



## ADAPTATION FUND

AFB/PPRC.37/Inf.31  
16 March 2026

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Adaptation Fund Board  
Project and Programme Review Committee  
Thirty-seventh Meeting  
Bonn, Germany, 7-8 April 2026

## PROPOSAL FOR ZIMBABWE



ADAPTATION FUND

## ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project Concept

**Country/Region:** Republic of Zimbabwe  
**Project Title:** Zimbabwe Adaptation for Drought and Agro-Production Transformation in Semi-arid Regions (Z-ADAPT)  
**Thematic Focal Area:** Water management, Agriculture and Ecosystem resilience  
**Implementing Entity:** International Fund for Agricultural Development (IFAD)  
**Executing Entities:** Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MLAFWRD); in collaboration with Ministry of Environment and Wildlife

**AF Project ID:**

**IE Project ID:**

**Requested Financing from Adaptation Fund (US Dollars):** 12,000,000

**Reviewer and contact person:** Alexandra Munoz Surriba

**Co-reviewer(s):** Lystra Fletcher-Paul

**IE Contact Person:**

<p><b>Technical Summary</b></p>	<p>The project “Zimbabwe Adaptation for Drought and Agro-Production Transformation in Semi-arid Regions (Z-ADAPT)” aims to address climatic change impacts, in particular drought, water scarcity, and rising temperatures, in the project area or targeted districts. It addresses climate extremes in Zimbabwe's most vulnerable semi-arid districts by enhancing resilience in agriculture and water management. This will be done through the three components below:</p> <p><u>Component 1:</u> Climate-proofed water supply and irrigation for climate-resilient horticulture in targeted districts (USD 5,900,000);</p> <p><u>Component 2:</u> Climate-smart horticulture production, diversification &amp; resilient livelihoods (USD 3,200,000);</p> <p><u>Component 3:</u> Climate information, early warning &amp; institutional capacity (incl. safeguards, gender, learning/M&amp;E (USD 1,000,373).</p> <p><u>Requested financing overview:</u>  Project/Programme Execution Cost: USD 959,535  Total Project/Programme Cost: USD 11,059,908</p>
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	<p>Implementing Fee: USD 940,092 Financing Requested: USD 12,000,000</p> <p>The proposal includes a request for a project formulation grant and/or project formulation assistance grant of USD 150,000.</p> <p>The initial technical review raises several issues, such as more details in the Theory of Change, quantitative data for the Economic benefits, tracking and analysis of experiences, Alignment with the AF Results Framework and screening of environmental and social impacts, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.</p>
Date:	March 3, 2026

Review Criteria	Questions	First Technical Review Comments March 3, 2026
Country Eligibility	1. Is the country party to the Kyoto Protocol, and/or the Paris Agreement?	<b>Yes.</b> The country has ratified both the Kyoto Protocol (30 December 1998) and the Paris Agreement (07 August 2017).
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	<b>Yes.</b> The country is a developing country which is vulnerable to the adverse climate change effects of recurrent droughts, rising temperatures and intra seasonal rainfall variability causing direct losses to agricultural production, water availability and rural livelihoods, particularly in the semi-arid western and southern provinces.
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	<b>Yes.</b> As per the Endorsement letter dated December 18, 2025.

	<p>2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?</p>	<p><b>Yes.</b> The proposal, including annexes, amounts to 50 pages.</p> <p><b>CR1:</b> Please use rounded and full figures throughout the proposal. For example, in paragraph 107, instead of “USD 5.90”, use “USD 5,900,000”.</p>
	<p>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?</p>	<p><b>Yes.</b> <b>However, some additional information is required.</b></p> <p>Part II.A (para 49 – 67) describe the project components, outcomes, outputs and activities. The project activities are well suited to addressing the climate change impacts and are not a “business-as-usual” development project. The activities lead to tangible and substantial outcomes, and they generally align well with the overall goal and objectives of the project. A Theory of Change narrative and diagram is included to explain the vertical logic of the intervention. However, some amendments are required in the component’s description as well as in the Theory of Change.</p> <p><b>CAR1:</b> A number activities as presented should not form part of project components but actions to be taken by the IE or EE and should be costed under the IE and EE costs. Specifically, 3.1.2.1; 3.1.2.2.;3.1.2.4;3.1.3.1; 3.1.3.2;3.1.3.3.</p> <p>Please note that the AF requires that ‘learning and knowledge management’ can form part of components but not ESP and gender actions unless it is that a gender officer (staff) is being supported to cover some</p>

		<p>actions across the project components. Please refer to the costs and fees page of the AF website <a href="https://www.adaptation-fund.org/generic/costs-and-fees/">https://www.adaptation-fund.org/generic/costs-and-fees/</a>.</p> <p><b>CAR2:</b> Please note that an ESMP (costed) including to cover USPs, a full gender analysis and Gender Action Plan (costed) as well as grievance mechanism are required for the fully developed proposal stage. Consequently please revise the activities under output 3.1.2 and 3.1.3 to reflect this. It is noted that the current PFG includes the ESMP development. It is therefore not clear why it is being included in the project document as an activity. The GAP and grievance work can also be considered under the PFG grant.</p> <p><b>CAR3:</b> Based on Activity 1.1.1..1 and activity 1.1.2.1 the project would contain USPs. Please refer to the guidance at <a href="#">Guidance Document for Project/Programme with Unidentified Sub-Projects</a> and amend the proposal under these activities to indicate how the USPs will be addressed as well as under Part II, section K.</p> <p><b>CR2:</b> Activity 2.1.3.3: Financial literacy and facilitated linkages to existing finance/insurance seeks to “Deliver targeted financial literacy modules (costing, savings, risk management, basic business planning) and facilitate matchmaking/linkages to existing savings groups, micro-insurance and financial institutions (where available and appropriate)”. What happens if the farmers who do not access to such institutions?</p>
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		<p>.</p> <p><b>CR3:</b> Please consider reformulating the general objective of the proposed project. Currently, the proposal only includes what the project will address from a very general perspective.</p> <p><b>CR4:</b> Kindly ensure that the Theory of Change (narrative and diagram) includes the following elements:</p> <ul style="list-style-type: none"> <li>(i) the main problem.</li> <li>(ii) the overall objective.</li> <li>(iii) outcomes, outputs, and activities.</li> <li>(iv) Components as the solutions to contribute to the main problem.</li> <li>(v) assumptions and risks, as transversal elements across all the above. These should be specific rather than generic.</li> </ul> <p><b>CR5:</b> Please revise and amend all outcomes and outputs, considering that <b>outcomes</b> are the expected results (e.g., strengthened institutional capacity) while <b>outputs</b> are the direct, tangible products (e.g., trainings held). Please include a target for each output.</p>
	<p>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?</p>	<p><b>Yes.</b>  <b>However, additional information is required.</b></p> <p>Part II.B (para 68 to 70) provides information on the economic, social and environmental benefits to be provided. The proposal also includes information on the number of households and farmers who will benefit from the capacity building. To avoid social harm and</p>

