



Concept Note

The Green Climate Fund (GCF) is seeking high-quality projects or programmes.

Accredited entities may choose to submit a concpet note, in consultation with the relevant national designated authority, to present the proposed project or programme idea in order to receive early feedback and recommendation.



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Please submit the completed form to fundingproposal@gcfund.org

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A. Project / Programme Information				
A.1. Project / title	Buzi River Basin Climate Resilience Fund			
A.2. Project or programme	Project			
A.3. Country (ies) / region	Zimbabwe and Mozambique			
A.4. National designated authority(ies)	Zimbabwe Washington Zhakata, Director - Climate Change Management Department, Ministry of Environment, Water and Climate, 11th Floor, Kaguvi Building, Corner 4th Street/Central Avenue, Harare, Zimbabwe Email: climatechange@environment.gov.zw or washingtonzhakata@gmail.com Tel: +263 4 701681/3 Mobile: +263 773 069 438,			
	or			
	Mr. Elisha N. Moyo (Alternate), Principal Climate Change Research Officer Email: enmoyo@gmail.com or moyo_elisha_n@yahoo.co.uk Tel: +263 4 701681/3 Mobile: +263 775 219 592 or +263 733 203 708			
	Mozambique Mrs. Marilia Telma Antonio Manjate Ministry of Land, Environment and Rural Development. Av. Acordos de Lusaka, 2115, Maputo, P. Box 2020, Mozambique E-mail: telma.manjate12@gmail.com Tel. +258 823 286210			
A.5. Accredited entity	UNEP / UNDP TBC			
A.6. Executing entity / beneficiary	Executing Entity: ZINWA/ ARA-Centro Beneficiary:			
A.7. Access modality	Direct □ International X			
A.8. Project size category (total investment, million USD)	Micro (≤10) X Small (10 <x≤50) (="" (50<x≤250)="" large="" medium="" □="">250) □</x≤50)>			
A.9. Mitigation / adaptation focus	Mitigation □ Adaptation X Cross-cutting □			
A.10. Public or private	Public			
A.11. Results areas (mark all that apply)	Which of the following targeted results areas does the proposed project/programme address?			
	Reduced emissions from: Energy access and power generation (E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.) Low emission transport (E.g. high-speed rail, rapid bus system, etc.) Buildings, cities, industries and appliances (E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.) X Forestry and land use (E.g. forest conservation and management,			

¹ Please use the following naming convention for the file name: "[CN]-[Agency short name]-[Date]-[Serial number]" (e.g. CN-ABC-20150101-1).



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	agroforestry, agricultural irrigation, water treatment and management, etc.)
	Increased resilience of: X
A.12. Project / programme life span	3 years
A.13. Estimated implementation start and end date	Start: Jun 2016 End: Jun 2019

B. Project/Programme Details

The Fund requires the following preliminary information in order to promptly assess the eligibility of project/programme investment. These requirements may vary depending on the nature of the project/programme.

B.1. Project / programme description (including objectives)

The Climate Resilient Infrastructure Development Facility (CRIDF) is proposing a Project to establish the Buzi River Basin Small-scale Climate Resilience Fund. The proposed fund is intended to build climate resilience of vulnerable rural communities in the Buzi River Basin. The project sponsor, CRIDF, is already financing efforts to strengthen local stakeholder structures in the Buzi basin and developing their capacity to take collective action. This project will focus on linking these local groups to resources and external partners to strengthen their capacity to adapt to dry spells, drought and extreme flood events which are becoming more prevalent in the river basin due to climate change.

The Buzi is a transboundary river basin shared between Zimbabwe and **Mozambique.** The Buzi catchment area is 27,700 km² of which 24,500 km² (88%) is located in Mozambique (downstream) and 3,200 km² (12%) in Zimbabwe (upstream). The Buzi catchment is important for hydropower, two major dams, the Chicamba (2,020 Mm³) located in the tributary Revué and the Mavuzi Dam (1.8 Mm³) exist in the upper catchment of the Buzi in Mozambique, and agriculture (bananas, beans, vegetables, forestry and tea growing). There are around 1.2 million people living in the Buzi basin (projected to rise to 1.9 million by 2030), the majority of which are poor and depend on rainfed agriculture. Buzi is prone to heavy rains and flooding during the four months rainy season (between October and April) but also to dry spells and drought in the dry season due to water scarcity arising from poor water management and high evaporation rates (1100-1400 mm/year). The area is also affected by overexploitation of natural resources, land degradation, soil erosion (especially in the communal lands of Zimbabwe), deforestation, invasion of water hyacinth and pollution from industry and commercial farming. Institutional capacities to manage flooding, drought and actively participate in negotiations of shared water resources weak in both countries.

The overall objective of the Project is to build climate resilience of vulnerable communities living in the Buzi Basin by supporting community based Integrated Water Resource Management and Development (IWRM&D) initiatives. The aim is to improve the management of surface waters and support adaptive farming strategies to build climate resilience and enable vulnerable farmers living in the Buzi basin to adapt to climate change. This will be achieved by establishing a Buzi River Basin Climate Resilience Fund to support community driven, small scale IWRM&D interventions. The fund will be overseen by ARA-Centro and ZINWA, the parastatal agencies responsible for managing water resources on a catchment basis in Mozambique and Zimbabwe



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respectively, with Technical Assistance provided by CRIDF. The project is guided by the CRIDF and the Pungwe, Buzi and Save (Pubusa) Joint IWRM Strategies as well as experience from a similar Fund established in the Pungwe Basin (which is managed by the same institutions). CRIDF has already conducted a preliminary assessment and has created a preliminarily design of a suitable fund model. An appropriate and effective governance structure, criteria for project selection, reporting mechanisms and the technical assistance requirements for fund beneficiaries in the Buzi River Basin will be developed during proposal preparation.

