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Adaptation Fund Board Project and Programme Review Committee Thirty-fourth Meeting Bonn, Germany, 8-9 October 2024

PROPOSAL FOR ZIMBABWE



ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: REGULAR-SIZED PROJECT CONCEPT

Country/Region:	Zimbabwe		
Project Title:	Enhanced Climate Change Adaptation in semi-arid areas of Zimbabwe through sustainable business models		
Thematic Focal Area	: Rural development		
Implementing Entity	: Environmental Management Authority (EMA)		
Executing Entities:	United Nations Development Programme (UNDP)		
AF Project ID:	AF00000392		
IE Project ID:	Requested Financing from Adaptation Fund (US Dollars): 10,000,000		
Reviewer and contact person: Dirk Lamberts Co-reviewer(s): Ahmad Ghosn			
IE Contact Person:	Hlompho Naledi Kulube		

Technical Summary	The project "Enhanced Climate Change Adaptation in semi-arid areas of Zimbabwe through sustainable business models" aims to support vulnerable communities and institutions in Zimbabwe to become more adaptive and resilient to climate shocks while also strengthening entrepreneurial activity and private investment into adaptation work in the country. This will be done through the four components below:
	Component 1: Climate-proofed irrigation schemes and piped water development (USD 4,500,000);
	Component 2: Climate-proofed value chain/market development (USD 2,000,000);
	<u>Component 3</u> : Off-farm income generation activities through vocational skills training and entrepreneurship development (USD 1,000,000).
	<u>Component 4:</u> Improved community climate change adaptation as a result of access to reliable weather and climate information (USD 700,000);
	Requested financing overview:
	Project/Programme Execution Cost: USD 950,000
	Total Project/Programme Cost: USD 9,150,000
	Implementing Fee: USD 850,000

	Financing Requested: USD 10,000,000
	The proposal includes a request for a project formulation grant of USD 50,000.
	The initial technical review raises several issues, such as IE ownership of the project, effectiveness and sustainability of the proposed activities and compliance with the AF ESP and GP, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.
Date:	23 May 2024

Review Criteria	Questions	Comments
Country Eligibility	 Is the country party to the Kyoto Protocol, or the Paris Agreement? 	Yes.
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes. Zimbabwe is increasingly vulnerable to extreme events such as drought, floods, heavy rainfall events and heat waves. Limited and unreliable rainfall patterns coupled with socio-economic activities strongly linked to agriculture and natural resources use make the country extremely vulnerable to a changing climate. Zimbabwe's climate variability is among the key drivers of food and nutrition insecurity across the country.
Project Eligibility	 Has the designated government authority for the Adaptation Fund endorsed the project/programme? 	Yes. As per the Endorsement letter dated 26 January 2024.
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	Yes. The proposal consists of 43 pages and 1 page of annexes. The document could benefit from a round of proofreading and revision to better align the proposal with AF expectations for various sections, and to
		address several inconsistencies.

	E.
3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Unclear. The proposal includes a range of activities that all directly or indirectly may contribute to creating adaptive capacity for the communities in the target area. All activities proposed are at an early stage of formulation, and are thereby low on specifics, rather broad and the proposal does not demonstrate the potential to achieve most of the components' objectives.
	The feasibility of the activities of component 1 is unclear. The proposal includes a generic description of the potential water sources for the irrigation schemes but provides no specific information on the actual availability of increasingly scarce water for irrigation, or how that water resource will be managed. What will be the water source for the envisaged dam, and what will be its impact? Similarly, the description of the piped water activities does not provide information that is essential to determine their viability. In addition to the concerns over the sources of the water, there is no information on the feasibility and operation of the 'mini water purification plants'. What do they entail, what is their capacity and what will be the assured quality of the (drinking) water they will produce? Who will manage, who will finance and how will the network be maintained – all this information is lacking. Similar concerns apply to the other components, e.g. on the nature and relevance of "contextually relevant vocational skills" and the use of the weather stations and how these will generate relevant information. The link with disaster preparedness is mostly missing.

	 CAR 1: Please further elaborate the envisaged activities of the project to demonstrate that they are feasible and sustainable concrete adaptation actions. The underlying Theory of Change (TOC) of the project is unclear. CR 1: Under Part II.A, please briefly discuss the project TOC and provide a schematic presentation of the same.
4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	 Unclear. The information provided on the activities is too limited to substantiate the claimed benefits. E.g., the relevant section of the proposal states (p. 18) that "The irrigation schemes and community gardens will be run through a commercial business model which will allow the participants to have sustainable income even in the presence of climate and market shocks". Benefits are discussed under each component without categorizing benefits (environmental, social, economic) and providing supporting statistics, if any. CR 2: Please describe and substantiate the economic, social and environmental benefits the project will provide, in particular to vulnerable communities. The description of the benefits includes that the project activities will "challenge the pervasiveness of patriarchal dominance in Zimbabwe's rural communities ()." There is no indication that a gender analysis was conducted. CR 3: Please clarify if a gender analysis was carried out and present its key relevant findings in the proposal.

	Section II.B (2) of the proposal provides a description of how the executing entity will assess environmental and social impacts of the project during the full project proposal development stage. At the concept proposal stage, the environmental and social risks need to have been identified in line with the AF ESP and GP.
	Please see CAR 9.
	Throughout the proposal, the IE relies heavily on the EE – including for matters that are the responsibility of the IE – to provide key project credentials and to ensure project effectiveness and compliance with AF policies.
	CR 4: Please clarify that the IE has sufficient ownership of the project to effectively fulfill its role of implementing entity, including on fiduciary matters and those related to safeguards and gender.
5. Is the project / programme cost effective?	Unclear. The discussion under Part II.C only reflects measures employed by the EE for optimal use of resources to generate the project outcomes. Focus should be placed on the selected scope and approach of the project interventions and demonstration of cost effectiveness from a sustainability perspective compared with alternative technical options.
	CAR 2: Please revise the discussion under Part II.C to focus on the cost effectiveness of the selected scope and approach from a sustainability perspective and compare with alternative options.

6.	Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	 Largely. However, while the most important adaptation-related plans and strategies are discussed, other relevant national and sectoral plans and strategies, if any, need to be mentioned, among other plans discussed under "Policy Landscape" in Part I. CR 5: Please identify and include in the discussion other relevant national and sectoral plans and strategies.
7.	Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	 No. The initial statement in section II.E of the proposal that UNDP has adopted the AF ESP is incorrect. AF projects are required to comply with AF policies and national legal requirements, and the IE is accountable in this respect. The IE is encouraged to apply its own safeguards system to meet the AF requirements, supplemented and modified as needed. The relevant section of the proposal only addresses matters related to the Zimbabwe Environmental Management Act. CAR 3: Please identify all relevant national technical standards and describe how the project will meet those.
8.	Is there duplication of project / programme with other funding sources?	Unclear. The proposal includes a table of initiatives with other funding sources but lacks essential information such as the titles of the related projects, status along with start and end dates, synergies, lessons learned, and how the synergies/lessons learned are considered in the project design.

	CR 6: Please provide further relevant information on relevant initiatives with other funding sources, elaborate on how there is no duplication and highlight possible synergies and how lessons learned have been considered the project design.
9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	No. The relevant section of the proposal provides mostly irrelevant information on monitoring and evaluation, for which there is no role allocated to the IE.
	The minor learning and knowledge management elements are generic. There are no corresponding elements in the description of the components.
	The proposal does not mention the ongoing AF project in Zimbabwe, implemented by UNESCO.
	CAR 4: Please include a learning and knowledge management component that (i) identifies the lessons and knowledge the project is expected to generate, and (ii) includes concrete actions to capture such knowledge and make it available in an appropriate format to relevant audiences.
10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Not fully. The discussion in Part II.H (p. 31) does not reflect consultations with local communities' beneficiaries, with due reference to vulnerable/marginalized groups or consideration of gender aspects as per AF ESP and GP. Moreover, more details are needed on these consultations, including topics discussed and outcomes, and how these outcomes have been incorporated in the project design.

	CAR 5: Please include information on consultations with relevant communities' beneficiaries, with due reference to vulnerable and marginalized groups, considering gender aspects. Please report on these consultations in the proposal along with related statistics on the participants.
11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	 Unclear. The full cost of adaptation for most of the proposed activities is unclear. E.g., the structures and costs for the management and maintenance of the irrigation schemes are not mentioned. Similarly, the vocational training will develop certain skills but none of the other elements of developing these skills into income generating enterprises like tools, equipment, etc. are mentioned. Claims of ecosystem and catchment protection are vague and not substantiated. CAR 6: Please clarify the requested financing on the basis of the full cost of adaptation reasoning. The relevant section of the proposal includes inconsistencies with other parts of the proposal, e.g. on budget figures. CR 7: Please ensure consistency throughout the proposal.
12. Is the project / program aligned with AF's results framework?	Unclear. The alignment table includes AF results framework Outcome 8 (Support the development and diffusion of innovative adaptation practices, tools and technologies), while the project does not contain any innovation elements.

	CAR 7: Please demonstrate how the project is aligned with the AF results framework.
13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	No. The relevant section of the proposal makes a distinction between the sustainability of the project infrastructure activities and that of the livelihood improvement mechanisms. The argument for the sustainability of the infrastructure is the activity itself. For the livelihoods aspects, the arguments are limited to claims regarding UNDP's capabilities.
	Addressing sustainability from AF perspective requires demonstration (i) of how the adaptation benefits achieved can be sustained, replicated and/or scaled up with other funds after its end; (ii) that all key areas of sustainability are addressed (economic, social, environmental, institutional, financial); and (iii) of arrangements through which the above would be achieved taking into account operation and maintenance of facilities to be installed, policies/governance arrangements to be developed/implemented, knowledge to be generated, capacities to be improved, etc. CAR 8: Please revise the project activities to ensure that sustainability is taken into account.
14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	No. The proposal includes a completed table under section II.K, marking the AF ESP principles for which risks have been identified.
	However, the proposal provides no substantiating information that supports the reported risks findings.

		 Risks are said to have been identified by the EE, using UNDP's SESP. It is unclear how this would have lead to outcomes compliant with the AF ESP and GP. Application of just the UNDP SESP does not lead to AF ESP and GP compliant outcomes. It is unclear how the IE has provided oversight of the identification of the environmental and social risks of the project activities, and how it has ensured compliance with the AF ESP and GP. CAR 9: Please identify environmental and social risks of the project activities in compliance with the AF ESP and GP.
Resource Availability	 Is the requested project / programme funding within the cap of the country? 	Yes.
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	 No. The IE Management Fee is currently at 9.3 per cent of the total project budget before the fee. CAR 10: Please adjust the IE fee to be within the permissible level. Several budget figures include numbers with decimal figures. CAR 11: Please remove decimal figures from the budgets.
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	 No. The Project Execution Costs are currently at 10.4 per cent of the total project budget including the fee. CAR 12: Please adjust the Execution Costs to be within the permissible level.

Eligibility of IE	 Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board? 	Unclear . The accreditation of EMA expires on 30 June 2024.
	 Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund? 	n/a at concept stage
	Are there measures for financial and project/programme risk management?	n/a at concept stage
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage
	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage
	Is an explanation and a breakdown of the execution costs included?	n/a at concept stage
Implementation Arrangements	Is a detailed budget including budget notes included?	n/a at concept stage
5	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	n/a at concept stage
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	n/a at concept stage
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage



CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Enhanced Climate Change Adaptation in semi-arid areas of Zimbabwe through sustainable business models.

Country:ZimbabweThematic Focal Area:AgricultureType of Implementing Entity:National Implementing EntityImplementing Entity:The Environmental Management AuthorityExecuting Entities:United Nations Development Programme (UNDP)Amount of Financing Requested:10 million USDProject Formulation Grant Requestvailable to NIEs only): Yes No

Amount of Requested financing for PFG: 50,000 USD

Letter of Endorsement (LOE) signed: Yes 🛛 No 🗆

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities

Stage of Submission:

 \Box This concept has been submitted before

It is the first submission ever of the concept proposal.

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

Please note that concept note documents should not exceed 50 pages, including annexes.

Project/Programme Background and Context:

Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Context:

Zimbabwe is largely semi-arid and generally experiences low and erratic rainfall. The average annual rainfall is 650mm, but geographically it ranges from around 350 to 450mm per year in the Southern Lowveld to above 1,000mm per year in the Eastern Highlands¹. Zimbabwe is vulnerable to climate change including extreme events such as drought, floods, heavy rainfall events and heat waves. These impacts are threatening water supplies, food and nutrition security, health, hydroelectric power generation, human settlements and biodiversity thereby impeding the country's social and economic development goals². The Government of Zimbabwe regards climate change as one of the threats to the country and its people and recognizes its potential to undermine sustainable development³.

Rainfall has declined by about 5 percent since 1901 and is projected to further decline by approximately 15 percent by 2060 and up to 25 percent by 2080, especially over the south-western parts of the country⁴. The frequency and intensity of extreme weather events such as droughts, floods and tropical cyclones are projected to increase.