		<p>exclusion, it is proposed that there will be no planned physical resettlement, and targeting will be transparent and criteria-based, including quotas/targets for women-headed households, youth groups and other vulnerable households. An initial gender assessment was conducted in compliance with Gender Policy requirements, and the findings of that assessment are provided in paragraphs 39 and 40 and Annex 4. However, quantitative information is required as well as how the benefits will be equitably distributed, among other issues.</p> <p><b>CR6:</b> Please provide additional information on the criteria which will be used to select the target groups in the selected areas.</p> <p><b>CAR4:</b> Please include quantitative data for the project economic, social and environmental benefits based on its planned interventions. If exact figures are not available, kindly include estimation proxies.</p> <p><b>CR7:</b> Please clarify whether the project interventions pose any risk of negative development or maladaptation that could increase the vulnerability of beneficiaries or non-beneficiaries or reduce their capacity to adapt to climate change.</p> <p><b>CAR5:</b></p> <ol style="list-style-type: none"><li>1. Please include the overall project beneficiaries (direct and Indirect), gender disaggregated, and identify the specific vulnerable groups (e.g., women, indigenous peoples) that will benefit from the project.</li><li>2. Please also, outline how the benefits will be equitably distributed.</li></ol>
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	<p>5. Is the project / programme cost effective?</p>	<p><b>Yes.</b> <b>However, additional information is required.</b></p> <p>Part II.C (para 71 – 74) and Table 4. The proposal describes the approach used by the project to maximize cost-effectiveness by targeting investments in the most drought- and heat-vulnerable, food-insecure districts (Natural Regions IV–V), prioritizing low-lifecycle-cost, community-maintainable measures, and leveraging existing IFAD/GoZ systems (e.g., HEEP, DATES, RDCs) to fund only incremental climate-resilience needs rather than broad rural development. Table 4 also compares the cost-effectiveness of each component by looking at the benefits generated or losses averted compared to alternatives to the project.</p> <p><b>CAR6:</b> Please provide information on the cost-effectiveness from the sustainability point of view.</p> <p><b>CR8:</b> Where possible, please include quantitative estimates of cost-effectiveness. Otherwise, please include proxy estimates.</p>
	<p>6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national</p>	<p><b>Yes.</b></p> <p><b>As per the information provided in Part II.D (para 75 – 81).</b> The proposal lists a number of national and sectoral development plans, adaptation programmes,</p>

	<p>communications and adaptation programs of action and other relevant instruments?</p>	<p>including Vision 2030, NDC, NAP, agriculture and food security, water, drought and disaster risk management, inter alia, showing the alignment with the various components of the project.</p>
	<p>7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?</p>	<p><b>Yes.</b> <b>However, some details are needed.</b></p> <p>Part II.E (para 82 to 91) and Table 5. The proposal describes how the project/programme meets relevant national technical standards, including inter alia standards for environmental assessment, construction, land use and public health. Table 5 also summarizes for the relevant project activity, the applicable standard, compliance requirement and responsible agency. However, more details are needed.</p> <p><b>CR9:</b> Please include in Table 5, in the case that <u>compliance is required, the main steps needed to comply with it.</u></p> <p><b>CR10:</b> Please ensure that the table listing is comprehensive, including rural and local standards. Applicable standards may include any other sector-specific related regulations relevant to the project interventions.</p>
	<p>8. Is there duplication of project / programme with other funding sources?</p>	<p><b>No.</b> <b>However, further information is required.</b></p> <p>Part II.F (para 92 – 95) and Table 6. The proposal describes 6 projects and one general to refer to other resilience and food security programmes. Table 6 presents information on on-going and past projects, summarizing their objectives, areas of synergy and</p>

		<p>non-duplication. However, some details in Table 6 are needed to include.</p> <p><b>CR11:</b> Please check if there are also relevant regional projects of which Zimbabwe is a beneficiary, which may be included in Table 6.</p> <p><b>CR12:</b> Please revise Table 6 and identify other related ongoing or completed projects and include them in the table. For <u>each</u>, please include:</p> <ul style="list-style-type: none"> <li>(i) Project title, Timeline and specific Location within the country,</li> <li>(ii) Main project interventions, and Target population,</li> <li>(iii) Implementing entity,</li> <li>(iv) Lessons learned, how they are considered/ reflected in the proposed project design,</li> <li>(v) Overlaps and synergies with the proposed project.</li> </ul> <p>Please <u>avoid</u> using a group of projects, each line should be one identified project.</p> <p><b>CR13:</b> The no duplication statement should be clearly justified (e.g. by indicating the distinct geographic locations and/or types of interventions) for each related project identified.</p>
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p><b>Yes.</b> <b>However, additional information is required.</b></p> <p>Part II.G (para 96 – 98) describes how the project proposes to capture and disseminate lessons learnt. Methods to be used include systematic field mechanisms like Farmer Field Schools, Water User</p>