Initially, it is envisaged that US\$500,000 will be needed to capitalise the Fund. From experiences in the Pungwe Basin, such a basket fund would support a minimum of ten of Small Grant projects. This number is also reasonable to start with while testing the robustness of the Funding Model that is going to be developed.

B.2. Background information on project/program me sponsor

Describe project/programme sponsor's operating experience in the host country or other developing countries.

CRIDF is a DFID supported water infrastructure programme for southern Africa. Working to deliver sustainable small-scale infrastructure across 11 SADC countries, the demand-driven programme focuses on water services, water resource management, and water for livelihoods, fostering sustainable development of the region's water resources and addressing the water, food and energy nexus. CRIDF supports small-scale water infrastructure projects and facilitates access to finance for the implementation of these projects. Such interventions provide the entry point and platform for CRIDF to engage with, support and influence key SADC interventions, river basin organisations and national stakeholders. Activities are selected according to a set of CRIDF principles to ensure that investments align with strategic objectives that have been developed specifically for each SADC river basin. All CRIDF projects are selected from the SADC priority list. An MOU between CRIDF and SADC is attached at Annex 1.

CRIDF's work is intended to ensure that poor people in countries of the SADC region benefit from climate-resilient water infrastructure. This will create conditions for enhanced cooperation between stakeholders in shared river basins, and strengthens the evidence base for cooperation on shared waters. Through these outputs and outcomes the CRIDF programme contributes to peaceful, climate-resilient and sustainable planning and management of shared waters in SADC, generating current and future benefits to the poor.

CRIDF collaborates with interested partners, to support small projects to assist vulnerable communities attain food security and improved livelihoods that are, in the longer term, climate resilient. CRIDF supports actions or projects at regional, national, sub-national, or local levels that better enable communities, particularly the poor, to predict, manage, or mitigate the impacts of extreme climate events through infrastructure interventions; it is however recognised that the demand for financial resources in the Southern African region to implement these infrastructure interventions far outweighs the resources at CRIDF's disposal. As such, one of the pillars of the PUBUSA Portfolio Strategy is to increase the flow of capital resources through innovative means in order to respond to water security and climate resilience needs of poor communities in the Buzi River Basin.

CRIDF is currently involved in a number of projects in Mozambique and Zimbabwe. These range from optimisation of planning and management of transboundary large scale water infrastructure, design and construction of small scale infrastructure and livelihoods schemes with capacity development as a cross-cutting support. In the Limpopo Basin, Save basins in Zimbabwe, CRIDF is supporting NGOs and water professionals in the holistic planning and delivery of small-scale water infrastructure for improved livelihoods. Climate change risk assessments, gender and social inclusion comprise pillars of CRIDF support, while capacity development of NGOs to prepare, package and implement such projects is a focal point of CRIDF support. Support is provided to create linkages between markets and the communities for surplus produce. CRIDF's work will also facilitate the formation of a Stakeholder Advisory Committee that will bring together government and non-state actors to guide beneficiaries in the delivery process. In Mozambique, CRIDF supports flood management programs in Limpopo, while in the Buzi CRIDF supports small scale water infrastructure for water supply. These initiatives are expected to lay foundations for the proposed GCF supported projects.

Describe financial status and how the project/programme sponsor will support the



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project/programme in terms of equity, management, operations, production and marketing.

The CRIDF Project started in April 2013 and ends on 31st March 2017 although a Business Case for a second phase is currently under development by DFID. Details regarding CRIDF's Financial Status are shown below.

- Total Facility Size: Approx. US\$38m
- Commitments of facility up to Dec 2015: Approx. US\$25m
- Remaining funding at end of Dec 2015: Approx. US\$13m
- Total planned Capex (CRIDF Funded): Approx. US\$8m

B.3. Market overview

Describe the market for the product(s) or services including the historical data and forecasts.

There is a huge demand from farming communities in the Buzi, Save and Pungwe river basins for small scale, community managed interventions that improve water security and secure agricultural livelihoods as evidenced by popularity of the Small Grants Fund in the Pungwe basin. The demand for funding of small climate resilient IWRM&D community projects is also evident from the stakeholder engagements conducted so far, and the fact that communities are faced with challenges of water security in general, compounded by the threats of climate change where seasons are becoming increasingly erratic. Scoping studies have revealed a strong demand for this form of direct support and the potential for success is high as these projects are identified by the beneficiaries who, to a large extent, also take part in project implementation. The call for IWRM&D proposals from both Sida and AfDB received overwhelming response from the communities and, while only a few projects could be funded due to limited funding, an indication of the high demand and obvious benefits of the fund has been confirmed.

Consultations with ARA-Centro and ZINWA and beneficiaries of the Pungwe fund also confirm that the small grant funds have been extremely welcome in both countries. These funds provide a bridge between IWRM theory and the hitherto missing practical demonstrations of IWRM on the ground and how resources can be mobilised to achieve food security while, at the same time, optimising resource use and environmental sustainability.

Provide the key competitors with market shares and customer base (if applicable).

There is currently no other funding entity supporting demand led, community based IWRM&D projects in the Buzi basin.

Provide pricing structures, price controls, subsidies available and government involvement (if any).

N/A

B.4. Regulation, taxation and insurance

Provide details of government licenses, or permits required for implementing and operating the project/programme, the issuing authority, and the date of issue or expected date of issue.