The climate landscape in the majority of the peripheral districts is characterized by prolonged periods of hot temperatures and low and erratic rainfall and mid seasonal droughts. A hotter future, characterised by late start of the rainfall season is projected, along with increased intensity and frequency of intra-annual and intra-seasonal variability⁵. A World Bank study found that by 2030, without adaptation, the impacts of a drier climate on the agricultural sector could cause a decline in Zimbabwe's GDP of over 2%⁶.

Over the past 2 decades, Zimbabwe has been experiencing increased frequency and magnitude of droughts, prolonged dry spells, violent storms, and tropical cyclone activity. The extreme weather events are negatively impacting on water, agriculture, health, forestry & biodiversity, infrastructure, human settlement, and tourism sectors. Between 1950 and 2003 Zimbabwe had two episodes of extreme drought, four of severe drought, and 16 instances of mild drought⁷. Drought has caused six of the ten worst natural disasters between 1991 and 2013⁸. Beside droughts, the country encountered, 24 epidemic episodes, 16 of which occurred during the period 2000–2016 (Epidemic outbreaks tend to follow the cycle of flooding)14 floods, and 8 storms, which resulted in total deaths of approximately

¹ Government of Zimbabwe (2022) Fourth National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment, Climate, Tourism and Hospitality Industry Harare

² Government of Zimbabwe (2023) Zimbabwe's climate change National Adaptation Plan

³ Government of Zimbabwe (2023) Zimbabwe's climate change National Adaptation Plan

⁴ Government of Zimbabwe (2022) Fourth National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment, Climate, Tourism and Hospitality Industry Harare.

⁵ Government of Zimbabwe (2020). Understanding Climate Risks over Zimbabwe. Ministry of Environment, Climate, Tourism and Hospitality Industry, Harare

⁶ https://climateknowledgeportal.worldbank.org/country/zimbabwe/vulnerability

⁷ Government of Zimbabwe (2020). Understanding Climate Risks over Zimbabwe. Ministry of Environment, Climate, Tourism and Hospitality Industry, Harare

⁸⁸ UNDP and Government of Zimbabwe. (2016). Mapping of Selected Hazards Affecting Rural Livelihoods in Zimbabwe -A District and Ward Analysis 3. 2

8000 people, with more than 20 million people affected, and total damage of USD 950 million⁹. Future annual rainfall declines by up to 10% were predicted, with the southern and southeast sections of the country experiencing the highest decline¹⁰. Drought and prolonged mid-season dry spells were the most prevalent shocks experienced by 45% of the rural households in Zimbabwe in 2023¹¹.- ZimVac 2023

The likely impacts of climate change are numerous, and most, especially extreme weather/climate events could seriously hinder the realization of targets set under the Sustainable Development Goals particularly SDG 1 (Poverty), SDG2 (Hunger), SDG3 (Health), SDG5 (Gender Inequality), SDG6 (Water) because of heightened vulnerabilities of natural ecosystems, agriculture, water, health, energy and infrastructure. Zimbabwe's climate variability is among the key drivers behind the cereal insecurity food and nutrition insecurity across all the provinces, with 26% of the rural population (2,715,717 people) projected to be food insecure at the peak of the lean season in 2024¹². Stunting prevalence (26%), has remained high according to the World Health Organization classification¹³.

The human migration trends point towards increased cross border migration, rural-to-urban and urbanto-urban migration, where population growth and urbanization are taking place at too high a pace for the receiving areas to cope. Climate variability and change is therefore an extra burden that exacerbates existing challenges. Zimbabwe's adaptive capacity is constrained by limited alternative livelihood options for the majority of the population, inadequate ability to withstand or absorb disasters, and its socio-economic status¹⁴. The proposed interventions under this call are, therefore, designed to assist the vulnerable communities to adapt to adverse effects of climate change (hotter and drier climate in the country, and to greater variability in precipitation - in terms of rainfall volumes, seasonal onset, duration, and intensity).

The driest region is in the south and southwest low-lying areas which experience a dry climate with rainfall ranging from 250 to 500mm per year. The rainfall pattern is characterized by shifts in the onset and cessation dates of the rainfall season, increase in frequency of dry spells interspaced with increase in the frequency of heavy short-lived rainfall events. These characteristics determine the quality of the rainfall season in any given year. Available evidence for rainfall trends suggests moderate decreases in annual rainfall over Zimbabwe of approximately 5 percent since 1900¹⁵. The number of days with rainfall shows a decreasing trend. There is also evidence which shows that inter (between seasons) /intra (within season) rainfall variability over the country has increased since the late 1960s and that droughts have become more frequent, severe and widespread. On the other hand, intense periods of heavy short-lived rainfall have resulted in increased incidences of flooding¹⁶.

It is against this background that most communities prioritized construction of dams/ water reservoirs (34.3%) and employment/job creation (34.3%) and road and water infrastructure development (30.8%)

⁹ https://climateknowledgeportal.worldbank.org/country/zimbabwe/vulnerability

¹⁰ Government of Zimbabwe (2020). Understanding Climate Risks over Zimbabwe. Ministry of Environment, Climate, Tourism and Hospitality Industry, Harare

¹¹ Zimbabwe Vulnerability Assessment Committee (ZimVAC) 2023 Rural Livelihoods Assessment, Food and Nutrition Council, Zimbabwe

¹² Zimbabwe Vulnerability Assessment Committee (ZimVAC) 2023 Rural Livelihoods Assessment, Food and Nutrition Council, Zimbabwe

¹³ Zimbabwe Vulnerability Assessment Committee (ZimVAC) 2023 Rural Livelihoods Assessment, Food and Nutrition Council, Zimbabwe

¹⁴ Government of Zimbabwe (2023) Zimbabwe's climate change National Adaptation Plan

¹⁵ Government of Zimbabwe (2020). Understanding Climate Risks over Zimbabwe. Ministry of Environment, Climate, Tourism and Hospitality Industry, Harare

¹⁶ Government of Zimbabwe (2020). Understanding Climate Risks over Zimbabwe. Ministry of Environment, Climate, Tourism and Hospitality Industry, Harare 3

in the Rural Vulnerability Assessment for 2023¹⁷¹⁸.

The country's adaptive capacity and response to the challenges caused by the changing climate are constrained by high poverty levels and limited human, institutional and financial capacity. There is therefore need to strengthen and sustain climate change mainstreaming into development planning to effectively respond and adapt to the effects of climate change.

Targeted Districts

Climate variability and climate change are the principal consideration in the identification of target communities for the adaptation activities. As such the proposed programme will only target the vulnerable rural districts in the southern, south-western, and south-eastern areas of Zimbabwe (Lower Chipinge, Chivi, Insiza and Umzingwane districts). Below is a summary profile of the targeted districts.

Chipinge

The lowveld part of Chipinge district is in agro-ecological region V with very little rainfall¹⁹. The high incidence of drought and seasonal dry spells means that the dry land cropping is usually successful. Predominant crops are maize, small grains, cotton, sugar beans and horticultural crops. It is a major livestock zone with beef, goats, indigenous poultry and donkeys. However, livestock is usually affected by diseases like Foot and Mouth, Anthrax, Black Leg in cattle and New Castle in poultry. The main economic activities are mostly agricultural-related activities as well as cross border trading and activities due to the district's proximity to Mozambique. Main sources of livelihood include crop and livestock production, formal and informal employment as well as casual labour and petty trade. All the sources of livelihood are not able to meet the needs of the households including food needs. The black clay soils also work as an advantage for improving the livelihoods once water is available due to their water holding capacity. Wards along Save river and in the low-lying Lowveld are also prone to flooding and cyclones.²⁰

Lower Chipinge is also characterized with high level of land degradation. The chief drivers of land degradation are erosion from poor land management practices and poor soil structures, veld fires and the propagation of invasive alien species. It usually results in food insecurity, higher food prices, climate change, environmental hazards, and the loss of biodiversity and ecosystem services. Human induced land degradation is high in the Lowveld.

Chivi

Chivi is located in a semi-arid area and occupies an area of 3,510 km². The district is drought-prone, with an average rainfall of 450 mm per year. It has a population of 172,979 (Census 2022). The high incidence of drought means that the agricultural practices in the area are at risk. Maize, sorghum, and groundnuts are grown under dry land conditions and provide the food and income base in the district. Subsistence agriculture is the basis of the rural economy, supplemented by trading, artisanal mining and fishing. The district has 32 Wards of which 29 are communal.

¹⁷ Zimbabwe Vulnerability Assessment Committee (ZimVAC) 2023 Rural Livelihoods Assessment, Food and Nutrition Council, Zimbabwe

¹⁸ African Development Bank. (2019). Zimbabwe Infrastructure Report 2019. African Development Bank.

¹⁹ Government of Zimbabwe (2022) Fourth National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment, Climate, Tourism and Hospitality Industry Harare.

²⁰ Source: WFP ICA

Insiza

Insiza district is in the Agro-ecological zone IV and the southern part in zone V, which is characterized by low rainfall and high annual evaporation²¹. Crop production is mainly through irrigation and not much comes from rain-fed agriculture, as Insiza predominantly receives low, and poorly distributed, rainfall of up to +/-400mm and is prone to severe long dry spells during the summer season, leading to crop failure. As a result, Insiza district has had varying trends of food insecurity ranging from 42% in 2016, 49% in 2019 and 18% in 2022. Rampant gold panning in the district has resulted in the siltation of rivers and dams thereby impacting negatively on water sources for domestic, irrigation and livestock use. Veld fires common in the Northern parts of Insiza have exacerbated land degradation by destroying both flora and fauna. The end result has been the loss of biodiversity, weakening of soil structure, increased soil wash as well as siltation of water bodies. The district is also prone to flash floods.²²

Umzingwane

The climate of Mzingwane is semi-arid to arid receiving an average of between 200 and 450mm of rainfall per year which is poorly distributed. The district usually experiences dry spells, which can lead to crop failure. The entire district mostly depends on rain-fed production Stunting rates are very high in the district, ranging from 22.1% to 34.2%. The average poverty prevalence rate for Umzingwane District is 82.1%.²³. Small grain production and livestock production is the major source of livelihood in the district. Persistent drought results in low yield resulting in most households being food insecure. Due to the erratic rains received over the years, the district is experiencing low yields resulting in food insecurity. Rampant gold panning in the district has resulted in the siltation of rivers and dams thereby impacting negatively on water sources for domestic, irrigation and livestock use.²⁴

Policy landscape:

Climate change has been a complex and cross-cutting issue in Zimbabwe. As such the Government of Zimbabwe has responded by developing various policies to create an enabling environment to support climate adaptation and mitigation. The country's policy frameworks, strategies and the institutional arrangements for managing environmental and climate challenges are expansive. The Constitution of Zimbabwe protects and guarantees environmental rights while at the same time promoting sustainable socio-economic development. Section 73 of the Constitution provides that every person has the right to an 'environment that is not harmful to health or well-being and to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development. In addition, section 77 (a) of the constitution provides that every person has the right to safe clean and potable water. The National Development Strategy (NDS1) identifies climate resilience and Natural Resources Management as one of the priorities for the nation, and further outlines strategies implemented to improve climate action.

Zimbabwe's National Climate Policy developed in 2017 aims to enable Zimbabwe to establish the legal

²¹ 2022 Population Distribution: Census Report

²² WFP Drought Risk Classification 2020, Flood Risk Classification 2020, UNDP- Multi Hazard Analysis 2015

²³ Zimbabwe Poverty Atlas, 2015

²⁴Umzingwane District FNS Profile 2022-FNC

structures to regulate businesses in climate-related matters and enable them to reduce their greenhouse gases (GHG) emissions. The Policy further focuses on adaptation with regard to rural communities and agriculture. The National Climate Change Policy's vision is a climate resilient and low carbon Zimbabwe and guides climate change management in the country including climate change mitigation through the use of renewable energy and energy efficiency. The Climate Change bill is currently under the process of finalization, once gazetted it is expected to provide a supportive legislative framework that enhances stakeholder collaboration in mainstreaming climate change mitigation and adaptation at all levels of development in the country. In addition, Zimbabwe developed its long-term green growth strategy the Zimbabwe Long-term Low Greenhouse Gas Emission Development Strategy (2020-2050) in 2020. This strategy expands from 2020-2050 and is subject to domestic Measurement, Reporting and Verification (MRV). Zimbabwe also has a National Climate Change Response Strategy which promotes climate change adaptation and mitigation measures: The National Environmental Policy and Strategies (2009) whose main thrust is to avoid irreversible environmental damage, improve resource and energy efficiency and promote use of clean energy sources; and the Zimbabwe Climate Change Gender Action Plan provides action-oriented recommendations to support a more comprehensive, inclusive and equitable approach to climate change²⁵.

The Zimbabwe Climate Change Response Strategy developed in 2014 to provide guidelines on coordination and mainstreaming of climate change factors into the country's developmental trajectory. The strategy led to the development of the country's National Adaptation Plan (NAP) Plan draft which informed the development of the National Adaptation Plan (NAP). The NAP is aimed at mainstreaming climate risks into national developmental planning, programs, and policies. As such priority adaptation measures include: developing and implementing climate-smart agriculture solutions and strengthening the resilience of agricultural value chains and markets; enhancing early warning and climate-related disaster risk reduction systems; ensuring climate-resilient infrastructure and design; and developing and promoting resilient water resources management. The NAP also covers an additional 4 priority sectors ie tourism, human settlements, forestry and biodiversity.