		<p>Committees, Local Adaptation Plans, partner reflection sessions (DATES, MSD, EMA, RDCs, financial institutions, HEEP), and gender-sensitive tools such as seasonal learning logs and outcome stories from women/youth on workloads, incomes, and risks. Component 3 is dedicated to knowledge management and proposes to disseminate information and lessons learned via user-friendly products such as technical briefs/guides and community co-produced case studies/resilience stories emphasizing gender/youth. However, the proposal does not include information on how it proposes to periodically track and analyse the experiences gained to determine the effectiveness of the methods used and how the methods used can be improved.</p> <p><b>CAR7:</b> Please include information of how the project will track and analyse experiences to enrich the global, national and local knowledge on climate adaptation and to accelerate understanding about what kinds of interventions work. Please consider the aspects of <b>CAR 1</b> in reframing and responding to <b>CAR7</b> and <b>CAR8</b> below.</p> <p><b>CAR8:</b> Kindly include the following details:</p> <ol style="list-style-type: none"><li>1. Provide additional details on the Learning and Knowledge Management activities, including the institutions involved and the specific actions to be undertaken.</li><li>2. Explain how the knowledge generated will be maintained once the project concludes and describe the institutional or operational arrangements required to ensure its long-term sustainability.</li></ol>
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		<p>3. Specify what feedback mechanisms are in place to assess and refine the training materials and capacity-building activities, ensuring they become increasingly effective and impactful over time.</p>
	<p>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?</p>	<p><b>Yes.</b>  <b>However, additional information is required.</b></p> <p>Part II.H (para 99 – 105) and Annexes 2, 3 y 4. The proposal describes the consultative process, including the overall approach used, the different levels of consultations, key findings, validation of project components and geographic targeting, as well as gender-responsive and youth-focused consultations. More than 118 participants took part in the provincial stakeholder consultations. The proposal also explains how the consultation findings were incorporated into the project design, for example, climate-resilient financial instruments in Component 2 and inclusive Local Adaptation Plans in Component 3. However, more details about all consultations are needed.</p> <p><b>CAR9:</b> Please include in the Table in Annex 2, the following:</p> <ul style="list-style-type: none"> <li>(i) consulted entity/ group, especially if they correspond to gender organizations. They should be specifically named,</li> <li>(ii) number of participants disaggregated by gender,</li> <li>(iii) expand on the key issues raised and how they were considered in project design (name</li> </ul>

		<p>specific outputs and outcomes currently in the proposal),</p> <ul style="list-style-type: none"> <li>(iv) background information to verify whether marginalized and vulnerable groups have been consulted,</li> <li>(v) Moreover, please indicate if further future consultations will be conducted.</li> </ul> <p><b>CAR10:</b> Please refer to Annex 4. The information provided should inform and guide the identification of women’s specific needs.</p>
	<p>11. Is the requested financing justified on the basis of full cost of adaptation reasoning?</p>	<p><b>Yes.</b> <b>However, additional information is required.</b></p> <p>Part II.I (para 106 – 107) provides a justification for the requested funding, indicating that the project will finance the full incremental cost of climate adaptation in the drought prone regions of the country, focusing on those investments that directly address current and projected climate risks and are not business as usual. Table 7 compares two scenarios for each of three project’s components: (i) business-as-usual scenario, and (ii) with the Adaptation Fund Additionality.</p> <p><b>CAR11:</b> Please clarify if the project has co-financing and that the AF project would be able to deliver its outcomes and outputs regardless of the other funding sources.</p> <p><b>CR14</b> Please provide a detailed logical narrative on how the proposed project’s objective will be achieved in terms of adaptation for each component as and the overall project. This may be included in Table 7.</p>

	12. Is the project / program aligned with AF's results framework?	<p><b>Yes.</b> <b>However, amendments are required.</b></p> <p>Part III (para 119) and Table 9. The alignment of the project with the Adaptation Fund Results Framework is presented, considering outcomes and outputs for each component. However, some amendments are required.</p> <p><b>CAR12:</b> Please revise Table 9 and amend according to the instructions and utilize the template provided in <a href="#">Results Framework Alignment Table</a> (Nov 2025). Please ensure the following:</p> <p><b>CAR13:</b> Please ensure <u>consistency</u> that all the Fund Outcomes associated with the listed Fund outputs in the lower section of the table are reflected in the upper section of the table. Also, all wording of AF indicators should be consistent with <a href="#">Results Framework Alignment Table</a> (Nov 2025).</p> <p><b>CR15:</b> Please ensure that all project's outputs and outcomes indicators are SMART.</p>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p><b>Yes.</b> <b>However, additional information is required.</b></p> <p>Part II.J (para 108 – 112) provides a comprehensive description of sustainability across all key dimensions: (i) institutional and policy foundation; (ii) financial and economic feasibility; (iii) technical resilience and operation and maintenance (O&amp;M); (iv) environmental coherence; and (v) social, gender, and youth</p>

		<p>engagement. However, more specific details are needed for all identified dimensions.</p> <p><b>CAR14:</b> Please provide more details <u>for each</u> sustainability dimension following this guidance:</p> <ul style="list-style-type: none"> <li>(i) All arrangements are clearly described. For example, under financial and economic sustainability, how will it be ensured that the community-agreed tariff will be sufficient to cover O&amp;M and minor repairs?</li> <li>(ii) Are there any pre-arrangements already signed or under preparation?</li> <li>(iii) What will be the main responsible institutions involved?</li> </ul> <p><b>CAR15:</b> Please include information on how the adaptation benefits would enable replication and scaling up after the project has ended.</p>
	<p>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?</p>	<p><b>Yes.</b>  <b>However, additional information is required.</b></p> <p>Part II.K (para 113 – 118), including Table 8. The CN provides an overview of the environmental and social impacts and risks in compliance with the AF ESP and Gender Policy. It lists the potential environmental and social risks, as well as the risk management instruments which will be prepared at the Full Project Stage. The project is classified as Category B. Risk have been identified against each of the 15 ESP principles. An Initial Gender Assessment is included in Annex 4.</p> <p>However, the screening process does not indicate that it covers all direct, indirect, transboundary and</p>