Some of the infrastructure interventions will require approval from the Catchment Councils and the Zimbabwe National Water Authority. According to the Zimbabwe Water Act: No. 31 of 1998, none of the dams in this proposal are classified as large dams. For dams that are between 8 and 15m in crest height, with a capacity ranging from 500,000 to 1 million cubic meters, approval from the responsible Catchment Council (with ZINWA - Zimbabwe National Water Authority providing technical services) will be required while those less than 8m, and with less than 500,000 cubic meters do not require official approval. Contractors will be required to meet the required safety regulations in Zimbabwe. The Environmental Management Agency (EMA), as the government agency responsible for ensuring that environmental requirements are met, will support and guide the Campaign in terms of the environmental regulations to be complied with. Impact Assessments will be undertaken during the design stage under the guidance of EMA, and mitigation measures will be determined.

Describe applicable taxes and foreign exchange regulations.

Zimbabwe currently runs on a United States dollar currency, with no national currency. Implementation contracts generally attract import duties and value added taxes. A possibility exists, however, for exemption from import duties and taxes where the projects



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are accorded National Status. Considering the scale of the GCF support and with support from the NDA, national status is considered a distinct possibility.

In Mozambique, foreign exchange controls exist. All imports are subject to duties and taxes.

Provide details on insurance policies related to project/programme.

All construction is expected to be managed through small works contracts let through a competitive and transparent procurement process. Such contractors will be required to carry construction all risk insurance cover while all professionals will be required to carry professional indemnity cover.

B.5. Implementation arrangements

Describe construction and supervision methodology with key contractual agreements.

Describe operational arrangements with key contractual agreements following the completion of construction. Provide a timetable showing major scheduled achievements and completion for each of the major components of the project/programme.

The fund will be managed by a Fund Management Secretariat with oversight from ZINWA and ARA-Centro with technical support provided by CRIDF. The establishment of a 'Challenge Fund' type structure is also to be explored.

ZINWA is a parastatal agency created under the Zimbabwe National Water Authority Act of 1998, which is responsible for water planning and bulk supply. ZINWA manages water resources on a catchment basis with involvement of stakeholders in each catchment area. Other responsibilities of ZINWA include the management of the water permit system, the pricing of water, operating and maintaining existing infrastructure, and executing development projects. Responsibility for managing river systems and enforcing laws and regulations is devolved at the local level. Elected water user representatives comprise Catchment Councils that constitute the 'Board' to which ZINWA provides technical and secretarial services.

ARA-Centro is one of Mozambique's Regional Water Administrations responsible for Buzi and two other river basins (Save and Pungwe) in the central belt of Mozambique. ARA-Centro was was established in 1997 following the enactment of the Water Law in 1991 and is responsible for the implementation of IWRM at the river basin level. This includes operational water management and facilitation of stakeholder participation through River Basin Management Units (RBMUs) and River Basin Committees (RBCs).

The main components of the proposed project are shown below with timings for each.

1. Fund management systems established and operating effectively

- Funding mechanism and governance system developed to target the most climate vulnerable households and communities (initial 3 months).
- Staff recruited and trained to manage fund (initial 6 months).
- Fund is capitalised (mid Year 1).
- Fund disburses target resources to beneficiary groups within desired timeframe (Year 2 - 3).
- Projects funded are monitored and evaluated effectively to time and budget (Year 2
 - 3).

2. Capacity of beneficiary groups to access and use funding effectively developed

- Awareness of fund among beneficiary groups developed (Year 1).
- Capacity of target groups to prepare good funding proposals developed (Year 1 3).
- Fund receives high quality funding proposals (Year 2 3).

3. Fund re-capitalised and community based IWRM&D projects deliver long term climate resilience

- Fund attracts additional funding from other development partners (Year 3).
- Funded projects deliver positive outcomes to beneficiary groups in line with project targets (Year 2 3).
- Adaptive capacity and climate resilience of beneficiary groups developed in line with fund targets.
- Knowledge and understanding around community managed IWRM&D projects documented and communicated to key stakeholders.



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C. Financing / Cost Information

C.1. Description of financial elements of the project / programme

Please provide:

- a breakdown of cost estimates analysed according to major cost categories.
- a financial model that includes projection covering the period from financial closing through final maturity of the proposed GCF financing with detailed assumptions and rationale;
- a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance.

The expected cost of launching and running the fund for three years is USD 823,9000. A break down is shown below.

1. Fund management systems established and operating effectively

- Funding mechanism and governance system developed to target the most climate vulnerable households and communities (USD 25,000).
- Staff recruited and trained to manage fund (USD 10,000).
- Fund management staff time for 3 years (USD 54,000).
- Annual external evaluations (USD 30,000).

Total USD 119,000

2. Initial fund capitalisation

- GCF contribution (USD 300,000)
- Contributions from other donors (USD 200,000)

Total USD 500,000

Capacity of beneficiary groups to access and use funding effectively developed

- Awareness of fund among beneficiary groups developed (USD 10,000).
- Capacity of target groups to prepare good funding proposals developed (USD 60,000).

Total USD 70,000

4. Fund re-capitalised and community based IWRM&D projects deliver long term climate resilience

- Fund-raising activities to attract additional funding from other development partners (USD 30,000).
- Knowledge management and communication (USD 30,000)

Total USD 60,000

In addition, a 10% management fee (**USD 74,900**) will apply which will cover:

- Overall Project management, implementation and delivery in terms of the agreed Implementation Plan;
- Tender preparation, advertisement, adjudication and contracting for construction works;
- Internal Monitoring and Evaluation of deliverables, quality assurance, timing and value for money;
- advocacy and information related tasks, such as arranging meetings (e.g. provincial and district level, DDRC) briefing workshops, seminars, missions etc. and making interventions and presentations;
- project-planning missions, field visits, meetings and briefing sessions;
- · Public participation activities
- · Financial management and bookkeeping;
- Preliminary, interim, final narrative and financial reporting.