The National Renewable Energy Policy of 2019 aims to increase access to affordable and clean energy through addition of installed Renewable Energy capacity in the country. In this policy the Ministry of Energy and Power Development and its agencies undertake to develop and implement off-grid energy solutions for access to electricity and powering productive uses in the water and agriculture sectors. This is complemented well by the National Climate Change Policy which also promotes renewable energy technologies in agriculture that encompass bio-energy crops, clean energy for productive use in irrigation and the use of sustainable energy options in the agriculture sector for crop production, curing and drying.

The Bio-fuels Policy of 2020 is a policy framework for the production and use of liquid biofuels in the transport sector up to year 2030. The Policy aims to implement production models that increase community benefits from bio-fuel investments and foster institutional cooperation & coordination. The National Agriculture Policy Framework (NAPF), 2018 to 2030 aims to create a stable enabling environment that enhances the capacity of the agricultural sector and the flow of investment towards sustainably enhancing agricultural productivity and production, and natural resource management. The policy recognises that access to affordable and reliable energy is a critical factor for the success of

²⁵ Government of Zimbabwe (2022) Fourth National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment, Climate, Tourisen and Hospitality Industry Harare.

agriculture across the value chain and to ensure that the sector is competitive and plays to its comparative advantage within and outside the country. It is also recognised that approximately 70% of Zimbabweans rely on agriculture for their livelihood. Consequently, agriculture development cannot be divorced from energy development. Focussing on rural electrification using a combination of renewable energy technologies will spur rural development and creation of agro-enterprises thereby providing diverse employment opportunities especially for those vulnerable and left behind, including women and youth in the rural areas.

The 2013 Constitution emphasises that government must prioritise provision of water in the allocation of revenue to national and provincial tiers of government. The Water Act mentions the need for provision of water for reasonable primary uses of water for that include basic domestic human needs in or about the area of residential premises, or the support of animal life, other than fish in fish farms or animals or poultry in feedlots and Dip tanks. The National Water Policy (NWP) (approved in 2013) guides water resource management in Zimbabwe. The NWP recognizes the significance of climate variability and calls for an improved understanding of climate change on water resources. The government is developing a National Water Resource Master Plan (NWRMP) for 2020–40, which will assess the current state of water resources, develop spatially disaggregated projections of requirements and availability, and produce a program of investments to achieve goals. The NWRMP presents a real opportunity for Zimbabwe to tackle many of the major challenges facing the sector. Zimbabwe's climate related policies and strategies are intrinsically linked to global frameworks that shape the climate discourse.

As a party to the UNFCCC and the Paris Agreement, Zimbabwe submitted its Intended Nationally Determined Contribution (INDC) in 2015 which became the country's first NDC in 2017 when the country ratified the Paris Agreement. In line with the Paris Agreement to revise the NDCs every five years, Zimbabwe presented its revised NDC in 2021 which includes an ambitious 7% increase in emission reduction target from 33% to 40% below the projected business as usual scenario by 2030. Unlike the first NDC which covered only the energy sector, this NDC makes progress towards an economy-wide NDC as it includes the waste, Industrial Processes and Product Use (IPPU) and; the Agriculture, Forestry and Other Land-Use (AFOLU) sectors. In addition, the revised NDC presents high-level adaptation actions in response to the country's high vulnerability to climate change impacts.

Full implementation of Zimbabwe's climate policies and strategies require mobilization of domestic, international, private and public financial resources. It will also require a multi-stakeholder approach in the interventions. According to the revised NDC (2021), the mitigation measures alone are estimated at USD 4.8 billion and the adaptation measures were costed in the NAP with an estimated requirement of USD 10.23 billion from 2023-2030. There are currently large gaps between current public adaptation finance flows and the funds required for adaptation, especially in developing countries and Zimbabwe has not been spared. It was discovered that every USD 1 invested in climate adaptation brings USD 4 in benefits. As such, early action and investment makes economic sense and support social justice, as delayed adaptation will make the country face higher economic and social costs of disaster relief and recovery. Many adaptation investments serve multiple purposes and can deliver wide-ranging health, social, environmental and economic 'co-benefits' for the at-risk populations.

Challenges:

The major challenge in Zimbabwe is its vulnerability to climatic shocks and climate change. The vulnerability is further exacerbated by poverty with about 40% of Zimbabweans in extreme poverty

living below USD 1.90 per day while about 72% of Zimbabweans are living below the poverty datum line. With about 70% of the population employed in the agricultural sector, and about 60% of all raw materials for the industry and 45% of the country's exports being of agricultural origin, climate change has a significant impact to Zimbabwe's economy. Seventy percent of Zimbabwe's population depending on rainfed agriculture for food, the impact of climate change is high on livelihoods and food security.

Zimbabwe is divided into five Agro-ecological Regions. Regions I, II and III, which experience better rainfall pattens, are more suited for commercial crop production, while Regions IV and V are more suited for irrigated agriculture and livestock farming. The vast majority of farmers in Zimbabwe (70%) are smallholder farmers that are mostly reliant on rain-fed agriculture and natural resources as their livelihood, and thus face a high risk of crop failure due to drought²⁶. Most small-holder farmers live in Regions IV and V and grow both food for subsistence and cash crops. Subsistence farming, however, is more dominant because of a poor agricultural resource base and poor support services.

Large inter-annual and seasonal climatic variability challenge the primarily rainfed production base, a situation made worse by low levels of farming technology, low adaptive capacity, and weak support services. Historically, climate variability has had major implications on socio-economic development. For example, the 2015/2016 El Nino event lowered rainfall and reduced agricultural production to the point where four million people needed temporary food aid A World Bank study found that by 2030, without adaptation, the impacts of a drier climate on the agricultural sector could cause a decline in Zimbabwe's GDP of over 2%²⁷.

Zimbabwe faces a significant disparity between rural and urban access to energy, with about 83% of the population in urban areas with access to energy compared to 20% in rural areas. With energy being one of the key drivers of economic growth, the disparities in access to energy disadvantage the rural population. Furthermore, Zimbabwe has a deforestation rate of about 262,000 ha per year the annual deforestation rate is estimated at 262 348.98 hectares per annum for the period 1992 to 2017. and is driven largely by agricultural expansion and reliance on wood energy (Forestry Commission, 2020). Wood energy is the primary source of energy used for domestic purposes in rural areas. In the face of a changing climate, continual depletion of trees increases the occurrence of other ills such as desertification, further increasing the vulnerability of rural communities.

Zimbabwe is also susceptible to extreme weather events such as droughts and cyclones, which often affect the access to water resources of rural communities. Prolonged droughts have affected the provision of portable water in several rural communities causing people to turn to unsafe water for domestic use and livestock increasing the prevalence of water borne diseases. Weak and/or inadequate community based early warning systems prevent key sectors from anticipating extreme events and, hence, leaves them vulnerable to adverse impacts. Disaster risk reduction is also not fully mainstreamed in development planning and investments in climate-proofing infrastructure are limited.

Project/Programme Objectives:

²⁷https://documents1.worldbank.org/curated/en/615901625732976000/pdf/Assessment-of-the-Potential-Impacts-of-Climate-Variability-and-Shocks-on-Zimbabwe-s-Agricultural-Sector-A-Computable-General-Equilibrium-CGE-

Analysis.pdf

²⁶ Government of Zimbabwe (2022) Fourth National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment, Climate, Tourism and Hospitality Industry Harare

List the main objectives of the project/programme.

This proposal aims to support vulnerable communities and institutions in Zimbabwe to become more adaptive and resilient to climate shocks while also strengthening entrepreneurial activity and private investment into adaptation work in the country. There has been an increasing global call to increase adaptation finance to enhance the adaptative capacity and resilience building of vulnerable communities, to climate change and variability. The proposed interventions will assist the targeted atrisk communities adapt to the adverse impacts of climate change while fostering climate resilience and sustainable development through infrastructural and technological support.

The proposed programme have the following specific objectives;

- Develop climate proofed water and agricultural infrastructure.
- Develop and strengthen climate-proofed Value chain for the targeted vulnerable households.
- Promote off- farm livelihoods through vocational skills training and entrepreneurship development.
- Strengthen disaster preparedness, response and management of climate related hazards.

Project/Programme Components and Financing:

Fill in the table presenting the relationships among project components, activities, expected concrete outputs, and the corresponding budgets. If necessary, please refer to the attached instructions for a detailed description of each term.

For the case of a programme, individual components are likely to refer to specific subsets of stakeholders, regions and/or sectors that can be addressed through a set of welldefined interventions / projects.

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$) million
 Climate-proofed irrigation schemes and piped wate development 	 Establishment of4 2 30 hectare climate proofed smallholde irrigation schemes fo 320 households (1600 people) (80 households pe irrigation scheme) Establishment of 4 climate proofed piped water schemes (750 households, (3750) 	 Increased agricultural productivity and food security among smallholders farmers. Enhanced resilience, improved livelihoods and income generation 	4 500 000. 00

	people)250opportunihousehold per pipedfarmingwater scheme)householdCapacity building ofIncreasedcommunitiesinmultipleandproductive water usecommuniConstruction of 1Increasedsmall dam to benefitknowledg500households(2500 people)communiEstablishment of 2minipurification plants.and consdistrict)- Enhancedstorage cagriculturdomesticotherdependeractivities	ties for ds d access nd reliable water for ties, d e and among ty regarding nagement ervation d water apacity for e, use, and water- nt
2. Climate-proofed Value chain/market development	 Establishment of 24 - Increased gro-processing centres on climate smart value chains agricultur for 240 (1200 people) products, households (10 households (10 households per processing centre with 6 processing centres per district) Commercial grain districts for 400 - Rehabilitat households (2000 people) (100 income district) Supporting 4000 agrofores production (1000 households (2000 people) in commercial traditional grain drought tolerant crop production (1000 households per district) Capacity building in business development and agro-processing in 4 livestock districts for 2400 production production (1000 climate crop and district) 	d 2 000 000. 00 ig for al creation pyment in cessing, dition d income sale of d ated land, ation try, m yield and n from proofed livestock n income climate crop and n eurship

	- Technical and financial support to climate smart value chains in 4 districts for 240 household participants (1200 people)	and business skills including increased competitiveness and market access for agro-processing enterprises. - Improved adoption of climate-smart agriculture resulting in enhanced resilience of value chains to climate	
3. Off-farm income generation activities through Vocational skills training and entrepreneurship development	 Training of youth and women in off-farm livelihood diversification Vocational skills training for 1000 youths and women in 4districts, 250 youth per district and women Supporting youth and women entrepreneurship for climate smart livelihood diversification 	 Increase in the number of households with reduced dependency on agriculture-based livelihoods. Number of households with diversified of income sources Number of youth and women with specialized vocational skills Number of youth and women entrepreneurs with functional climate proofed businesses 	1 000 000
4. Improved community climate change adaptation as a result of access to reliable weather and climate information (EWS)	 9600 households (48000 people) (2400 households per district) directly trained to integrate traditional knowledge system into scientific weather and seasonal forecast and dissemination of weather & climate information. 70% of people trained that timely use weather & climate information to plan and timely respond to 	 Targeted population groups covered by adequate risk reduction systems. Targeted population groups participating in adaptation and risk reduction planning, awareness activities. Number of households covered with 	700 000

	anticipated weather & climate disasters.	functional early warning systems utilizing reliable weather blended	
6. Project/Programme	950 000		
7. Total Project/Programme Cost			8 200 000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable) 8.5%			850 000.00
Amount of Financing F	10 000 000.00		

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme.

Milestones	Expected Dates
Start of Project/Programme Implementation	01 January 2025
Mid-term Review (if planned)	01 January 2027
Project/Programme Closing	01 January 2029
Terminal Evaluation	30 June 2029

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

1. Climate-proofed irrigation schemes and piped water development

Seventy percent of farmers in Zimbabwe are small-holders who are mostly reliant on rain-fed agriculture. Yet only 37% of Zimbabwe's land area receives sufficient rainfall to be considered suitable for rain-fed crop production, and many farmers face a high risk of crop failure each year due to unpredictable rainfall. Irrigation plays a significant role in successful crop production, contributing 20% of the value of agricultural crops in Zimbabwe. However, the country is currently not meeting its full irrigation potential: only half of the land that is suitable for irrigated agriculture is equipped for irrigation.

The NAP identified Development and promotion of climate resilient infrastructure, water resources development and sustainable management and adoption of water use efficient systems, as some of the priority adaptation actions in the water sector, on the 2023 Rural livelihoods assessment, 34.3% of

the rural households prioritized construction of dams/ water reservoirs and employment/iob creation as a priority climate adaptation strategy (34.3%). Irrigation schemes establishment provides estimated yield increases of between 50 and 140%²⁸. As such, the proposed programme will establish 4 climateproofed smallholder irrigation schemes each with at least 30 hectares and 4 piped water schemes, capacity building of communities in multiple and productive water use, and 1 small dam, to make the targeted more resilient to climate related shocks, especially droughts and floods. The project will facilitate training of the participating households in farming as a business and commercial agronomic practice. The promotion of multiple productive water use will ensure the targeted communities will have access to water for irrigation and livestock and for domestic use from the same water facility. In keeping with the water-energy- food nexus, the project will ensure solar water pumping for all the irrigation scheme across the 4 districts. The project will establish solar mini-grid in the area targeted for irrigation, portable water scheme and dam development to facilitate solar water pumping and to support, inter alia: commercialization of agriculture; small and medium scale businesses; agro- processing of climate proofed crop products; and possibly satisfying the energy needs of nearby public facilities such as health centres, schools, business centres and ordinary rural households, and supporting project activities under component 2 and 3(value chain development and off-farm income generating activities) where possible.