		<p>cumulative impacts and risks that could result from the proposed project.</p> <p><b>CAR16:</b> Refer to the Initial Gender Assessment and include a summary of the opportunities and challenges/risks for men and women. The information provided should inform and guide the identification of women’s specific needs and risks.</p> <p><b>CAR17:</b> Please revise Table 8 to:</p> <ol style="list-style-type: none"><li>1. Describe all potential impacts (direct, indirect, transboundary and cumulative) and risks that could result from the project.</li><li>2. Revise the magnitude of the risks and impacts (low, moderate, high). <b>Risks</b> should describe as: “<i>There is a risk ....</i>” and should be accompanied by <b>mitigation plans</b> as: “<i>Mitigation measures are ....</i>” or “<i>To mitigate this risk, the project ....</i>”</li><li>3. Kindly leave a check mark in the second column ‘<b>No further assessment required for compliance</b>’ if no further assessment is needed and leave blank if an assessment is to be conducted. No text should be included in the second column.</li><li>4. If no risk is identified for a given principle, a <u>sound justification</u> must be provided.</li><li>5. Please note that AF Principles 1, 4 and 6 <b>always apply</b>. For more information, please visit: <a href="#">AF’s ESP guidance</a> and <a href="#">Environmental and Social Policy</a> . If USPs will be part of the</li></ol>
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		project, please address in a brief explanation under Part II.K.
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	<b>Yes.</b>
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	<p><b>Yes.</b></p> <p><b>However, some amendments are needed.</b></p> <p>All figures are rounded to whole numbers, and the Implementing Entity Management Fee is 8.5% (USD 940,092). The PFG request is correct in size (USD 150,000), including the PFG fee for the Implementing Entity's Management of 8.5% (USD 12,750).</p> <p><b>CR16:</b> Please expand the description of each of the PFG activities in the "budget note" column of the PFG form, providing details and justifications for funding required.</p>
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	<p><b>Yes.</b></p> <p><b>As per information provided in Table 2: Projects Components, Outputs Outcomes and Budgets.</b> All figures are rounded to whole numbers, and the Implementing Entity Management Fee is 8.7% (USD 959,535).</p>
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	<p><b>Yes.</b></p> <p>International Fund for Agriculture Development (IFAD) is an accredited Multilateral Implementing Entity (MIE).</p> <p><b>Accreditation Expiration Date:</b> 05 February 2031.</p>

Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage
	2. 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
	5. Is an explanation and a breakdown of the execution costs included?	n/a at concept stage
	6. Is a detailed budget including budget notes included?	n/a at concept stage
	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:** Zimbabwe Adaptation for Drought and Agro-Production Transformation in Semi-arid Regions (Z-ADAPT)

**Country:** Republic of Zimbabwe

**Thematic Focal Area:** Water management, Agriculture and Ecosystem resilience

**Type of Implementing Entity:** Multilateral Implementing Entity

**Implementing Entity:** International Fund for Agricultural Development (IFAD)

**Executing Entities:** Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MLAFWRD); in collaboration with Ministry of Environment and Wildlife

**Amount of Financing Requested:** USD 12,000,000 (Twelve Million United States Dollars)

**Project Formulation Grant Request (available to NIEs only):** Yes  No

**Amount of Requested financing for PFG:** 150 000 (in U.S Dollars Equivalent)

**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:**

- This concept has been submitted before
- This is the first submission ever of the concept proposal

In case of a resubmission, please indicate the last submission date:

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

## **Project Background and Context:**

1. **Geography and natural resources:** The Republic of Zimbabwe, is a landlocked country in Southern Africa, with a total land area of about 390,757 square kilometers, bordered by the Zambezi River to the north and the Limpopo River to the south. A high central plateau (the Highveld) forms a major watershed between the Zambezi River system to the north and the Limpopo River system to the south, while the Eastern Highlands and the Lowveld create sharp altitudinal gradients that shape climate, hydrology, soils and land-use potential across the country<sup>1</sup>. The physical geography significantly influences the climatic conditions, hydrological systems, and agricultural viability of the nation, requiring a sophisticated comprehension of the environment to formulate successful climate adaptation strategies. Zimbabwe is divided into five separate agro-ecological zones, referred to as Natural Regions, categorized mostly by precipitation patterns, soil quality, and vegetation compatibility. Natural Regions I and II in the eastern highlands and highveld receive sufficient precipitation for intense agricultural cultivation.
2. Zimbabwe is largely a semi-arid country characterized by low, erratic rainfall and recurring droughts. Average annual rainfall is around 650 mm, but it varies dramatically by region, from only 350–450 mm in the southern lowveld (Natural Region V) to over 1,000 mm in the Eastern Highlands<sup>2</sup>. Overall, **only 37% of Zimbabwe's land receives rainfall adequate for agriculture**, with the rest prone to moisture deficits<sup>3</sup>. The country has experienced a long-term drying trend: **rainfall has declined** about 5% since 1901 and is projected to decrease by a further 15% by 2060 (and up to 25% by 2080) under climate change, especially in the already dry south-west<sup>4</sup>. Southern provinces including parts of Matabeleland, Masvingo and Midlands that lie in Natural Regions IV and V have already observed **rising temperatures**, more frequent mid-season dry spells, and prolonged droughts since the 1950s<sup>5</sup>. Climate models predict a **hotter, drier future with a late onset of rains and intensified intra-seasonal droughts** in these areas<sup>6</sup>. For example, rainfall in southern Zimbabwe could decrease by around 15% with a 20% reduction in runoff by mid-century, leading to higher food deficits and livestock losses if no adaptation measures are taken<sup>5</sup>.
3. Zimbabwe's climate is predominantly **summer-rainfall** (roughly November–March), but rainfall and temperature patterns vary significantly with elevation and exposure. National planning and agricultural practice commonly use **agro-ecological "Natural Regions" (I–V)** to reflect this variability, ranging from higher-rainfall zones (especially in the eastern highlands) to **semi-arid** areas where mean annual rainfall is typically in the **450-600 mm** range and seasons fail frequently<sup>7</sup>. In recognition of climate change impacts on farming suitability, Government has also moved toward **revising agro-ecological zoning** to better reflect emerging climatic realities and planning needs<sup>8</sup>.
4. Natural resources underpin both rural livelihoods and national development, yet they are under increasing pressure from climate variability and land-use change. Large parts of the drier regions are characterized by **sandy soils** with inherently low nutrient retention and low water-holding capacity, which can amplify drought impacts and increase sensitivity to short dry spells. Where catchments are degraded, accelerated runoff and erosion contribute to **sedimentation of small reservoirs and water bodies**, reducing effective storage and reliability over time<sup>9</sup>.
5. Hydrologically, the country depends on highly seasonal flows in many sub-catchments, making water availability particularly sensitive to rainfall variability and drought. Zimbabwe's recent policy framing highlights recurrent severe drought episodes, such as **1991-1992, 2001-2002, 2015-2016, and 2018-2019**, and their far-reaching impacts on agriculture, water resources and rural welfare, underscoring the centrality of water security and climate-risk-informed resource governance in national resilience planning<sup>8</sup>.