The GCF grant will be used to establish and run the fund for three years as well as to leverage additional funds from other donors to continue supporting community based IWRM&D projects through small grants in the long term.



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C.2. Project financing information		Financial Instrument	Amount	Currency	Tenor	Pricing
	Total project financing (a) = (b) + (c)		823,900	<u>Options</u>		
	(b) Requested GCF amount	(ii) Senior Loans (ii) Subordinated Loans (iii) Equity (iv) Guarantees (v) Reimbursable grants * (vi) Grants *	- - - - 623,900	Options Options Options Options Options Options	() years	()% ()% ()%IRR
		* Please provide detailed economic and financial justification in the case of grants.				
		Total Requested (i+ii+iii+iv+v+vi)	623,000	<u>Options</u>		
	(c) Co- financing	Financial Instrument	Amount	Currency	Name of Institution	Seniority
		Options Options Options Options	200,000	Options Options Options Options	TBC	Options Options Options Options
		Lead financing ins	titution:			
	(d) Covenants					
	(e) Conditions precedent to disbursement					

D. Expected Performance against Investment Criteria

Please explain the potential of the Project/Programme to achieve the Fund's six investment criteria as listed below.

D.1. Climate impact potential

Specify the climate mitigation and/or adaptation impact. Provide specific values for the below indicators and any other relevant indicators and values, including those from the Fund's <u>Performance Measurement Frameworks</u>.

- Total tonnes of CO₂ equal to be avoided or reduced per annum
- Expected total number of direct and indirect beneficiaries and number of beneficiaries relative to total



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[Potential to achieve the GCF's objectives and results] population (e.g. total lives to be saved from disruption due to climate-related disasters)

The project is expected to create positive impacts on farming communities living in the Buzi River Basin directly targeting 1000 households and indirectly benefiting a further 500 households. The fund will address climate vulnerability linked to social inequities, water insecurity and environmental degradation as well as governance challenges that exist amongst rural communities of the shared Buzi Basin. Ensuring that the fund directs resources into community managed, climate resilient water infrastructure will enhance water security and reduce exposure to climate risk for around 1000 households and avoid the lock-in of long-lived, climate-vulnerable infrastructure. Experience from the PUNGWE Project Fund has shown that these small-scale investments realise a huge impact as they give local communities an opportunity to implement projects that will address specific and priority needs while developing their own capacity.

Investing in improved storm-water management and water harvesting and storage structures will also reduce the number of people affected by flooding and drought. Flood events and cases of food shortages are already occurring in the Buzi Basin almost on an annual basis. Capturing and storing runoff during the rainy season will reduce flood damage and enhance agricultural production and provide a supply of water during dry spells. Moreover, by targeting the most vulnerable population groups and applying a gender-sensitive approach, the fund will enhance the adaptive capacity and resilience of rural livelihoods among local communities living in the Buzi river basin.

Small scale irrigation schemes are expected to have a significant impact on yields and rural livelihoods. With irrigation facilities, the impacts of dry spells are minimised. For example, maize yields are expected to increase by at least three-fold with small scale irrigation and a micro irrigation banana project at St Columbus in Zimbabwe has increased income from banana sales from USD 40,000 to USD 120,000 per annum. Supporting vulnerable communities to adapt to longer and more frequent dry spells with irrigation will hence build resilience and enable year round cropping meeting household food security needs and generating a surplus that can be sold.

Supporting community driven projects has been shown to enhance cooperation between upstream and downstream communities and will reduce the potential for conflicts over natural resources. The Pungwe Fund illustrated that involving stakeholders in the process of identifying and prioritising initial project ideas as well as implementation has a positive impact in terms of cementing cohesion between up-stream and down-stream communities. For example, upstream communities were taught to appreciate how their land-use activities were adversely impacting water availability for downstream communities. As a result, upstream project ideas to protect the integrity of the water resources were readily supported and prioritised by the downstream communities ahead of their own needs.

Strengthening community institutions and building awareness of climate threats will promote climate-responsive planning and development. This will reduce household vulnerability levels to prevailing climate threats and develop the necessary skills needed to adapt to future climate change as well as ultimately reduce the need for external support. An effective and well resourced knowledge management and communications component will build awareness of climate threats and risk-reduction processes as well as generate analysis and surveys that will increase the uptake and use of climate information by policy makers and other key decision makers. These studies could include local demand assessments, feasibility studies for small dams and pipelines, hydrological investigations and assessments of existing infrastructure that requires rehabilitation.

D.2. Paradigm shift potential [Potential to catalyze impact beyond a one-off project or programme investment]

Provide the estimates and details of the below and specify other relevant factors.

- Potential for scaling-up and replication (e.g. multiples of initial impact size)
- Potential for knowledge and learning
- Contribution to the creation of an enabling environment
- Contribution to the regulatory framework and policies

The potential for scaling up and replication is considered high both regionally and beyond due to the large number poor rural communities living in other river basins that are affected by floods and droughts. The initial focus is the Buzi Basin shared between Mozambique and Zimbabwe but there is scope to replicate this initiative in other river basins in other SADC countries. The fact that the design of the fund itself has been



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adapted from an existing river basin fund demonstrates the potential for scaling up and replication. Once the fund has been established and the systems are in place there is potential to expand the scope and impact without significantly increasing the running costs of the fund. Basins with high rural populations, such as the 8-country Zambezi, the 4-country Limpopo Save and Ruvuma are eligible for such interventions.