This will not only ensure access to water for both productive and domestic use but also to ensure that even those areas not currently accessing grid electricity will access clean energy for agricultural productive use. The use of solar energy for pumping will also allow for sustainable low-cost crop production in irrigation schemes, as electricity cost has been a major cost, threatening the viability and sustainability of smallholder irrigation schemes.

To ensure sustainability, project infrastructure and site-specific climate proofing considerations will be incorporated from the design phase right through to the implementation, operationalization and beyond the lifetime of the project. Where surface water is not available, consideration for borehole drilling, riverbed borehole drilling and sand abstraction will be made, to avail water for the irrigation schemes and domestic use, even in during time compromised surface water. Water pumps extracting water from rivers and dams will be mounted on floating rafts or pontoons to allow water extraction even during times of floods and receding water level. This will also protect the pumps from being washed away, by violent floods and excessive runoff. Drip irrigation systems will be installed at all the 4 irrigation schemes to ensure water use efficiency and allow for irrigation even during times of extreme drought when surface and underground water level is compromised. Farmers will be trained in the use of drip irrigation systems and on-farm management practices which conserve water (such as modern irrigation scheduling technologies like the chameleon and soil additives like mulching) will be employed.

The solar mini grid infrastructure will be designed to ensure it can withstand harsh climatic conditions which are expected in the future due to climate change to allow for sustainable irrigation water extraction and conveyance even during heavy storms, floods and cyclones. As some of the sites are prone to such extreme weather events, various site-specific measures will be taken to ensure climate proofing and sustainability, such as: ensuring the correct rating and quality solar PV arrays; ensuring enough battery storage capacity; correct positioning and tilting of arrays; utilizing shorter, sturdier LT lines to withstand storms; and use of concrete overhead tanks on angle-iron rather than plastic.

Mini-water purification plants will be established at the different irrigation schemes and water sources

²⁸https://documents1.worldbank.org/curated/en/615901625732976000/pdf/Assessment-of-the-Potential-Impacts-of-Climate-Variability-and-Shocks-on-Zimbabwe-s-Agricultural-Sector-A-Computable-General-Equilibrium-CGE-Analysis.pdf 13

developed by the project, conveying portable water to communities and establishing livestock drinking troughs at strategic points along the delivery pipelines. The project will build capacity of communities in catchment management to ensure sustainable use of the water resources.

2. Climate-proofed value chain/market development

Efficient value chains and markets for crop and livestock established (including drought tolerant crops) were identified as one of the adaptation actions in the NAP. As such the project will promote climateproofed value chains/ markets sustainable appropriate agricultural technologies for agro-processing. One of the major activities under this component is the promotion of commercial production of drought tolerant traditional small grain production and climate smart livestock production, for 4000 households. The project will support 240 households in the commercial agro-processing of the climate smart crops to allow for sustainable value chain development and climate proofed value chains. Commercial agro-forestry will also be promoted as a sustainable way of reclaiming degraded land and diversifying livelihoods sources for 400 participating households.

The major objective of this climate proofed value chain development component is the shifting of the subsistence mindset of the targeted communities to a commercial/business mindset, which is highlighted in the NAP as a priority area for climate change adaptation. To that end, all the project activities will be preceded by mandatory business development and management training and Village Savings and lending treatment, not only to provide a platform for savings but to inculcate financial literacy and business understanding in their farming operations.

Commercial traditional grain (drought tolerant crop) production:

Adoption of climate smart agricultural practices was specified as one of the priority adaptation action in the NAP. Specifically, the NAP, recommended deliberate promotion of conservation agriculture and training of farmers and other stakeholders in climate smart crop and livestock production systems including crop and livestock diversification, to assist households adapt to climate change and make them more resilient to climate shocks (especially droughts and seasonal dry spells) The proposed programme will, therefore, support 4000 households in the commercial traditional grains (sorghum, millet, round nuts, and sesame production) production through the tried-and-tested climate smart agricultural practices and the value chain.

Through the Ministry of Agriculture's AGRITEX department, the one-hectare plus model will be promoted across the 4 districts to ensure that the programme's household participants will produce their traditional crop varieties on a commercial scale of at least 1 hectare per household. Efforts will be made to ensure the production is market-driven and the market is secured before production. AGRITEX will provide the technical support and the project will provide minimum input support where necessary and promote farmer-to-farmer learning of the commercial model. The project will support the mechanisation of traditional grain production by introducing small scale planters and shellers on a post-harvest cost recovery system and train the participating farmers in farming as a business, in financial literacy and will guide farmers on how to utilise the proceeds from crop sales. A total of 4,000 households will be targeted across the 4 districts.

The proposed programme will also promote the scaling up of seed multiplication of drought tolerant crops through establishment of community seedbanks linked to established private sector Seed houses. This will allow for viable sustainable and climate proofed traditional grain seed production at community level, to support the commercialisation of drought tolerant crops.

A Resilient and Sustainable Agriculture extension manual and the Traditional Grain Commercialisation Policy strategy document that was produced under the UNDP-ZRBF programme will guide the farmers and extension staff in the commercialisation of traditional crop production under this proposed programme.

Agro processing:

Agro processing of drought tolerant crops will be deliberately promoted across the districts depending on the available crops, market and available opportunities. Based on the experiences from the UNDP-ZRBF programme, Oil pressing from sunflower, cotton seed, sesame seed and soya beans for cooking oil and stock feed production has been proven cost-effective and viable agro-processing activities for rural communities. The proposed project will provide the business training and support the identified young (including women and girls) entrepreneurs with the relevant machinery for agro processing. The other agro-processing options include solar drying of vegetables, traditional grain dehulling and threshing, stock feed production. Local agro processing will address the output marketing challenges the rural farmers are currently facing, through value addition and allowing them to have control over their value chains and adapt better to climate change.

A village dairy model will be established for selected irrigation schemes, selected community gardens as well as vibrant individual households. The model will involve introduction of at least 2 locally adaptable dairy cows where there is adequate water and a significant amount of agricultural waste. such as stover to be generated. The dairy cows will produce milk daily for sale to the community members. Studies have revealed that the demand for milk is currently insatiable and the high prevalence of stunting in rural areas have been linked to limited access to milk and milk products. Besides the nutrition benefits of milk, it is a stable source of income for the participating households. The model has been successfully piloted and scaled up in other districts under ZRBF. Under this project, interested farmers satisfying the basic requirements for dairy production will have their local cow breeds cross breed with dairy bull through artificial insemination. This will produce high value climate adaptable dairy cows.

Where the village dairy model is not applicable, market-linked commercial cattle pen fattening will be promoted. The proposed programme will facilitate the establishment of basic infrastructure, such as feed and water troughs and fencing of the pen-fattening facilities. In addition to the farming as a business training, those involved in pen fattening business will also be linked to commercial abattoirs, who will also provide them with tailored technical trainings for the business.

Commercial small livestock - goat production:

The farmers in the 4 districts will also be trained in commercial goat production with the project assisting in drought tolerant breed improvement and linking the farmers to viable markets. For all the livestock based commercial activities, the Department of Veterinary Services will be the key partner leading the process to allow for the effective management of risks associated with the activities in the context of climate change. Considering that the livestock ownership is very low, as 63% of households did not own cattle and 56% did not own goats²⁹, the promotion of drought tolerant small livestock commercial production will allow the targeted communities to cope and adapt well to climate change, especially the increasing frequency and intensity of droughts.

^{29 29} Zimbabwe Vulnerability Assessment Committee (ZimVAC) 2023 Rural Livelihoods Assessment, Food and Nutrition Council, Zimbabwe 15

The proposed programme will promote Investment in breeding programs that incorporate the adoption of smaller and climate resilient mixed livestock breeds that are more disease and pest resistant. Switching to smaller livestock increases protein production, provides a more climate resilient food source, and significantly reduces greenhouse gas emissions. For example, modelling indicates that goats produce 74% less emissions per unit of protein produced than communal cattle in Zimbabwe. In addition, goats are less susceptible to heat impacts: while climate change drives reductions in the income from beef cattle by 11-13% by 2040, income from goats only decreases by 7-9%. Promoting small livestock is also a gender-equity informed investment as more women in Zimbabwe are more likely to own small livestock and have more control over than they have over cattle.

Commercial agro forestry:

This proposed programme will partner with the Forestry Commission of Zimbabwe to promote commercial agro forestry in degraded areas. The commercial agro forestry will be preceded by the training of extension and community members in budding and grafting of drought tolerant citrus trees most suitable in each location and motivate household and community commercial production where water is available. The agro-forestry initiative on degraded land will facilitate for sustainable land reclamation. This will not only provide the much-needed carbon sinks but also a viable, climate-proofed and sustainable inter-generational source of income for the participating households. The project will partner with a trainer from the in-country Agriculture learning and research institutions to facilitate professional trainings. Besides the household agro-forestry units for each programme participants, each irrigation scheme will have at least 5 hectares under agro-forestry and each community garden will also dedicate at least 10% of the garden to agro-forestry. This intervention is in line with the national priority adaptation measure to develop, implement and scale-up climate smart agriculture solutions and strengthen the resilience of agricultural value chains and markets outlined in the NAP.

The proposed project will also support the establishment of community apiaries in selected areas. The establishment of these apiaries will ensure an additional source of income for communities, the preservation of trees which are key in both climate change mitigation and adaptation. In addition, apiculture supports the productivity of irrigation schemes and farmlands as pollinators are actively protected. Learning from the Supporting Enhanced Climate Action for Low Carbon and Climate Resilient Development Pathway Project (SECA), ZRBF as well as the Inclusive Growth and sustainable livelihoods projects implemented by UNDP, apiculture as well as other non-timber forest products are key sources of income in rural communities enabling livelihood diversification. With value addition, the production of honey on a commercial scale has the potential to reduce poverty in communities and build resilience. The project will facilitate training of the community members in apiculture and honey processing.

Off-farm income generating activities.

The proposed programme will support 1000 rural youth and women to develop off-farm income generating activities to reduce their dependency on rain-fed agriculture-based livelihoods. This will be done through training of 1000 youth and women in vocational skills and entrepreneurship development. The training of youth in contextually relevant vocational skills will facilitate transformational adaptation through diversification of livelihoods and income sources and reducing their reliance on the climate sensitive rain-fed agriculture.

Deliberate targeting of the youth and women was informed by the fact that they tend to face greater barriers in responding to climate impacts and are less able to select adaptation options in agriculture,

including CSA options³⁰. Some of the barriers women and youth face in adopting CSA practices include unequal access to credit, technology and agricultural inputs as well as a lack of capacity-building³¹. Women and youth typically have less voice and agency to institute change and may also be less able to select adaptation options in agriculture, including CSA. Their lower levels of participation in all levels of decision making significantly limit their potential to contribute to climate resilience and adaptation efforts, despite their perspectives and knowledge being unique and vital in climate-related decision making.

Based on the UNDP experiences in other projects, the following skills will be considered (but not limited to): dress making, welding and metal fabrication, bricklaying, carpentry, cellphone repair, hairdressing, plumbing, solar installations, retailing, and cross border trading. The vocational skills training will be done through the government vocational school training centres, with minimum financial support from the project. Upon completion of the trainings, the youth will be guided to start their own businesses with the technical back-stopping support from The Ministry of Women Affairs, Community, Small and Medium Enterprises Development and the Ministry of Youth Empowerment, Development and Vocational training. This is in line with the NDS1 which identifies human capital development and innovation as one of the national priorities. The trained cadres will be trade-certified and trade experts will ensure the products they produce are of high market quality, which will translate into improved sustainable household income for the participating households.

3. Improved disaster preparedness, response and management of climate related hazards

Strengthening Zimbabwe's early warning system will help reduce the economic impact of natural hazards, avoid loss of life and associated setbacks in economic and social development. The proposed project will facilitate the installation of 4 Automated Weather Stations, one per district, strengthen Community Based Disaster Risk Reduction Management in the 4 targeted districts cascaded to village level. Deliberate effort will be made to ensure to engage both men and women in the generation, interpretation and dissemination of information to communities, to ensure early warning information reaches all groups and networks at the local and grassroots levels. The proposed project will focus on building the capacity of communities and field level extension to improve their access to and utilization of reliable, accurate weather and climate information services, through training of 9600 community members and integration of traditional knowledge system with scientific weather and seasonal forecasts.