## **National Context and Climate Baseline/ Observed Trends:**

6. Zimbabwe's ND-GAIN (Notre Dame Global Adaptation Initiative) score reflects high climate change **vulnerability** (due to reliance on rain-fed agriculture, water/energy stress) and low **readiness**, ranking it poorly globally, needing urgent

<sup>1</sup> FAO 2016: Country Profile: <https://openknowledge.fao.org/server/api/core/bitstreams/b43602b2-724e-45ed-8861-727d0381b66e/content>

<sup>2</sup> 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.

<sup>3</sup> Madzwamuse, M. (2010). *Climate Change Vulnerability and Adaptation Preparedness in Southern Africa – Zimbabwe*. Heinrich Böll Stiftung. (Citing that only around 37% of Zimbabwe receives adequate rainfall for agriculture, with the rest in semi-arid zones).

<sup>4</sup> Government of Zimbabwe (2020). "Understanding Climate Risks over Zimbabwe." Climate Change Management Dept., Ministry of Environment

<sup>5</sup> Green Climate Fund (2020). FP127: Building Climate Resilience of Vulnerable Agricultural Livelihoods in Southern Zimbabwe

<sup>6</sup> Government of Zimbabwe (2023). *National Climate Change Adaptation Plan*. Ministry of Environment, Climate, Tourism and Hospitality Industry.

<sup>7</sup> Food and Nutrition Security Profile 2022: <https://www.fnc.org.zw/wp-content/uploads/2023/04/Hwange-District-Profile.pdf>

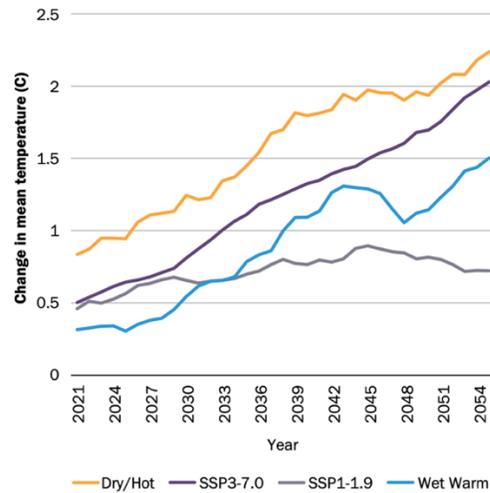
<sup>8</sup> UNFCCC: Zimbabwe NDC 3.0 (2024): [https://unfccc.int/sites/default/files/2025-02/Zimbabwe%20NDC3.0%20Country%20Statement\\_2025\\_35.pdf](https://unfccc.int/sites/default/files/2025-02/Zimbabwe%20NDC3.0%20Country%20Statement_2025_35.pdf)

<sup>9</sup> Dalu, T., Tambara, E.M., Clegg, B. et al. Modeling sedimentation rates of Malilangwe reservoir in the south-eastern lowveld of Zimbabwe. *Appl Water Sci* 3, 133–144 (2013).

investment in resilience, despite modest GHG emissions, as it strives for development through strategies like its updated Nationally Determined Contribution (NDC) for reduced emissions and adaptation<sup>10</sup>.

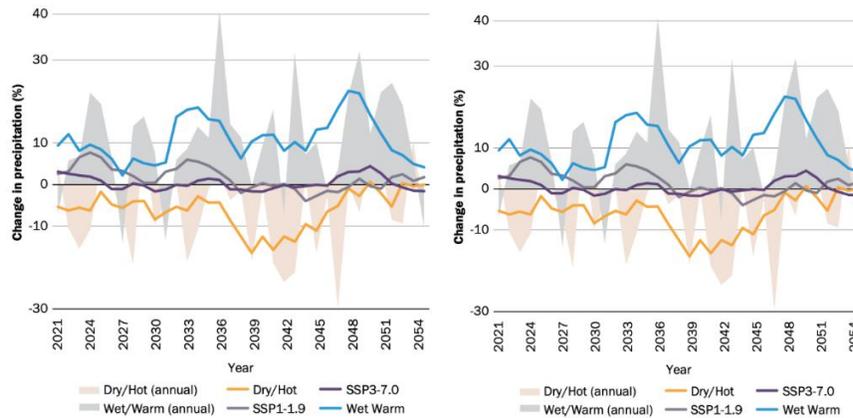
- The World Bank Country Climate Change Development Report (CCDR) 2024<sup>11</sup> mentions that though there are both risks of wet and dry shocks, Zimbabwe faces greater downside **risk from dry shocks than from wet shocks**. The evidence from existing climate variability, observed climate change, and projected climate change suggests that the risks of droughts will continue to be higher than the risk from floods and storms, but that both dry and wet shocks will persist. This frames Zimbabwe’s adaptation challenge in that climate proofing need to build resilience to both wet and dry shocks, even if **greater emphasis needs to be put on managing dry shocks**. Figures 1 and 2 depict this variability.

**Figure 1: Zimbabwe change in mean temperature**



Source: World Bank 2023a

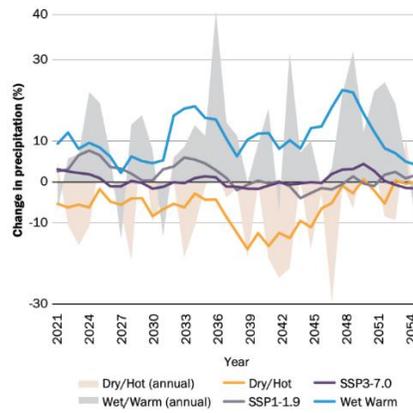
**Figure 2: Zimbabwe change in mean precipitation (lines 5-year moving average, shaded area annual variation)**



<sup>10</sup> ND GAIN Matrix Zimbabwe: <https://gain->

[new.crc.nd.edu/country/zimbabwe#:~:text=GDP%20\(PPP\)%20per%20capita%20,\(the%20186th%20most%20ready%20country](https://gain-new.crc.nd.edu/country/zimbabwe#:~:text=GDP%20(PPP)%20per%20capita%20,(the%20186th%20most%20ready%20country)