There is also considerable scope to mobilise additional resources into the fund from other sources to sustain positive outcomes and increase the reach of the fund. A number of donors have already expressed an interest in supporting the fund including Sida and the World Bank. Resources will be allocated to securing this support during the project and fund raising targets will be included in the log-frame to ensure the long term viability and sustainability of the fund.

There is strong potential for knowledge and learning both horizontally between communities and vertically between communities and policy makers. Effective mechanisms will be developed to share effective technologies, practices and approaches beyond the beneficiary communities to increase uptake and to mobilise external actors into developing an enabling policy environment. These will include farmer-to-farmer video documentaries, community meetings as well as responsive surveys and analysis and briefing notes for policy makers to enhance knowledge and understanding and promote dialogue.

Provide the estimates of economic, social and environmental co-benefits.

The expected benefits are listed below.

Economic co-benefits

- Improved water supply and increased access to reliable water for household use and irrigation
- Improved assets at the household and community level
- Increased agricultural productivity and diversification from an improved stock of water infrastructure
- Increased household incomes deriving from improved agricultural productivity, livestock and fishery management, and restoration of forests
- Increased agri-business opportunities
- More efficient use of water in agriculture, leading to increased productivity and household incomes

Social co-benefits

- improved access to water for humans and livestock
- improved food security as yields improve with irrigation and livestock and fish farming systems can be supported with increased water availability
- improved incomes as excess produce can be sold
- improved nutrition as the diversity of crops, livestock and fish also means access to larger variety of foodstuffs
- employment creation as the beneficiary farmers hire additional labour during peak season.
- increased sustainable livelihood opportunities resulting from enhanced yields (e.g. value addition such as canning of produce or selling mealie-meal instead of maize, etc) leading to increased incomes as well as improved health and education.
- · reduced potential for community conflicts
- increased capacity of communities to effectively manage water and other natural resources

Environmental benefits

- Reduced erosion and improved soil quality from adoption of improved land-use practices
- Protection of other ecosystem services (water, forest products, erosion and flood control, wildlife habitat, carbon storage, biodiversity etc.)
- Reduced deforestation

Gender-sensitive development impact

- Reduced time spent fetching water for women and children
- Increased food and security for women headed households
- · Gender sensitive indicators will ensure effective targeting of women and equitable

D.3.
Sustainable development potential [Potential to provide wider development co-benefits]



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participation of women in project interventions

• Strengthened, climate resilient livelihoods for women

D.4. Needs of recipient [Vulnerability to climate change and financing needs of the recipients]

Describe the scale and intensity of vulnerability of the country and beneficiary groups and elaborate how the project/programme addresses the issues. Examples of the issues include the following: 1) Level of exposure to climate risks for beneficiary country and groups; 2) Does the country have a fiscal or balance of payment gap that prevents from addressing the needs; 3) Does the local capital market lack depth or history; 4) Needs for strengthening institutions and implementation capacity.

As Least Developed countries Zimbabwe and Mozambique have high levels of poverty and low adaptive capacities. Mozambique is one of the poorest countries in the world, in 2014, it was ranked 178 (out of 187) on the HDI with 59.6% of the population living below the poverty line (US\$1.25 PPP), 44.1% living in severe poverty and an average life expectancy of 59.9 (UNDP HDI data 2014). Zimbabwe has experienced political and economic crisis over the past decade and is one of the only countries in the world whose Human Development Index (HDI) is lower today (ranked 156 out of 187 countries in 2014) than it was in 1970 with 12% of the population living in severe poverty. Both countries lack the resources and capacity to deliver the necessary support to enable farmers living in the Buzi basin to adapt.

Climate data show that both Mozambique Zimbabwe are already beginning to experience the effects of climate change. Rising temperatures (maximum temperatures have risen by 2°C over the last century) and rainfall variability have caused recurrent droughts and extreme flood events in both countries with significant impacts on the economy and the livelihoods of the poor due to a high dependence on rain-fed agriculture. In Mozambique, the mean temperature is expected increase by 1.8 - 3.1°C with precipitation expected to decrease by 2-11% and solar radiation to increase by 2-3% by 2075 (National Communication to UNFCCC, 2003). In Zimbabwe, annual rainfall levels based on the 1961–90 average are projected to decline between 5–20% by 2080 in all of the Zimbabwe's major river basins. These conditions, combined with warming trends, pose a major threat to the economy, due to already declining agricultural outputs, high climate variability (both spatially and temporally) and climate sensitive resources (62% of the population are farmers).

Farming communities living in the Buzi basin are particularly vulnerable as maize is one of the main staples grown in the drier areas and is highly sensitive to climate change. Current yields of maize are well below 1 t/ha which is below the level needed to attain food security. In Zimbabwe, climate impacts have been exacerbated by an increasing trend towards maize growing on communal lands since the 1980's making communal farmers much more vulnerable to climate change and food insecurity than commercial farmers who tend to grow more cotton and sorghum which are more climate resilient. Households are also vulnerable to extreme events with flooding cases reported almost on an annual basis particularly in the lower lying areas of Mozambique. After such floods, high temperatures and evaporation rates contribute to crop failure due to water stress. Even diversified livelihood systems with a livestock component are expected to become more vulnerable due to climatic variability in semi-arid areas which poses major threats to natural processes that sustain fodder production for livestock and moisture for rain-fed crop production. If no adaptation measures are taken, yields from rain-fed agriculture in Zimbabwe are expected to decrease by up to 50% by 2020.