Based on the successful piloting of the integration of traditional knowledge system to the scientific weather and seasonal forecasting under previous programme, the programme will facilitate the production of hybrid forecasts, involving the community members, tapping into indigenous knowledge systems to complement scientific knowledge seasonal forecasting for climate adaptation. This will improve rural household access to climate-risk informed extension services, addressing a key barrier to climate change adaptation. The integration of traditional knowledge system into weather and seasonal forecast will not only improve the precision of the forecasts but will also provide the communities with the much-needed confidence to use the weather and seasonal forecast early warning information in their seasonal cropping planning.

³⁰ https://climateknowledgeportal.worldbank.org/country/zimbabwe/vulnerability

³¹ https://climateknowledgeportal.worldbank.org/country/zinababwe/vulnerability

B. (1) Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations.

1. Climate-proofed irrigation schemes and piped water development

The establishment of climate-proofed infrastructure will ensure that the at-risk communities will continue to have access to water for irrigation and domestic use. The productive focus for the development of the water infrastructure will ensure that the communities will utilize the water to diversify their livelihoods and income sources which will sustainably improve their food/nutrition and income security. The irrigation schemes and community gardens will be run through a commercial business model which will allow the participants to have sustainable income even in the presence of climate and market shocks. Besides reducing poverty levels, viable irrigation farming will reduce environmental degradation from unsustainable livelihood activities harmful to the environment to cope with climate related shocks (for example poaching and selling firewood). In addition, intensive agricultural production in irrigation schemes will reduce the need to clear extensive land for agriculture to produce adequate food.

Climate-proofed piped water systems will guarantee the communities, safe portable water use, even during time of droughts and floods, which will reduce the prevalence of water-borne diseases. It will also reduce the distances travelled by women and girls to fetch water, freeing time for household and other productive use.

Early action and investment make economic sense and support social justice, as delayed adaptation will make the country face higher economic and social costs of disaster relief and recovery. Small dams will also reduce the chances of downstream floods events, through the regulation of river channel flow, which will save lives and chances of property losses.

2. Climate-proofed value chain/market development

The proposed commercialisation of drought tolerant traditional grain crops was provided for in the Zimbabwe Climate Smart Agriculture Investment Plan (2019). Under a changing climate, maize, a staple food crop in Zimbabwe, is expected to see a 33% yield reduction by the 2030s, with a range of expected yields from +35% to -50% across three different climate scenarios considered (a dry/hot, a medium and a wet scenario)³². According to the Zimbabwe Climate Smart Agriculture Investment Plan (2019), crop-switching to drought and heat tolerant crop varieties was estimated to increases yields by 3-12% across all crops. For example, sorghum requires less water than maize making it more resilient to drought or future climate change. Simulations of the the yield response to climate change found that maize yield reductions are 61% in Agro-ecological Region V, while sorghum proves to be more resilient to drier conditions with only moderate reductions of 11-20%³³.

The agro-processing and commercial agro-forestry will assist the communities in dealing with the chronic output marketing challenges that has eroded the income base of the rural farmers. The agro-forestry under this programme will allow for effective reclamation of the degraded land. The value chain approach to be employed by this project will improve the risk sharing and transfer mechanisms at local, national, regional, and global scales, which can increase the resilience of the targeted communities to climate extremes.

³² https://climateknowledgeportal.worldbank.org/country/zimbabwe/vulnerability

³³ https://climateknowledgeportal.worldbank.org/country/zipgbabwe/vulnerability

3. Transformational adaptation for the youth (female and male) through vocational skills training and entrepreneurship development

Transformational adaptation will see the youth engaged in diversified economic activities with reduced reliance on environment in farming-based agriculture which is highly sensitive to climate change. This will effectively climate-proof the livelihoods of the rural population and motivate for self-reinforcing local business development. The project will also contribute to economic empowerment through support for businesses with ripple effects on fiscal contribution and employment.

Targeting the youth will also reduce criminal activities, drug abuse, violence and unsafe out-migration. The programme will challenge the pervasiveness of patriarchal dominance in Zimbabwe's rural communities and allow for effective adaptation to climate change impacts for women. The programme will promote gender equity by removing barriers to decision making planning processes, accessing to climate change information and opportunities, and ownership of essential resources such as land and property rights (which currently compromises their capacity to adapt effectively).

4. Improved disaster preparedness, response and management of climate related hazards

The NAP highlighted that strengthening early warning systems underpins the success of most of the prioritised adaptation options in Zimbabwe. Strengthening Zimbabwe's early warning system will help reduce the economic impact of natural hazards, avoid loss of life and associated setbacks in economic and social development. The proposed project will facilitate the installation of 4 Automated Weather Stations, one per district, strengthen Community Based Disaster Risk Reduction Management in the 4 targeted districts cascaded to village level. Deliberate efforts will be made to ensure engagement of both men and women in the generation, interpretation and dissemination of information to communities, to ensure early warning information reaches all groups and networks at the local and grassroots levels. Based on the successful piloting of the integration of traditional knowledge system to the scientific weather and seasonal forecasting under previous programme, the programme will facilitate the production of hybrid forecast, involving the community members, tapping into indigenous knowledge systems to complement scientific knowledge seasonal forecasting for climate adaptation. This will improve rural household access to climate-risk informed extension services, addressing a key barrier to climate change adaptation. The integration of traditional knowledge system into weather and seasonal forecast will not only improve the precision of the forecasts but will also provide the communities with the much-needed confidence to use the weather and seasonal forecast and early warning information. Strengthening early warning systems plays an integral role in enhancing preparedness, supporting long-term sustainability, and improving the efficiency of disaster response and recovery.

B. (2). Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

During the full project proposal development stage, UNDP will carry out an Environmental and Social Impact Assessment across all the targeted project areas to identify potential negative impacts and mitigation measures of potential risks, in line with the UNDP's Social, Environmental Standards

Procedure (SESP). This will guide the programme on how to avoid or mitigate the negative impacts in compliance with the Adaptation fund's Environmental and Social Policy and Gender Policy the UNDP's Social, Environmental Standards Procedure (SESP) details possible environmental, socioeconomic risks and their suggested mitigation measures. The planned interventions will be screened for environmental and social risks using the SEPS which is well aligned to the Environmental and Social Policy and Gender Policy of the Adaptation Fund. The tool will help identify potential project-related environmental and social (E&S) risks and impacts and provide an appropriately scaled assessment and management measures to address those risks. The identified E&S risks will be incorporated in the final project proposal to make project activities more risk-informed to guide the implementation and risk management strategies of the project activities. The risks will also be recorded in the project risk register which will inform the project's monitoring plan, ensuring that these social and environmental risks are properly tracked and reviewed during project implementation.

To ensure sustainable and long-lasting capacity by partners to maintain the infrastructure and the outcomes, the intervention will build on existing capacities of communities, local structures, and government institutions. Partners and stakeholders' capacities for managing social and environmental risks will be strengthened. UNDP has an Accountability Mechanism that ensures individuals, peoples, and communities affected by UNDP projects have access to appropriate procedures for hearing and addressing project-related grievances. Through application of the SESP and Accountability Mechanism, UNDP enhances the consistency, transparency and accountability of its decision-making and actions, improves performance, and strengthens achievement of positive development outcomes. During the project inception phase, UNDP will, through a solution mapping exercise, co-create the related intervention with the community, local stakeholders, and relevant government institutions to avoid activities that may adversely affect the communities. The available local traditional knowledge will be blended with the innovation being introduced by the intervention.

While preliminary assessments conducted in the 6 targeted districts indicate that the proposed programme will engender significant positive impacts on food production, climate resilience, economic development, livelihoods, health and quality of life, some key risks with a direct bearing on project delivery include financial sustainability and related socio-economic and environmental conflicts. Considering the project will involve infrastructure development which will generate potential environmental impacts, there are key E&S instruments that will need to be developed to comply with national E&S requirements and UNDP's Social and Environmental Standards to minimise conflicts. The studies include:

- EIA prospectus
- Environmental and Social Impact Assessment (ESIA)/ Environmental and Social Management Plan (ESMP)
- Stakeholder Engagement Plan
- Grievance Redress Mechanism (GRM), and
- Emergency Preparedness and Response Plan

In addition, the project will develop site specific Environmental and Social Management Plans (ESMPs) for irrigation schemes, treatment plants and solar energy plants that assign risks to a risk owner for monitoring of the accountability framework and ensuring grievance redress procedures are adhered to.

UNDP has developed a Grievance and Redress Mechanism (GRM) guideline which will be tailor made for this programme to include the asset management committee structures. The GRM aims to respond

to and settle or redress any grievances, complaints, queries, or clarification of complaints from affected persons in a manner that is legitimate, reliable, transparent, cost-effective, accessible and culturally appropriate to all parties. The mechanism is already under use in UNDP projects and will be adapted for use in this programme. This GRM has been designed in accordance with internationally accepted principles for redressing grievances as elaborated by the UN (UN Human Rights Council, 2011).

The structure of the GRM includes establishment of the grievance resolution committees and grievance uptake points at community, district, and provincial level. Any grievance received at each level shall be recorded in specific grievance log and resolution forms. The Project Management Unit for the proposed programme shall act as a secretariat and ensure the overall coordination, operation, and monitoring of the GRM. The GRM users will be sensitized to take their complaints or grievances to these committees whenever they feel aggrieved, or to alternative grievance resolution platforms such as the UNDP Accountability Mechanism which includes the Social and Environmental Compliance Unit (SECU) and Stakeholder Response Mechanism (SRM) or the national court system.

Noting the sensitivity of gender-based conflicts, the project will customise the existing gender-based handling procedure currently under use illustrated in Figure 1 below.



Figure 1: Gender based violence handling procedure

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

OECD/DAC defines effectiveness as the extent to which the development intervention's objectives were achieved, or are expected to be achieved, considering their relative importance. During the full project proposal preparatory stage, a cost-effectiveness analysis will be carried out. This will help to ascertain how the project will use the most cost-effective way of achieving the project results. UNDP's interventions recognize the scarcity of development finance and make Value for Money (VFM) a key consideration at project design and implementation. In order to quantify effectiveness, UNDP will assess the extent to which the objectives of the intervention will be or most likely achieved, understanding if the target group was reached. The programme will conduct a baseline survey, midterm evaluation and end of project evaluation. This will also be coupled with an impact evaluation.

UNDP's strategic advantage in ensuring value for money is in its access and capacity to engage with the government and stakeholders, sound programme, operations policies and fully operational system in place to ensure flexible implementation options and risk mitigation. The VFM concept will be factored into the program through the programme cycle. Value for money is a key comparative advantage that UNDP offers in programming. Through evidence generated throughout the UNDP-ZRBF programme, UNDP and its implementing partners have identified the most cost-effective means of building individual and community resilience and have the necessary economies of scale to ensure maximum value for money. The UNDP-ZRBF programmes has shown that resilience-building is far cheaper in the long term than humanitarian assistance per beneficiary year after year. Shifting from humanitarian responses to building resilience has been shown to provide good value for money, potentially saving US \$7 in disaster-related economic losses for every US \$1 spent in resilience building and disaster preparedness. The proposed programme will meticulously manage the budget execution adhering to UNDP procurement systems, expenditure against each output, cost of reach per beneficiary/activity and cost per result at output indicator level.

UNDP already has expertise in resilience building and climate change adaptation working in on-going projects who will provide their expertise to this programme, through level of effort, instead of engaging new implementers. Irrigation schemes, dams, early warning systems and climate proofed entrepreneurship activities and vocational skills training, will have an extensive coverage. The programme is anticipated to directly reach over 96,747 people individuals from 16810 households. The cost benefit ratio for the program is therefore projected to be about USD10.00 which demonstrates the efficacy of the value for money strategy. This takes into consideration indirect beneficiaries and the multiplier effects of the EWS, which when factored in will make the cost per beneficiary lower.

The UNDP procurement and financial management policies fully embed the VFM principles. We ensure that the project resources (financial, physical and manpower) are adequate in terms of both quantity and quality and that there is economical use of financial and human resources. UNDP ensures that resources (funds, human resources, time, expertise, etc.) have been allocated strategically to achieve outcomes. Our project design and implementation ensure that the project's resources are used effectively to produce planned results and the project was cost-effective compared to similar interventions. The project management will seek to understand if results achieved justify the costs and if the same results be attained with fewer resources and actively seek other efficient ways and means of delivering more and better results with available inputs. During procurement, UNDP ensures that technologies selected (any innovations adopted, if any) were suitable and cost-effective.

Lastly, UNDP will continuously scan the horizon to ensure that project activities do not overlap, and duplicate other similar interventions funded nationally or by other donors. The 4E framework/VFM Components (Economy, Efficiency, Effectiveness and Equity) will be implemented, measured, and analysed throughout the project lifecycle.

At design stage some of the key strategies that will be implemented are:

The use of a strong evidence on what works well in building climate adaptation and private sector support using evidence from other UNDP programmes such as the CAWEP, ZRBF, GCF and the erstwhile Inclusive Growth and Sustainable Livelihoods project to make informed decisions leading to continuous improvement and overall effectiveness. A robust knowledge management and learning component will be instituted as part of the M&E framework to ensure extraction and dissemination of lessons learned and good practices to enable adaptive management and upscaling or replication.