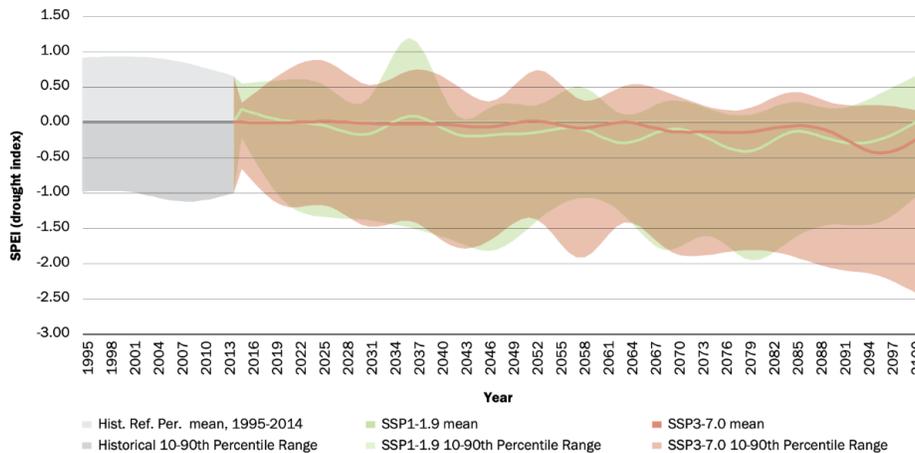
<sup>11</sup> World Bank CCDC 2024: <https://openknowledge.worldbank.org/server/api/core/bitstreams/a7e43475-55b0-4b6c-bfb1-5c23ebad1957/content>

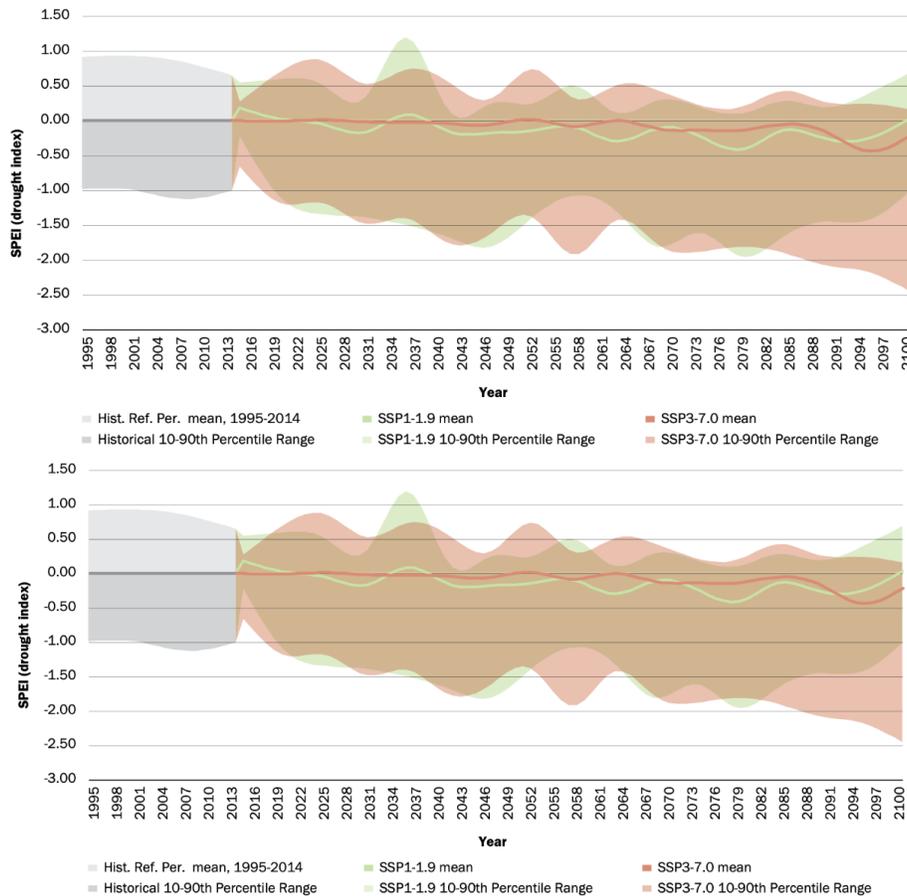


Source: World Bank 2023a

8. The combination of **higher temperatures** and **lower precipitation** will increase the risk of **drought** (WB CCDR 2024)<sup>13</sup>. The frequency and intensity of extreme events is increasing: devastating droughts, flash floods, and even tropical cyclones (notably Cyclone Idai in 2019) have struck more often in recent decades<sup>6</sup>. Zimbabwe has experienced repeated hydrometeorological shocks, including multi-year droughts affecting much of the south and center of the country, localised flash flooding in floodplains and urban areas, and, in the eastern highlands, landfall of tropical cyclones such as Cyclone Idai in 2019. While Cyclone Idai’s most severe impacts were concentrated in eastern districts, it illustrates the multi-hazard nature of Zimbabwe’s climate risk profile and the way national shocks propagate through food systems, markets and public finances. For the semi-arid districts in Masvingo and Matabeleland South, the dominant and recurrent climate hazards are drought, higher temperatures and erratic rainfall; occasional intense rainfall events are nonetheless considered in the climate-resilient design of water and horticulture infrastructure.

**Figure 3: Annual SPEI drought index projections for SSP1–1.9 and SSP3–7.0 multi-model ensembles (reference period 1995-2015)**





Source: World Bank CCKP

9. Between 1950 and 2003, Zimbabwe recorded **multiple drought** episodes (2 extreme and 4 severe droughts), and droughts accounted for 6 of the 10 worst natural disasters from 1991–2013<sup>12</sup>. Without adaptation, climate variability and shocks could cause over a 2% decline in GDP by 2030 (mainly via agricultural losses), undermining decades of development gains<sup>13</sup>.
10. **Future Warming Projections:** Climate model projections indicate significant warming for Zimbabwe’s semi-arid regions by mid-century, especially under high-emission pathways. By **2040–2059, mean annual temperatures** in Zimbabwe are projected to increase by roughly **+2.2 °C** above the late 20th-century baseline, assuming a high emissions scenario (comparable to RCP8.5 or the newer SSP5-8.5). This magnitude of warming is on par with regional projections for southern Africa in IPCC assessments, which foresee a **2–3 °C rise by mid-century** if global emissions continue a high trajectory. Notably, Zimbabwe’s semi-arid zones (**southern and western districts**) may warm slightly more than the national average. For instance, national analyses based on CMIP5/6 models (as summarized by the World Bank’s Climate Portal) show an approximate of 2.2 °C median increase by 2050 under RCP8.5. By end-of-century, this scenario could result in +5 °C or more of warming in parts of Zimbabwe<sup>14</sup>. These projections for mid-century warming are consistent across various studies<sup>15 16 17 18 19</sup> and carry **high confidence** they highlight the urgency for adaptation in Zimbabwe’s hottest and driest regions, which are already experiencing temperature stress.