Both countries are also highly vulnerable to climate change due to their high dependence on surface waters for water supply and the limited institutional capacity to respond to the emerging threat. For example, Zimbabwe relies on surface water from dams and rivers for 90% of its supply (most of which is used for agriculture) and currently most of the runoff is not exploited (only 22% is utilised). Evaporation is predicted to increase by between 4-25% in the river basins and runoff is also projected to decline by up to 40%. This water stress will adversely impact agricultural and livestock yields from rangelands as well as public health, forestry and biodiversity, human settlements and tourism. Measures to increase water storage and distribution are therefore critical in enabling Zimbabwe to adapt to climate change.

Vulnerability to floods, storms, and periodic famines in the Buzi River Basin is exacerbated by low institutional capacity of the key water resources management Institutions operating within the basin (ARA-Centro in Mozambique and ZINWA in Zimbabwe). There have been a number of droughts in the past decade and flooding has caused heavy economic losses to the population in the Basin, with the most affected being the rural poor living closest to the banks of rivers and streams. Chronic vulnerability is also common as it relates to food insecurity, water pollution (agro-chemicals and mining) as well as water and sanitation-related diseases. GCF support for the



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establishment and strengthening of stakeholder structures within the shared basin will contribute significantly to enhancing confidence and mutual trust as well as addressing upstream downstream issues in the utilisation and management of the shared transboundary basins. Channelling funding through ARA-Centro and ZINWA combined with capacity support will also strengthen the institutional capacity of the agencies mandated to manage river basins in both countries.

D.5. Country ownership [Beneficiary country ownership of project or programme and capacity to implement the proposed activities] Provide details of the below and specify other relevant factors. Coherence and alignment with the country's national climate strategy and priorities in mitigation or adaptation. Brief description of executing entities (e.g. local developers, partners and service providers) along with the roles they will play. Stakeholder engagement process and feedback received from civil society organizations and other relevant stakeholders

The proposed interventions align well with national climate adaptation priorities in both countries. In its NAPA, Mozambique has prioritised improving the level of control and evaluation capacity of river water flows in order to reduce the impacts of droughts and floods within its hydrological basins along with reforestation and conservation agriculture to sustain agricultural livelihoods. Zimbabwe's National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) in 2013 also identifies adaptation in the agriculture sector as a key priority with improving water availability and irrigation systems, improved land management and integrated crop production identified as appropriate adaptation strategies. The Communication also calls for the adoption of new agricultural management strategies that include the use of short season varieties especially for maize, moisture management, the use of drought resistant small grains and the adoption of cash crops such as cotton which is deep rooted and can draw water from deeper soil layers. These objectives are also in line with national policies and strategies in both countries including in Zimbabwe, the National Climate Change Response Strategy (2015) and the Water Act (1998) which provides for the equitable distribution and stakeholder involvement in water management. Both countries are also signatories to the Shared Water Course Systems Protocol, which provides the basis for the management of international rivers in SADC.

The proposal is strongly supported by the Mozambique and Zimbabwean governments as well as other stakeholders. In addition to the target beneficiaries, the CRIDF design team have consulted with a range of stakeholders who actively support this proposal (see Section G). Going forward, the proposal design will ensure that the gender dimension is taken into account with a gender analysis and a specific mechanism will be developed to ensure the future engagement of key stakeholders in accordance with the Fund's environmental and social safeguards (ESS) and stakeholder consultation guidelines. The proposal places decision-making responsibility firmly with in-country institutions and will use national systems to ensure accountability. The proposal is in the process of being endorsed with a no objection letter from the NDAs or focal points in both countries accordance with the Fund's no-objection procedure.

Ownership at the community level will also be achieved by building on on-going local initiatives and facilitating a stakeholder managed selection of community beneficiaries (i.e. self-selection). This will increase transparency, participation and inclusion of vulnerable households in target interventions. The fund will only support projects conceived within the community and only those that need financial and technical support for developing the ideas into tangible projects.

CRIDF has a strong track record of supporting water resource management in the SADC region and is a credible champion for this project. CRIDF has considerable knowledge and experience of supporting IWRM&D projects and an extensive network of local partners in the region. The executing entities have a strong mandate to deliver the project and technical assistance will be provided to develop capacity. Both ZINWA and ARA-Centro have had experience on these kind of interventions working with CRIDF, the AfDB and Sida.

D.6. Effectiveness and efficiency[Econ omic and financial soundness and effectiveness of the

Provide details of the below and specify other relevant factors (i.e. debt service coverage ratio), if available. Estimated cost per t CO2 eq (total investment cost/expected lifetime emission reductions). Co-financing ratio (total amount of the Fund's investment as percentage of project). Economic and financial rate of return with and without the Fund's support.

Supporting community-based initiatives is the best way to strengthen stakeholder participation in IWRM&D at the local level. This participation is important because much of the day-to-day responsibilities for – and various effects of – IWRM occur at local catchment and community levels. This is particularly evident when considering such threats to the basin's water resources posed by uncontrolled gold panning or



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proposed activities]

environmentally damaging land use practices that lead to erosion and siltation of water bodies. To effectively engage communities in IWRM&D, small-scale investments are needed to link local communities more closely to IWRM processes and provide practical experience and lessons in IWRM. Deepening the participation of local people in IWRM processes will enhance climate resilience, contribute to poverty reduction, and improve health especially in relation to HIV and AIDS. Opportunities can also be sought to enhance transboundary relationships at local levels in the management and use of water resources reducing the potential for conflict.