- The project's detailed feasibility studies, due diligence, Environmental Impact Assessments, inception meetings, and solutions mapping will guide and refine the targeting of beneficiaries to ensure that the maximum level of benefits is reaching as many of our target groups as possible, ensuring effectiveness, efficiency, and equity. The project team will ensure participation of women and youth in project interventions and governance structures (40% of women to make up governance structures). A procurement plan will be developed and monitored to ensure timely delivery of the project interventions improving on efficiency and effectiveness.
- The project's budget is linked to the log-frame, activities, and outputs. This will ensure coherence and a logical flow between the budget, theories of change, log-frame and interventions being implemented.
- D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The proposed programme, its selected interventions and rolling-out strategies will be largely guided by the Zimbabwe National Adaptation Plan and other national and sub-national policy strategy documents. The NAP estimated the cost of adaptation actions in Zimbabwe, across different sectors, at USD 10.3 billion for the period of 2023 to 2030, translating to an estimated annual requirement of USD 1.288 billion. The USD10 million requested for this proposed programme will contribute to the adaptation needs for the country.

The NAP projected that changes in climate will impact on the performance of the following identified and prioritized climate sensitive sectors: water, agriculture, health, forestry and biodiversity, tourism, infrastructure and human settlements. These sectors are identified as priority areas of focus in the National Climate Policy. Adaptation Vision for Zimbabwe: "A climate resilient Zimbabwe" Goal of the National Adaptation Plan: "Climate change adaptation integrated in development policies, strategies, plans programmes and activities."

The NAP's two strategic priorities are: 1) Climate change adaptation mainstreamed and sustained; and 2) Effective and efficient climate risk management. And these strategies underpin the intervention under this proposed programme. The proposed programme will focus on the Agriculture, Water and Infrastructure sector and the selection of the project activities was guided by the NAP Priority Adaptation Actions of these Sectors.

Under Agriculture the following adaptation outputs, and actions which are well aligned to the proposed intervention under component 1,2 and 3

- 1. Improved access to weather and climate information services
- Increase the density of hydro-meteorological network and early warning infrastructure.
- Upscale training of extension workers, farmers and other stakeholders in weather and climate information access and use
- 2. Climate Smart Agriculture practices adopted

- Enhance Conservation Agriculture through initiatives such as Pfumvudza /Intwasa
- Enhance training of farmers and other stakeholders in climate smart crop and livestock production systems including crop and livestock diversification
- 3. Agriculture technologies promoted
- Invest in climate smart agricultural equipment/ mechanisation
- Upscale research, development and uptake of drought tolerant crop and livestock varieties
- Rehabilitate and develop new climate proofed irrigation schemes
- 4. Efficient value chains and markets for crop and livestock established (including drought tolerant crops
- Establish and promote efficient value chains and sustainable markets
- Develop and promote uptake of appropriate agricultural technologies for agro-processing

Under the water sector. The following adaptation outputs and actions were proposed which are well aligned to the proposed intervention under component 1, 2 and 3

- 1. Water resources developed and sustainably managed including catchment management and wetlands protection
- Upscale water harvesting (rooftop, weirs, dams among others)
- Sustainable exploitation of ground water resources
- Strengthen institutions in water resource management
- 2. Water use efficient systems adopted
- Enhance water use efficiency (efficient irrigation drip etc)
- 3. Potable water infrastructure developed and maintained

Under the infrastructure sector, the following adaptation outputs and actions were proposed which are well aligned to the interventions proposed under component 1, 2 and 4 of this programme.

- 1. Climate resilient infrastructure standards developed and adopted is the adaptation output with the following adaptation actions;
- Develop and promote climate resilient infrastructure standards (buildings, roads, dams, irrigation, telecommunications, bridges, power lines, etc.)
- Update existing building guidelines and standards to integrate climate change considerations.
- Increase the density of the hydro-meteorological network.

The National Climate Policy (2017) which aims to build a climate resilient and low-carbon Zimbabwe, forms the backbone of this proposed programme. The programme is guided by the NCP's guidelines on climate change management in the country, enhancement of the national adaptive capacity and the scaling up of mitigation actions. The priority issues enclosed in the Policy include data collection and management, information sharing, climate research, inter-agency coordination, domestic incorporation of international, regional and multilateral climate change instruments, vulnerability assessments and adaptation interventions, innovations and technologies for mitigation, climate finance, technology transfer. As such the proposed intervention for this programme are guided by the provision of the NCP. The proposed programme will have a robust monitoring and Evaluation systems to feed into the adaptive management of the proposed programme.

The proposed interventions will assist the targeted at-risk communities adapt to the adverse impacts of climate change while fostering climate resilience and sustainable development through infrastructural and technological support. This is aligned to the National Development Strategy 1

(NDS1) (2021-2025) framework which, captures "Environment Protection, Climate Resilience and Natural Resources Management" as a national priority to achieve sustainable socio-economic development.

Climate-proofed irrigation schemes and piped water development

The agriculture-related interventions for this proposed programme are well aligned to NDS1. The NDS1 recommended the following initiatives (which are similar to the intervention in this proposed programme) to ensure attainment of resilience and sustainable agriculture:-Upscale and expedite irrigation rehabilitation and expansion utilizing existing and new water bodies; Irrigation Development and Water Harvesting is a critical component of the NDS1 where the country is targeting to expand irrigation development and water harvesting to enhance agriculture production and productivity, targeting over 350 000 ha during the NDS1. As such the proposed programme seeks to develop irrigation scheme in the targeted 4vulnerable districts

NDS1 recommended Climate Smart Agriculture through adoption of conservation agriculture techniques and principles such as Pfumvudza/Intwasa (Concept which adopt conservation agriculture techniques or principles such as minimum soil disturbances and mulching) as well as water and input use efficient technologies development of stress tolerant, high yielding crop varieties and the promotion of drought tolerant traditional grains.

Commercial agro forestry

The commercial agroforestry component of the proposed programme is well aligned to the NAP Priority-Adaptation Actions Under the Forestry and Biodiversity sector. The NAP identified Enhanced alternative natural resource-based livelihoods options as one of the adaptation outputs and Enhance community led conservation initiatives (Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), non-timber forest products, apiculture, aquaculture, ecotourism) as one of the adaptation actions.

Zimbabwe's Climate Change Response Strategy recommended the identification of forestry as a recognized land use, build capacity for forest management in a changing climate. This will underpin the commercial agroforestry component of the proposed programme, modelled in a business model which will not only see the development of fruit trees establishment at a commercial scale, but the commercialization of Non-Timber Forest Production in ecologically rich areas. The proposed project will also support the establishment of community apiaries in selected areas. The establishment of these apiaries will ensure an additional source of income for communities, as well as encourages the preservation of trees which are key in both climate change mitigation and adaptation. The programme will work with the Forestry commission, and local authorities to implement sustainable community-based afforestation and prevention of land degradation.

Commercial traditional grain (drought tolerant crop) production

The proposed programme's small grain commercialization, commercial agroforestry, and value chain development was guided by the NAP Priority Adaptation Actions for the agriculture sector. The NAP specifically recommended the enhancement of Conservation Agriculture through initiatives such as Pfumvudza /Intwasa and training of farmers and other stakeholders in climate smart crop and livestock production systems including crop and livestock diversification. The NAP provided for the establishment and promotion of efficient value chains and sustainable markets. The National Development Strategy

1 aims to increase agriculture production, especially by smallholder farmers, to increase Zimbabwe's prosperity, food security and resilience against climate change. In 2021 UNDP assisted the Government of Zimbabwe in the Traditional Grain Commercialisation Policy strategy document and the production of the Resilient and Sustainable Agriculture extension manual under the UNDP-ZRBF programme. Both the strategy document and the RSA manual will guide commercialisation of traditional crop production and other agriculture related interventions under this proposed programme. The programme will invest in women- and youth-oriented production and marketing networks, including gender- and youth-sensitive extension services, aimed at conveying climate smart agronomic practices.

The proposed programme will work with the Forestry commission to motivate for a commercial model of promoting commercial agroforestry in the targeted districts and facilitate the sustainable reclamation of heavily degraded areas.

Agro processing

The NAP specifically recommended the development and promotion of uptake of appropriate agricultural technologies for agro-processing as one of the adaption actions under the Agriculture sector. One of the major outcomes of NDS1 is to improve the performance of the manufacturing sector through value addition, prioritizing agro-based value chain. It is from this national ambition that this proposed programme seeks to develop and strengthen Climate-proofed value chains or market development through agro-processing of drought tolerant crops across the targeted districts depending on the available crops, market and available opportunities. Oil pressing from sunflower, cotton seed, sesame seed and soya beans for cooking oil and stock feed production has been proven to be one of the easiest and cost-effective and viable agro-processing activities for rural communities.

The NDS1 recommended the mainstreaming of the following cross cutting issues, Youth and Gender; Financial Inclusion; Social Protection; Poverty Alleviation and Safety Nets; Environmental Protection; Climate Resilience and Natural Resources. The proposed programme will deliberately promote the youth and women engagement in non-farm economic activities/employment by training them in vocational skills and entrepreneurship development in providing an alternative source of livelihood to households, to reduce their vulnerability to climate change. It helps rural households to transition to alternative forms of employment, particularly during off-season periods, as climate changes to make agriculture less productive³⁴. Nonfarm income can also be reinvested in climate resilient agricultural practices and other climate change mitigation/adaptation strategies.

The proposed programmes will ensure that the youth and women are empowered in all the proposed intervention and there is deliberate effort to build their capacity through trainings in vocational skills and entrepreneurship development. This will allow the youth and women to partake in off-farm income generating action for effective climate adaptation., are core activities and cross cutting themes of the for the proposed programme. The NAP identified capacity building, training, and public awareness, gender, disaster risk management, and climate governance as both enablers and cross cutting issues to be integrated across different sectors. The proposed programme will not only tackle these issues as cross cutting issues, but forms part of the key outcomes under the Transformational adaptation for the youth and women, modelled in a business strategy involving private sector engagement, vocational skills training and entrepreneurship development.

³⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8192565/6

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

UNDP was acknowledged in the Adaptation Fund's Environmental and Social Policy, as one of the few finance and development institutions that have adopted the Fund's environmental and social policies (UNDP, 2012). It has acquired strong institutional capacity and convening power to manage all the social and environmental risks in the proposed programme, as provided for in the Adaptation Fund's Environmental and Social Policy and the national laws.

Zimbabwe's Environmental and Social Impact Assessment (ESIA), Environmental and Social Impact Assessment (ESIA)/ Environmental and Social Management Plan (ESMP) process focuses on coming up with environmental solutions on the negative impacts caused by a proposed project while enhancing the positive impacts. Any project that is prescribed in the first schedule of the Environmental Management Act (CAP 20:27) should undergo the EIA/ESIA process before implementation. as their implementation causes serious environmental damage. The EIA/ESIA for the proposed programme is likely going to recommend ways of reducing deforestation, through either replanting trees at their or supporting local communities in forest conservation initiatives (as part of the Environmental and Social Management Plan), where dam construction of irrigation development could disturb forests. In this project, the activities which will require an EIA include dam construction, irrigation scheme development establishment of solar fields in solar mini grid as they cause some level of deforestation and potentially displace people.

Beside it being a legal requirement, the EIA/ESIA for the proposed project is important for the following reasons:

- It promotes sustainable development by ensuring that development plans do not compromise vital resource and ecological functions, or the well-being, lifestyle and prosperity of the communities and peoples that rely on them.
- Increases project acceptance by the public communities as they are involved in the EIA process. The requirements for effective consultation are consistent with the Fund's current requirements for consultative processes in the development of projects/programmes with "particular reference to vulnerable groups, including gender considerations.
- Promotes sustainable development by ensuring that planning does not compromise vital resource and ecological functions or the well-being, health and living conditions of the communities and peoples who depend on them.
- It enables the monitoring and evaluation of developmental projects by regulatory authorities.

UNDP's key Social and Environmental standard instrument, the SEPS, details possible environmental, socio-economic risks and their suggested mitigation measures, before every infrastructure related programme is approved. In addition, the project will develop site specific ESMPs for irrigation schemes, treatment plants and solar energy plants that assign risks to a risk owner for monitoring of the accountability framework and ensuring grievance redress procedures are adhered to. These ESMPs are updated on an annual basis, and they form part of the mandatory programme/project risk register, that is updated on a quarterly basis.

As a matter of principle, EMA and UNDP do not support projects/programmes that unnecessarily harm the environment, public health or vulnerable communities and always facilitate informed participation of all stakeholders, including community members, the design, implementation, monitoring and evaluation of UNDP supported programmes. UNDP has made the identification and assessment of

environmental and social risks at the earliest possible stage of project/programme design, a mandatory requirement. It also has a solid risk management system which ensures that where avoidance of risks is not possible, mitigatory measures are put in the risk register, tracked on and reported on a quarterly basis until the end of the programme.

The proposed programme will comply with the national and international law, provide fair and equitable access to benefits in a manner that is inclusive and does not impede access to basic health services, clean water, and sanitation, amongst other equity issues. All the 6 targeted districts are in the drier and arid marginal districts of Zimbabwe with limited economic development opportunities and highest level of poverty rates, in line with the UNDP's leave no one behind principle. The programme also deliberately targets women and the youth and those living with disabilities in the beneficiary selection. UNDP is against child labor, in keeping with the International Labor Organization and this is inculcated in all the procurement processes, especially where community infrastructure and other civils are involved.