<sup>12</sup> UNDP & Government of Zimbabwe (2016). *Mapping of Selected Hazards Affecting Rural Livelihoods in Zimbabwe: A District and Ward Analysis*

<sup>13</sup> World Bank Climate Change Knowledge Portal – Zimbabwe Country Profile: *Climate Impacts on Growth*.

<sup>14</sup> Climate Risk Profile: Zimbabwe (2021): The World Bank Group.

<sup>15</sup> Dube, N. (2023). Forty years of climate risk research in Zimbabwe–1980–2021. *Development Southern Africa*, 40(6), 1308-1342.

<sup>16</sup> Mutasa, C. (2019). Zimbabwe’s Climate: Past, Present and Future Trends. *Climate Change Law in Zimbabwe: Concepts and Insights*, 11.

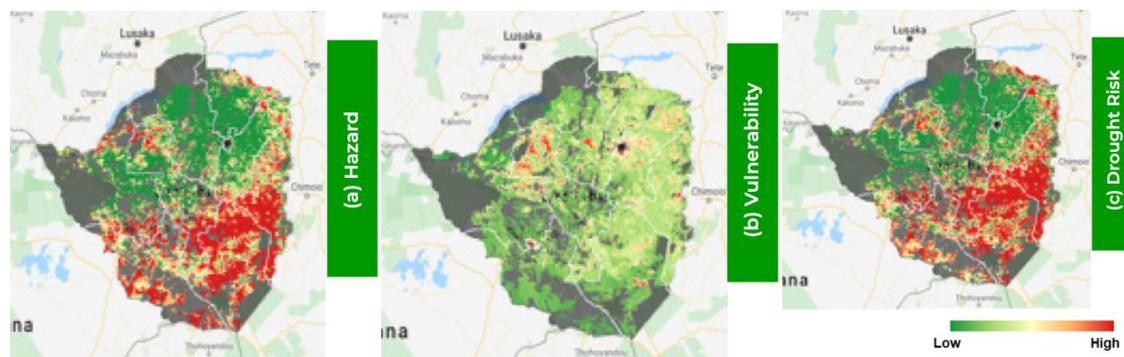
<sup>17</sup> Masimba, O., Gumindoga, W., Mhizha, A., & Rwasoka, D. T. (2019). An assessment of baseline and downscaled projected climate variables in the Upper Manyame sub-catchment of Zimbabwe. *Physics and Chemistry of the Earth, Parts A/B/C*, 114, 102788.

<sup>18</sup> Maviza, A., & Ahmed, F. (2021). Climate change/variability and hydrological modelling studies in Zimbabwe: a review of progress and knowledge gaps. *SN Applied Sciences*, 3(5), 549.

<sup>19</sup> Samu, R., & Akintuğ, B. (2020). Pre-disaster planning and preparedness: drought and flood forecasting and analysis in Zimbabwe. *Water Sa*, 46(3), 448-457.

11. Climate model simulations for Zimbabwe indicate an ongoing drying trend, especially within the southern and western regions. Based on historical losses of approximately 5% in annual precipitation since 1901, forecasts indicate a further decrease of 10-20% in seasonal rainfall and runoff by mid-century in critical catchments, accompanied by increased frequency of intra-seasonal dry spells and abbreviated rainy seasons. The changes are most evident in Natural Regions IV and V, where precipitation are anticipated to decline below 450-500 mm in several years, considerably increasing the likelihood of agricultural drought and water scarcity<sup>11</sup>.
12. **Geographic focus, Natural Regions IV and V:** The most climate-vulnerable areas of Zimbabwe are the drought-prone Natural Regions IV and V in the south and west of the country. These agro-ecological zones are characterized by **low annual rainfall (generally below 500–600 mm)**, a high frequency of mid-season dry spells, and periodic outright droughts that make rainfed farming extremely risky<sup>20</sup>.

**Figure 4: Drought Hazard, Vulnerability, and Risk maps for Zimbabwe**



**Table 1. Major droughts in Zimbabwe (Source: EM-DAT, 2020)**

Year	Location	Affected Population
1981	Central, South, East and West	1.9 million
1990	No data*	110,000
1998	Southern (Matabeleland)	800,000
2001	Central, North, South and West	3 million
2007	Central and East	1.9 million
2010	Manicaland, Mashonaland Masvingo, Matabeleland, Midlands	254,000
2013	Manicaland, Masvingo, Matabeleland, Mashonaland Central, Midlands	3.7 million
2019	* No data provided from source	1 million

13. Natural Region IV (covering much of southern Midlands, Masvingo and parts of Matabeleland) receives only about 450-600 mm of rain in a good year and suffers severe dry spells almost every rainy season<sup>8</sup>. Natural Region V the driest zone encompassing the southern lowveld and northwest normally gets under 450 mm of rain per year, with highly erratic and unreliable rainfall patterns<sup>8</sup>. In these regions, **crop failures are common**: rainfed agriculture yields a good harvest only once in every 4-5 years on average<sup>21</sup>. Most smallholders still attempt to grow staple crops (maize, sorghum, millet) on these marginal lands, but yields are extremely low and total crop failure is a constant threat<sup>8</sup>. Recurrent droughts in the semi-arid south have already led to significant declines in agricultural output, for instance, long-term data in Chiredzi District (Region V) show around 15% decrease in rainfall since 1980 accompanied by eight major droughts through 2004<sup>10</sup>. Annual rainy seasons have shortened and become more erratic, with more frequent “false starts” to the rains and prolonged dry spells that impact rainfed crops<sup>22</sup>. While Natural Regions IV and V extend into several provinces, the focus geographically concentrates on the south-western lowveld districts of Masvingo and Matabeleland South, which experience some of the lowest and most variable rainfall in the NR IV–V belt and are already facing recurrent drought emergencies.
14. These climate change stresses are further stressed by poor soil conditions: **around 70% of Zimbabwe’s arable land consists of sandy soils with low water and nutrient retention**, especially in the semi-arid regions, which exacerbates

<sup>20</sup> FAO (2000). *The Five Natural Regions of Zimbabwe*.