Using small grants is the most cost effective way to deliver community based water management scheme as these tend to be rooted in community needs and often the community takes responsibility for the long term operation of these schemes. Smaller grants offer greater flexibility enabling the fund to be responsive to local needs. Small grants are also easier to manage than larger grants. As a demand driven fund, only projects with strong community support will be supported increasing local ownership and reducing the risk of failure. A flexible fund based on clear selection criteria on transboundary, climate resilience and pro-poor principles and strategies of IWRM&D could also deliver concrete benefits to vulnerable households within a relatively short timescale. For example, the fund could support activities such as a local community catchment management projects, development of rainwater harvesting systems, development of an appropriate livelihood project such as a local gravity-fed scheme for small-scale irrigation, or an activity aimed at improving health and sanitation e.g. ecological sanitation. The timely delivery of positive outcomes will help to build awareness of adaptation processes and encourage climate resilient farming practices and greater participation in IWRM in the long term reducing the need for costly rehabilitation interventions following extreme weather events.

Promotion of good water resource management practices will deliver improved efficiencies in the way water and natural resources are managed. Measures to conserve and store water more efficiently and conservation agriculture will be promoted to improve water and food security. Moreover, good levels of secondary uptake of good practices by communities neighbouring the target areas are expected as demonstrated by past experience with similar interventions in the Pungwe Basin in Zimbabwe. The adoption of improved agricultural and water management practices is expected to result in reduced levels of erosion, higher agricultural yields and river bank stabilisation.

The proposed approach is likely to attract additional funding hence increasing the impact of GCF's investment. CRIDF has investigated and assessed the level of interest from development partners who have an interest in the region to contribute to the fund and the strong interest from a number of them demonstrates the potential for leveraging additional finance into the fund. Basing the fund on a tried and tested approach in a neighbouring basin increases the potential for further investment since several Partners have shown their willingness to contribute to a 'basket fund' of sorts for similar small-scale community projects in the Buzi River Basin. This has been confirmed through the initial engagements held with several of these potential fund contributors.

E. Brief Rationale for GCF Involvement and Exit Strategy

Please specify why the GCF contribution is critical for the project/programme.

A GCF contribution is critical for this project due to the urgent need for support and because the emerging threat of food shortages, increasing poverty, and losses from extreme weather events is real and growing each year as temperatures rise and rainfall becomes more erratic. Failing to act now only increases the vulnerability of communities living in the basin to extreme flooding events, droughts and conflicts. Moreover, earlier commitments from the Africa Development Bank to support Community Based Water Management Projects in the Save and Buzi basins raised expectations of local communities and generated some good project ideas but so far none of these projects have materialised with bureaucracy within the Bank and complications in procurement and implementation being cited as the major cause for the delays. The proposed collaborative approach to water resource management for the transboundary Buzi basin will also result in greater cooperation between upstream and downstream communities.

The project meets all the investment criteria and is a low risk project for GCF as it is based on a similar fund which has been successful in an adjacent river basin. Zimbabwe and Mozambique are among the poorest most climate vulnerable countries in the world due to the aridness, low adaptive



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capacities and weak institutions to deal with climate change impacts. Community based interventions are likely to generate positive outcomes for target beneficiaries (as evidenced by the Pungwe Fund).

GCF intervention at this stage has added advantages in that there is room to cooperate with other funding partners to optimise outputs while learning from experiences of the past where similar efforts have been pursued. Other donors have indicated a willingness to co-finance which means that GCF support will leverage additional funds for building climate resilience in the Buzi basin. There are also significant opportunities to build on existing initiatives as the fund design can also learn from and complement existing efforts by Sida and AfDB in the region. A detailed feasibility study will be undertaken during proposal development to learn from previous experience and explore the most effective fund design and efficient fund management structures with less bureaucracy and higher focus on implementation efficiency.

Please explain how the project/programme sustainability will be ensured in the long run, after the project/programme is implemented with support from the GCF and other sources.

A major strength of small-scale IWRM&D interventions is that they tend to be community driven and owned. This builds in sustainability and social development to the management of water and other natural resources. The project is also highly likely to be co-financed and has a high potential for scale up and replication. A clear exit strategy will be developed during the design phase based on securing funds from other donors. This will ensure the long-term sustainability of the fund.

F. Risk Analysis

Please describe the financial and operational risks and discuss mitigating measures.

The main financial risk is the failure to disburse funds on time as this will create delays in implementation and prolong vulnerabilities to climate impacts which are already pronounced. Close collaboration will be maintained between the Executing Entity and GCF on the one hand and with communities on the other. Fund management systems will be simple and streamlined to avoid unnecessary bureaucracy and improve accessibility to funding for beneficiaries. Further financial risk could arise from the mismanagement of funds at the fund and community level. The Fund's financial management system and the project selection process will be designed to maximise transparency and accountability and financial management competencies will be built into the fund management team either through recruitment or capacity development. An external audit will also be carried out each year. The Fund's financial management systems will comply with any GCF requirements.

Operationally, the main risk arises from low institutional capacities within the two river basin management authorities that will be responsible for managing the fund. Weak management of the fund could lead to poor project selection, limited support for proposal development, slow disbursement of funds and inadequate monitoring and evaluation. This will be mitigated through the provision of technical oversight and assistance provided through GCF funds to enhance capacity and provide technical backstopping. Projects for rural communities always tend to attract political interference. The independence and professional integrity of the Fund Manager are crucial for success.

Please briefly specify the substantial environmental and social risks that the project/programme may face and the proposed risk mitigating measures.

The project is aimed at protecting and developing in a sustainable manner the water resources of the Buzi River Basin, taking into account the needs of multiple stakeholders. The Fund will give special consideration to addressing deforestation and poor land use in catchments areas which alter runoff patterns, inhibit natural recharge of groundwater, and increase risk of flooding. It will also support interventions that reduce siltation of aquatic ecosystems and support water storage schemes. Sustainable utilisation of the shared water resources will be achieved in a sustainable manner to ensure the protection of natural resources. The community based approach will enhance knowledge of water resource management at community level; improve farming practices; reduce erosion; reduce water pollution and improve water supply and sanitation. Environmental risks are considered to be low but will be thoroughly assessed in an EIA during project design.