UNDP's GRM guidelines will be tailored for this programme to include the energy management committee structures. The GRM aims to respond to and settle or redress any grievances, complaints, queries, or clarification of complaints from affected persons in a manner that is legitimate, reliable, transparent, cost-effective, accessible and culturally appropriate to all parties. The mechanism is already under use in UNDP projects and will be adapted for use in this programme. This GRM has been designed in accordance with internationally accepted principles for redressing grievances as elaborated by the UN (UN Human Rights Council, 2011).

In line with the Zimbabwean Gender policy, and the UNDP gender policy, all the UNDP implemented programmes ensure that both women and men (a) are able to participate fully and equally; (b) receive comparable social and economic benefits; and (c) do not suffer disproportionate adverse effects during the development process. As such UNDP has been avoiding developmental strategies and options which involve involuntary resettlements. The range of proposed programme activities are climate friendly, from the promotion and support for renewable energy infrastructure, climate proofed water and energy infrastructure, commercialization of climate smart agricultural activities, support for climate proofed value chains and business initiatives and climate change adaptation capacity building initiatives.

F. Describe if there is duplication of project/programme with other funding sources, if any.

Project will not duplicate any effort with any other funding sources, However there is potential complementarity of some project components with some pipeline project that are yet to receive funding, on-going and completed projects.

Project	Landscape/district	Linkages of the	Comment
		project	
CAWEP	Chivi	Early Warning	On-going- will leverage
		Systems,	on the successfully pilot
		Irrigation Scheme	Participatory Planning for
		Madziva- cover	communities to
		gap in the	strengthen Early Warning
		Madziva	Systems
		undeveloped	- On-going- will leverage
		scheme which is	on the established water

		in the TMP	abstraction point in the development of an irrigation scheme under the project
GCF	Chivi	Early warning Systems, Sustainable Markets	Ongoing. Will leverage on the online information sharing platforms to strengthen early warning systems
ZRBF	Insiza	Irrigation Scheme, Bushmeal production	Completed 2021. Will draw lessons leant from Bushmeal production to assist communities involved in livestock interventions
CAWEP	Insiza	Irrigation Scheme- Upscale existing 30ha to 80ha Dam Rehabilitation, Catchment Management	Ongoing- Project will rehabilitate Breached Dams upstream of Wanezi Dam address gap in climate proofing Wanezi dam
LDS - Lutheran Development Services	Insiza	Livelihoods	Completed 2021- will leverage on works done Village savings and learning
CAWEP	Chipinge	Bushmeal production, scale up of biogas digestors	Ongoing- 2025
WHH SCOPE Project	Umzingwane	Inclusive Value Chains	Ongoing- will collaborate with the project in the rolling out of climate proofed value chain at district level
WHH Integrated Poultry Value Chain Project ZAPG	Umzingwane	Poultry Value Chains	Ongoing- will collaborate with the project in the rolling out of climate proofed value chain at district level

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The project level M&E is guided by the UNDP requirements as outlined in the UNDP Programme and Operations Policies and Procedures (POPP) and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all project monitoring, quality assurance, risk management, and evaluation requirements. The results framework and the costed M&E plan which accompany this proposal will guide the project specific M&E activities to be undertaken during project implementation. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project

implementation. In instances where the baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation.

The proposed programme will be anchored on a Monitoring, Evaluation and Learning Framework which will provide overarching guidance to the project M&E ensuring that common language is used and that there is minimum inconsistence in monitoring, results reporting and evaluation processes across the various project interventions. This framework is an enabler for accountability, learning, evidence-based decision making and demonstration of the impact the set results have had on the target population. Below is an outline of some of the key elements that will be embedded within the broader framework of project implementation.

- Establishment of baseline values Upon the finalization of the results framework, a process of reviewing/validating the baseline values will be undertaken by UNDP jointly with the appropriate stakeholders, during the first three months of implementation of the project. This baseline process will inform the milestone and target setting of the approved performance indicators and provide the essential input into the finalization of the project M&E Plan.
- 2. Routine Monitoring This will happen frequently from the onsite of the project, spanning across the project life cycle, focusing on the daily implementation of project interventions to inform output and outcome level mechanisms. Routine monitoring will provide the essential data and evidence of the progress that will be made from the baseline values towards the set targets and impact, including risk monitoring and management within the project activities. These will be documented at regular intervals and monitoring tools and templates will be developed to ensure that this key element informs other related activities.
- 3. Learning Events The proposed Project Management Unit will lead and facilitate learning activities of the project. Reports produced under monitoring and evaluation activities will be mostly circulated among key stakeholders, especially organizations represented in the Steering Committee. Provincial and District based stakeholders will play a crucial role in knowledge sharing through their district structures. When targeting local communities, products will be translated to local languages with few/no technical terms. EMA and Implementing Partners; also, in the form of peer review missions which can also be a platform for exchange visits and cross learning. These learning events will facilitate the forming of communities of practices, scaling up of best practices and lessons learnt. These visits can also take place at Steering Committee level and at the Technical Committee Level.
- 4. Output monitoring and verification processes A system will be developed for the purposes of output level monitoring to complement the activity-based monitoring.
- 5. Outcome Monitoring Each year the project will undertake outcome monitoring exercise.
- 6. Data Quality Assurance The Monitoring Evaluation Learning (MEL) Strategy mandates the Project Unit to conduct data quality assurance (DQA) assessments.
- 7. Evaluations Mid Term Evaluation Report A mid-term independent evaluation report will be completed, half way the project cycle.
- **8.** Terminal Evaluation (TE) An independent Terminal Evaluation (TE) will take place upon completion of all major project outputs and activities.

G(2). Explain how your organisation will ensure that you have the evidence you need throughout the life of the programme to make key decisions?

The organization will employ several strategies to ensure evidence gathering for decision making. A detailed M&E plan explained in detail earlier, will be the main framework for evidence generation.

UNDP will have a specific communications Officer who will lead both communications and evidence generation through human interest stories, image database, most significant change, videos, and documentaries. The project will also utilize the generated evidence to feed into technical and policy briefs to influence policy. Lessons learnt will also be generated and documented. The project will also take advantage of the existing Resilience Knowledge Hub to share information, knowledge, and evidence to influence decision making. The project will establish and maintain a comprehensive electronic beneficiary database which will be used as evidence of the reach of the project. The project will equip the beneficiaries with ICT (Information and Communication Technology) equipment which will be used for EWS as well as capturing and generating evidence.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

- The following government department under different Ministries were consulted during the preparation for this proposal;
- Ministry of Environment, Climate, and Wildlife:
 - Technical Departments- Climate Change Management Department, Meteorological Services Department (MSD), (EMA), Forestry Commission.
- Ministry of Lands, Agriculture, Fisheries, Water and Rural Development:
 - Technical Departments- Agricultural Advisory Services (ARDAS), Department of Irrigation (DOI), Zimbabwe National Water Authority (ZINWA)
- Ministry of Women Affairs, Community, Small and Medium Enterprises Development

 Technical Departments: Community Development.
- Ministry of Local Government
 - Technical Departments: Department of Civil Protection (DCP)
- Ministry of Finance
- Ministry of Information, Publicity and Broadcasting.

At district level and community level the following were consulted, in each of the 4 targeted districts;

- Ministry of Women Affairs, Community, Small and Medium Enterprises,
- District Civil Protection Unit's District Development Coordinator,
- Agritex,
- Rural District Councils,
- Department of Social Welfare and community members,
- Village Heads,
- Ward Councilors,
- Local Police.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

Impact: Communities and institutions supported by the programme are more resilient to respond to adverse effects of climate Change (droughts & floods).

The requested budget will finance the full cost of the proposed adaptation activities and the relevant government departments will provide some in-kind contribution through staff efforts level of effort, government vehicle and conference facilities where necessary. Premised on the firm belief that adaptation planning and implementation is effectively enhanced through complementary actions across levels, and the principle of Layering, Sequencing and Integration, the proposed programme will leverage on previous and on-going investments on climate adaptation interventions in the targeted geographical areas, through different collaborations and synergetic arrangements. The programme will remain open for opportunities for co-financing of activities, should funding opportunities permit.

Outcome 1: Poor & vulnerable households/ Communities' livelihoods are improved through reliable access to and use of irrigation infrastructure. (Budget US\$5 million).

The budget will support climate proofed infrastructural development, 1 dam and 4 x 30 hectare irrigation schemes to provide a foundation for climate change adaptation and provide climate proofed livelihoods and sources of income for the targeted communities. The programme will ensure that the developed water sources are sustainably managed including catchment management.

1 Establishment of climate proofed irrigation schemes. The budget will cover the climate proofed irrigation schemes establishment costs in 4 districts.

Irrigation scheme development will reduce the sensitivity of crop production to droughts and reduce the participating household reliance on rainfed agriculture which is prone to crop failure. The success rate of rainfed agriculture in in the targeted districts is in the order of one good harvest in every four to five years³⁵. Irrigation scheme development will allow the farmers to have 3 cropping cycles per year and have improved household income and become more food and nutrition secure. The use of solar energy in water pumping, the use of floating rafts, use water efficient drip irrigation systems, sand abstractions will allow for sustainable access multiple water use even during periods of extreme weather events. The budget will cover the cost of 3 irrigation scheme development, 1 dam construction, establishment of solar mini grids for solar water pumping and water conveyance and the excess renewable energy will be used to address power need for nearby public institutions and businesses involved in off-farm activities.

The construction of 1 small dam in one of the 4 districts will be done to support irrigation schemes establishment, to prevent downstream floods and for overall ecosystems and catchment protection.

Outcome 2 : Off-farm Income generating activities for youth and women(Budget US\$1 000 000.00)

The project will assist the youth and women to transition from agriculture based and off-farm income generating activities by training them in vocational skills and supporting them to venture into small businesses. The proposed programme will support 1000 rural youth and women to develop off-farm income generating activities through trainings in vocational skills and entrepreneurship development. The training of youth in contextually relevant vocational skills will facilitate transformational adaptation through diversification of livelihoods and income sources and reducing their reliance on the climate

³⁵ Food and Agricultural organization, The five natural regions of Zimbabwe https://www.fao.org/3/X5594E/X5594e03.htm

sensitive rain-fed agriculture. The 100 youth and women will go through intensive trainings in business management and financial literacy to build their capacity to manage successful businesses and adapt better to the changing climate. The budget will cover cost involved in the intensive training of the identified youth and women and equipping them with the necessary start-up kits, -tools and equipment to start their businesses and to make them more competitive in their various trades.

Based on the UNDP experiences in other projects, the following skills will be considered (but not limited to): dress making, welding and metal fabrication, bricklaying, carpentry, hairdressing, plumbing, solar installations, retailing, and cross border trading. The vocational skills training will be done through the government vocational school training centres, with minimum financial support from the project. Upon completion of the trainings, the youth will be guided to start their own businesses with the technical back-stopping support from The Ministry of Women Affairs, Community, Small and Medium Enterprises Development and the Ministry of Youth Empowerment, Development and Vocational Training. The trained cadres will be trade-certified and trade experts will ensure the products they produce are of high market quality, which will translate into improved sustainable household income for the participating households.

The youth will generate income from less climate sensitive sources and the different innovation will be scaled up and replicated using project resources and through spontaneous adoption. The proposed programme will support the youth to acquire productive assets to allow them to adapt to the vagaries of climate change effectively.

Outcome 3. Climate-proofed Value chain/market developed/strengthened. (Budget- US\$2 million).

The budget will support 4000 households in the commercialization of drought tolerant traditions crop production. This will assist the participating households to adapt better to the changing climate, especially the increasing frequency and intensity of droughts and seasonal dry spells, by practicing climate smart agricultural practices on a commercial scale. The activity will be underpinned with the seed multiplication of drought tolerant crop varieties to make the commercialization of the crops more sustainable.

The project will also support 4000 households in the commercialization of high value drought tolerant small livestock and diary production to align and to reduce the sensitivity of livelihoods sources to drought. Modelling indicates that goats produce 74% less emissions per unit of protein produced than communal cattle in Zimbabwe³⁶. In addition, goats are less susceptible to drought impacts: while climate change drives reductions in the income from beef cattle by 11-13% by 2040, income from goats only decreases by 7-9%. Promoting small livestock is also a gender-equity informed investment as more women in Zimbabwe are more likely to own small livestock and have more control over than they have over cattle³⁷ and the investment will help women to adapt better to climate change.

The project will also support 240 households in the commercial agro-processing of the climate smart crops to allow for sustainable value chain development of climate proofed value chains. This will provide the rural farmers with a business incentive to produce drought tolerant crops.

The promotion of commercial agro-forestry will allow the 400 participating households to adapt better

³⁶ World Bank (2019) Climate Smart Agriculture Investment Plan for Zimbabwe, International Bank for Reconstruction and Development / The World Ban

³⁷ World Bank (2019) Climate Smart Agriculture Investment Plan for Zimbabwe, International Bank for Reconstruction and Development / The World Ban 33

to the changing climate by diversifying their livelihood sources in an environmentally friendly as the activity will target degraded areas. The project will support the reclamation of the degraded areas and develop commercial drought tolerant citrus plantations on the reclaimed land. The activity will be implemented in collaboration with the Forestry Commission.

