledge products, including briefing notes, for use in products, including																		
Component 2: Strengthened livelihood-based climate- resilient water resources management.	Activity 2-1. Provision of hands-on training for climate resilient soil and water conservation technologies for strengthened resilience and water security																		
Component 3: Effective knowledge management results in informed decision-	Activity 3-1 Conduct policy advocacy activities and local level forums to disseminate lessons learned throughout the life of the project																		
making at all levels	Activity 3-2: Undertake community level knowledge and awareness events.																		

MDB Request for Payment for Project

Implementation Services (MPIS)^{1 2}

PILOT PROGRAMS FOR CLIMATE RESILIENCE **MDB Request for Payment of Implementation Services Costs** 1. Country/Region: Malawi 2. CIF Project ID#: 3. Project Title: Technical Assistance for Catchment-Based Climate Resilient Water Security in Northern Malawi (Nkhata Bay, Mzimba, Rumphi, and Chitipa) 760,000 4. Request for project funding including PPG: 5. Estimated costs for MDB project 38,000 implementation services ³: 6. Request for payment of MDB First tranche: 20,000 **Implementation Services Costs:** Second tranche: 18,000 7. Project financing category: a - Investment financing - additional to ongoing MDB project X 8. Expected project duration (no. 18 months of months/years): 10. Justification for proposed stand-alone financing in cases of above 7 c or d 4:

¹ The term "project implementation services" refers to MDB support throughout project lifecycle.

² A separate template needs to be presented for each project and program preparation grant request

³ If the MDB cost estimate exceeds the relevant benchmark, it needs to be supported by (i) a breakdown of costs of inputs required (staff/consultant time, travel, number of missions, etc) and (ii) by an explanation of the particular aspects of project design and implementation that drive MDB costs to exceed the benchmark.

⁴ The justification should include an explanation of (i) why no linkages to ongoing or planned MDB financing have been possible or pursued, and (ii) the expected effectiveness of the proposed stand-alone PPCR project in addressing the objectives and priorities of the PPCR.