Deteriorating water quality may affect the operation of the projects which will be supported by the Fund. The Buzi basin is already exposed to moderate levels of pollution from fertilisers, pesticides and herbicides which are used in small scale and large scale farming operations. There are also increasing reports of deforestation, unregulated alluvial mining and stream bank cultivation activities which accelerate environmental degradation and water pollution and sedimentation along the major river systems in both countries. These unsustainable activities are linked with high poverty levels and a lack of alternative livelihood opportunities. Supporting communities through this Fund will therefore offer alternative and more sustainable livelihood options to these communities. The project will also ensure close collaboration



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between the Fund Managers and ARA-Centro and ZINWA to increase efforts against pollution threats to water resources while, at the same time, ensuring that the projects supported by the Fund are managed in such a manner that they will not contribute to increased water pollution and general environmental degradation in the respective catchments.

The main social risk relates to the transboundary nature of the proposed project as it involves two countries with different administrative set ups, local languages, etc. However, water resources are in relative abundance in the Buzi basin (the total generation of the Buzi basin is 5685 Mm3/year) with no serious cases of water shortage which may lead to water conflict between Mozambique and Zimbabwe. The upstream Buzi sub- catchment in Zimbabwe contributes only 10% of the total area of the catchment further reducing the potential for conflict. The Buzi basin monograph shows that there is potential for further development of water resources without stressing the hydrological profile of the river system. However, further aggregated development, particularly that which comes through the proposed Fund, could have a transboundary dimension and should be in line with agreed quantities as outlined in the transboundary agreements for the river system.

The design of the Fund will therefore make provision for transboundary collaboration. In addition, cross-border stakeholder exchange visits will be encouraged for the beneficiaries as this further explores collaboration between stakeholders in both countries. At the national level, the signing of the Protocol on Shared Watercourses by the two countries and the establishment of the Joint Water Commission between Mozambique and Zimbabwe has created a common platform for the development of shared water resources. Moreover, both countries have agreed to jointly implement the project and there is already ongoing cross-border collaboration in the region under the umbrella of SADC (e.g. the Pungwe River Basin between Mozambique and Zimbabwe) and in other sectors.

G. Multi-Stakeholder Engagement

Please specify the plan for multi-stakeholder engagement, and what has been done so far in this regard.

There has been extensive consultation with a variety of stockholders including: communities living in the Buzi Basin, the Technical Committee of the Joint Water Commission between Mozambique and Zimbabwe, the DNA's of both Zimbabwe and Mozambique, ARA-Centro, the Department of Water Resources and Development of Zimbabwe, ARA-Centro and ZINWA, as well as with potential funders (including the Swedish International Development Cooperation Agency, World Bank, DFID, Danida, the Netherlands and AfDB). An engagement strategy will be developed during the project design to maximise stakeholder involvement during all stages of the project cycle.

H. Status of Project/Programme

- 1) A pre-feasibility study is expected to be completed at this stage. Please provide the report in section J. CRIDF prepared an initial assessment confirming the relevance, viability and potential the establishment such a fund would have in improving the livelihoods of vulnerable communities in the Buzi Basin.
- 2) Please indicate whether a feasibility study and/or environmental and social impact assessment has been conducted for the proposed project/programme: Yes

 No

 (If 'Yes', please provide them in section J.)

The CRIDF assessment made recommendations for a detailed feasibility study to be undertaken to learn from previous experience, and explore the most effective fund design and efficient fund management structures, with less bureaucracy and higher focus on implementation efficiency. This, along with an environmental and social impact assessment will be carried during the detailed project design.

3) Will the proposed project/programme be developed as an extension of a previous project (e.g. subsequent phase), or based on a previous project/programme (e.g. scale up or replication)? **Yes** □ No □ (If yes, please provide an evaluation report of the previous project in section *J*, if available.)

The establishment of a fund for the Buzi Basin can be viewed as an extension of the already existing fund being implemented by the Sida funded Pungwe Transboundary Basin Water Management Project. Communities within the Pungwe, Buzi and Save catchments have also received support for micro water projects before through NGOs and governments. A GCF supported fund will also complement past attempts by Africa Development Bank (AfDB) to support small projects in Buzi and Save catchments at the transboundary scale.

GCF supported interventions would be welcome in the sense that both Sida and AfDB have failed to satisfy the demand for funding of small projects as evidenced by the larger number of proposals received against the actual number of projects that were funded. The involvement of AfDB was supposed to end in June 2014 following a 6-month extension to facilitate completion of outstanding projects.



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However, since some of these projects have not taken off, it is not clear if they will be implemented at all. Again this is another window for GCF to continue from where AfDB has left off. The introduction of CBMPs had raised expectations of stakeholders and, yet, nothing has materialised on the ground. GCF support would therefore be instrumental in maintaining stakeholder engagement for the successful implementation of IWRM in all catchments. The projects will not only help communities to build resilience against climate change impacts, but will also improve general livelihoods in the catchments.

I. Remarks		
	Supporting Documents for Concept Note	
	Map indicating the location of the project/programme	
	Financial Model	
	Pre-feasibility Study	
	Feasibility Study (if applicable)	
	Environmental and Social Impact Assessment (if applicable)	
	Evaluation Report (if applicable)	

Annex 1 MOU between CRIDF and SADC.



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