Outcome 4: Improved disaster preparedness, response and management of climate related hazards (Budget US\$700 000.00)

Strengthening Zimbabwe's early warning system will help reduce the economic impact of natural hazards, avoid loss of life and associated setbacks in economic and social development. The proposed project will facilitate the installation of 4 Automated Weather Stations, one per district, strengthen Community Based Disaster Risk Reduction Management in the 4 targeted districts cascaded to village level. Deliberate effort will be made to ensure to engage both men and women in the generation. interpretation and dissemination of information to communities, to ensure early warning information reaches all groups and networks at the local and grassroots levels. The proposed project will focus on building the capacity of communities and field level extension to improve their access to reliable and utilization of accurate weather and climate information services, through training of 9600 community members and integration of traditional knowledge system to scientific weather and seasonal forecasts. Based on the successful piloting of the integration of traditional knowledge system to the scientific weather and seasonal forecasting under previous programmes, the proposed programme will facilitate the production of hybrid forecasts, involving the community members, tapping into indigenous knowledge systems to complement scientific knowledge seasonal forecasting for climate adaptation. This will improve rural household access to climate-risk informed extension services, addressing a key barrier to climate change adaptation. The integration of traditional knowledge system into weather and seasonal forecast will not only improve the precision of the forecasts but will also provide the communities with the much-needed confidence to use the weather and seasonal forecast early warning information in their seasonal cropping planning. This will allow the rural household to make riskinformed decisions and livelihoods adaptation plans which will make them more resilient to effects of climate change.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

Sustainability will be demonstrated from two perspectives: the sustainability of the infrastructure and second sustainability of livelihood improvement.

Infrastructure sustainability is when the infrastructure put in place continues to generate and deliver resources (power and water) that meet the community demands during and beyond the programme lifespan without any significant additional inputs. UNDP will achieve infrastructure sustainability through climate proofing the established infrastructure and efficient utilization of resources (power and water).

The second perspective is sustainability of livelihood improvement mechanisms. This will be attained via alternative livelihoods, establishment of robust market linkages for farmers, establish early warning systems, and closing of the digital divide. When combined these four measures will ensure that the programme continues to improve the livelihoods of beneficiaries beyond the project lifespan.

 Market linkages: Without a market it would be difficult for any farming activities to be profitable and sustainable. UNDP is best positioned to provide sustainable market linkages using the AgriData coming from the UNDP led Agritex Data collection platform. Agritex extension officers were trained in using Kobo Collect production and market data. UNDP is the only UN agency that has such a robust market analysis tool, which will be used by beneficiaries to make decisions across the value chain from production to consumption.

- Closing the digital divide: UNDP recognizes the role that digital will play in shaping the project. However, most of the beneficiaries do not have access to smart phone and/or broadband data. That is why UNDP is testing technologies like StreamSpot+, which utilizes a solar powered router box to create a local area network that anyone can use to access pre-loaded online content and feedback at zero data charges. StreamSpot+ will be used to create easy to access agricultural information gateways that offer advisory services to farms across the whole supply chain. All technology discussed above will constitute the information delivery of a robust early warning system as described in the next bullet point.
- Early warning systems: UNDP already possess expertise in information aggregation and early warning systems through the works of the GCF, CAWEP, ZRBF and Accelerator Lab. UNDP is unique in its ability to operate early warning systems on both the production and demand side. Through the GCF, UNDP has experience in setting up and running low cost, automated weather stations for weather advisory services to farmers. In the last seven years, ZRBF has perfected its High Frequency Monitoring (HFM) system, which utilizes Agritex Extension officers equipped with Kobo Collect enabled tablets to track the state of crop and livestock health. Thus, UNDP brings to the project the ability not only to set up weather related early warning systems, but also monitor crop/livestock condition in near real-time and provide early warning advisory services to communities and policy makers. This reduces the risks of diseases outbreaks which could result in poor harvests. On the demand side, the UNDP Accelerator Lab partnered with Agritex in setting up a supply and demand tracking platform for agricultural produce. Information from the platform will provide beneficiaries with a planning and forecasting advantage. Over many years the data will also enable predictive analysis.

The targeted beneficiaries and the relevant local government agencies and ministries will be fully capacitated to sustain the programme outcomes. The extent to which the target groups and counterparts can adapt sufficiently to external changes and shocks would also be a key criterion for sustainability. To ensure sustainability of the programme outcomes, permanent government institutions which have perpetual existence and mandate in the areas of intervention will be fully incorporated and capacitated to continue to support the intervention beyond the life of the project. The actors will play distinct roles which will complement each other in ensuring that project outcomes and development gains are maintained. The continuity needs of the intervention outcomes will be embedded in the mandates of the institutions and become service delivery to the beneficiaries. In terms of environmental and social sustainability, relevant government institutions will be trained on ESMP implementation and monitoring and grievances handling and management. The following institutions have been identified as key players for sustainability and they will be fully engaged and capacitated to play this key role:

- Ministry of Environment, Climate and Wildlife.
- Environmental Management Agency
- Forestry Commission
- Ministry of Lands, Agriculture, Water, Climate and Rural Development
- Zimbabwe National Water Authority
- Department of Irrigation
- AARDS

- Meteorological Services Department
- Rural Electrification Fund
- Zimbabwe Energy Regulatory Authority
- Ministry of Energy and Power Development
- District Development Fund
- Ministry of Women Affairs, Community, Small and Medium Enterprise Development
- Research Institutions (Innovation Centres) Other institutions will also play key roles in the sustainability of the outcomes, and these include:
- Irrigation Management Committees
- Irrigation Working Group
- Energy Management Committees
- Water Point Committees
- Private sector

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	X	
Access and Equity		x
Marginalized and Vulnerable Groups		X
Human Rights	x	
Gender Equality and Women's Empowerment		x
Core Labour Rights		x
Indigenous Peoples	X	
Involuntary Resettlement	X	
Protection of Natural Habitats		x
Conservation of Biological Diversity		х
Climate Change	X	

Pollution Prevention and Resource Efficiency	X
Dublic Health	V
Fublic Health	^
Physical and Cultural Heritage	Х
, ,	
Lands and Soil Conservation	X

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

Project	Project	Fund	Fund Outcome	Grant
Objective(s) ¹	Objective	Outcome	Indicator	Amount
	Indicator(s)			(USD)
Aim: To adapt and	to increase resilience o	of vulnerable rural co	ommunities, in Zimba	bwe to the
adverse effects of c	limate change and var	iability.		
Communities and	% of targeted	Outcome 1:	1. Relevant threat	8 200 000
INSTITUTIONS	nousenoids with an	Reduced exposure	and nazard	
supported by the	improved resilience	to climate-related	iniormation	
programme are	score. This will be	nazaros ano	generated and	
more resilient to	assessed by %. Of	uneaus		
offects of climate	communities in	Outcomo 2	community	
Change (droughts	boing able to recover	Strongthonod	timely basis	
& floods)	during able to recover	institutional	uniery Dasis	
d 110003)	shocks and avoid	canacity to	2 No. and type of	
	complete loss of	reduce risks	targeted institutions	
	livelihoods and	associated with	with	
	access to health and	climate induced	increased capacity	
	education.	socioeconomic and	to minimize	
		environmental	exposure to	
		losses	climate.	
			variability risks	
		Outcome 4:	3. Number of	
		Increased adaptive	people with	
		capacity within	reduced risk to	
		relevant	extreme	
		development	weather events	
		sector services and		
		infrastructure	4. Capacity of staff	
		assets.	to respond to, and	
			mitigate impacts of,	
		Outcome 6:	climate-related	
		Diversified and	events from	
			increased.	
		for vulnerable	5 Physical	
		neonle in targeted	infrastructure	
		areas	improved to	
			withstand climate	
			change and	
			variability-induced	
			stress.	

Project Outcome(s)	Project Outcome	Fund Output	6 %age of households and communities having more secure access to livelihood assets 7. %age of targeted population with sustained climate- resilient alternative livelihoods	Grant
	Indicator(s)		Indicator	Amount
Outcome 1: Poor & vulnerable households/ Communities livelihoods are improved through reliable access to and use of irrigation infrastructure.	 1.1 % of targeted land under irrigation 1.2 Number of people supported to better adapt to the effects of climate change through sustainable access to multiple water use, irrigation systems. Disaggregated by sex 1.3-No of people supported by the established dam 	Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability. Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale) 6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies. 6.2.1. Type of income sources for households generated under climate change scenario. 	4 500 000.00
Outcome 2: Off-	2.2 % of the youth	Output 8: Viable	6.2.1. Type of	1 000 000.00
ann income aonaratina	with improved access	rolled out scaled	households	
generaling activitios or	to sustainable		nousenoius apporated under	
livelihood sources	livelihoods	and/or accelerated.	climate change	

Annex 5 to OPG Amended in October 2017

through Vocational skills training and entrepreneurship development	2.3 -number of green jobs created by the project 2.4 Number of youth trained in vocational skills leading independent livelihoods	Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	scenario. 8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
Outcome 4. Climate-proofed Value chain/market developed/strength ened	Number or % of people with diversified livelihood income sources from climate proofed value chains Number or % of people with increased household income derived from climate- proofed value chain development producers	Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas Viable innovations are rolled out, scaled up, encouraged and/or accelerated	No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale) %age of households and communities having more secure access to livelihood assets %age of targeted population with sustained climate- resilient alternative livelihoods	2 000 000.00
Outcome 5: Improved disaster preparedness, response and management of climate related hazards (EWS)	-% of people trained that timely receive weather & climate information. - % of community members trained that timely use weather & climate information to plan and timely	-Risk and vulnerability assessments conducted and updated. -Targeted population groups covered by adequate risk	-No. of projects/programm es that conduct and update risk and vulnerability assessments (by sector and scale) -No. of early warning systems	700 000

Annex 5 to OPG Amended in October 2017

	Annex 5	to OPG Amended in	October 2017
respond to	reduction systems.	(by scale) and no.	
anticipated weather a	×	of beneficiaries	
climate disasters.	-Strengthened	covered.	
	capacity of national		
-Use of climate	and sub-national	-No. of field	
information	centres and	extension staff	
products/services in	networks to	trained to respond	
key decision-making	respond rapidly to	to, and mitigate	
government	extreme weather	impacts of, climate-	
departments (Met	events.	related events (by	
Services, AGRITEX &	&	gender)	
ZINWA)	-Targeted		
	population groups	-No. of targeted	
	participating in	institutions with	
	adaptation and risk	increased capacity	
	reduction	to minimize	
	awareness	exposure to climate	
	activities.	, variabilitv risks (bv	
		type, sector and	
		scale)	
		-No. of community	
		aroups formed to	
		ensure transfer of	
		knowledge	

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PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government² Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

(Enter Name, Position, Ministry)Date: (Month, day, year) 01/26/2024Mr. Washington Zhakata01/26/2024Director Climate Change Management Department01/26/2024Ministry of Environment, Climate and Wildlife, Zimbabwe01/26/2024		
	(Enter Name, Position, Ministry) Mr. Washington Zhakata Director Climate Change Management Department Ministry of Environment, Climate and Wildlife, Zimbabwe	Date: (Month, day, year) 01/26/2024

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</u>

B. Implementing Entity certification. Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

^{6.} Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Manie a olgridation	Steady	Kanga	La
	Bony	gola	
Implementing Entity (Coordinator		2 772104
Date: (Month, Day, Y	(ear) Tel. a	early Pange	Vale Email
Project Contact Pers	OH HIOMPHO	NALEDI	KULUBI

Annex 5 to OPG Amended in October 2017 Annex 1: Endorsement Letter from the Designated Authority (DA) of the Adaptation Fund in Zimbabwe

All communications should be addressed, "The Secretary for Environment, Climate and Wildlife."

P Bag 7753 Causeway, Zimbabwe Telephone: 701681/3 Fax: 252673

Your Ref.: Our Ref:



MINISTRY OF ENVIRONMENT, CLIMATEAND WILDLIFE

11th Floor, Kaguvi Building Cnr 4th Street/Central Avenue Harare ZIMBABWE

26 January 2024

To: The Adaptation Fund Board c/o Adaptation Fund Board Secretariat Email: afbsec@adaptation-fund.org Fax: 202 522 3240/5

Subject: Endorsement for Climate Change Adaptation Programme in Zimbabwe

In my capacity as designated authority for the Adaptation Fund in Zimbabwe, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the country.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the Environmental Management Authority (EMA) and executed by United Nations Development Programme (UNDP); through the Ministry of Agriculture, the Ministry of Environment, Climate Wildlife and the Forestry Commission of Zimbabwe.

Sincerely.

CHR CENTRAL WYDING & FOURTH ST N.O. 1949 7755 CALIFORNY FURNISHE STRING STRY

Mr. Washington Zhakata Director Climate Change Management Department Adaptation Fund and GCF Focal Point Ministry of Environment, Climate and Wildlife Zimbabwe