<sup>21</sup> FAO (2000). *Smallholder Irrigation Development in Zimbabwe – Socio-Economic Impact*.

<sup>22</sup> Adaptation Fund/UNDP (2012). *Coping with Drought and Climate Change – Zimbabwe Case Study (Chiredzi District)*.

crop wilting and yield losses during dry periods<sup>23</sup>. Overgrazing, unsustainable cultivation on fragile soils, deforestation and uncontrolled burning have stripped hillslopes and micro-catchments of woody and herbaceous cover. functions of these landscapes rather than providing only environmental co-benefits.

15. **Sensitivity and Adaptive Capacity of Smallholder Farming Communities:** Smallholder farmers in Zimbabwe's semi-arid Natural Regions IV and V, which extend across parts of Masvingo, Matabeleland South, southern Midlands and Manicaland, face acute climate risks due to erratic rainfall (approximately 350–650 mm/year), frequent droughts, and late or shortened rainy seasons.<sup>20</sup>. At least **one in three crop seasons results in total failure**, further impacted by heat extremes and degraded soils. These communities **rely heavily on rain-fed agriculture** and face high hazard, exposure, and sensitivity, with minimal adaptive capacity. Worsening food insecurity, affecting over half of rural households, combined with water scarcity, poor infrastructure, and degraded land has created a fragile rural economy highly vulnerable to climate shocks. In this context, **restoring critical landscape functions**, through **agroforestry**, gully and riverbank rehabilitation, and protection of riparian buffers, becomes an essential adaptation measure to reduce communities' sensitivity to climate shocks and enhance their adaptive capacity.
16. Poverty, gender inequality, and youth exclusion further reduce resilience. Over **76% of rural households live below the poverty line**, and **35% are female headed**, facing barriers in land tenure, finance, and extension access<sup>24 25</sup>. For example, Zimbabwe National Statistics Agency data (cited by UNDP), show around 35% of rural households are headed by women. These households typically face greater barriers (e.g. weaker land tenure and less access to credit, inputs and extension services) Meanwhile, **youth (68% of Zimbabwe's population) face 84% unemployment** and little stake in agriculture due to lack of land and opportunity<sup>26</sup>. Less than 5% of cultivated land is irrigated, and insurance penetration is below 2%<sup>27</sup>, while access to credit, drought-tolerant inputs, and reliable climate information remains limited. Zimbabwe's irrigation coverage is extremely limited. FAO notes that only about **124,000 ha of land** are currently equipped for irrigation. By comparison, Zimbabwe's total arable land is on the order of millions of hectares. Thus, only a few percent of cultivated land are irrigated (**well below 5%**)<sup>28</sup>. This makes most farming entirely rain-fed.
17. **Socio-Economic Vulnerability:** Zimbabwe's rural population (nearly 68% of the total 15 million people) is highly dependent on rain-fed agriculture and natural resources, making climate variability a direct threat to livelihoods<sup>11</sup>. Smallholder farmers, who produce the bulk of food in communal areas, have seen their **maize yields stagnate below 1 tonne/ha** in drought years, less than a quarter of potential, due to erratic rains and extended dry spells<sup>29</sup>.
18. The semi-arid districts of Chiredzi and Masvingo in Masvingo Province and Matobo and Mwenezi in Matabeleland South, are among the poorest and most food-insecure parts of Zimbabwe. These districts lie within the drier portions of Natural Regions IV and V, where recurrent droughts, shorter and more erratic rainy seasons, and high temperatures repeatedly undermine rainfed production and livestock systems. Poverty levels, food insecurity and dependence on climate-sensitive livelihoods are consistently higher than national averages in these four districts, with women- and youth-headed households disproportionately affected. By focusing on this south-western cluster of districts, the project targets the subset of NR IV and V where climate risk, exposure and socio-economic vulnerability intersect most acutely. During the 2021/22 lean season, about **2.7 million rural Zimbabweans (26% of the rural population) were food insecure**, requiring humanitarian assistance<sup>30</sup>. Child undernutrition is high, national stunting prevalence stands at around 26%, a "high" level by WHO standards, with even worse rates in drought-affected districts<sup>31</sup>.
19. Climate-induced crop failures and livestock losses are a key driver of this food insecurity pattern. In years that are impacted the most, communities in these impacted districts like Chiredzi, Mwenezi or Nkayi often rely on food aid to survive<sup>10</sup>. Moreover, **approximately 80% of Zimbabwe's rural inhabitants live in Natural Regions III, IV and V**, where rainfall is erratic many households in these areas cannot produce enough food even in good rainfall years, due to the challenging conditions and lack of irrigation<sup>9</sup>. This leaves a large swath of the population extremely vulnerable to

<sup>23</sup> Madamombe, S.M. *et al.* (2024). "Climate change awareness and adaptation strategies by smallholder farmers in semi-arid areas of Zimbabwe." *Int. Journal of Agricultural Sustainability*, 22(1).

<sup>24</sup> UNDP: <https://www.undp.org/zimbabwe/publications/zimbabwe-poverty-and-poverty-datum-line-analysis-zimbabwe-2011/12#:~:text=in%20urban%20areas>

<sup>25</sup> Chimedza, R. Draft Gender and Zimbabwe's maize value chain in the context of climate change.

<sup>26</sup> UNICEF: <https://www.zimbabwesituation.com/news/84-of-youths-in-the-informal-sector-unicef/>

<sup>27</sup> <https://gcratings.com/wp-content/uploads/2025/03/Insurance-Sector-Risk-publication-20-March-2025.pdf#:~:text=>

<sup>28</sup> FAO: <https://www.fao.org/zimbabwe/fao-in-zimbabwe/zimbabwe-at-a-glance/en/#:~:text=Zimbabwe%20has%20the%20potential%20to,to%20existing%20input%20and%20output>

<sup>29</sup> Mushore, T., Manatsa, D., Pedzisai, E., Muzenda-Mudavanhu, C., Mushore, W., & Kudzotsa, I. (2017). Investigating the implications of meteorological indicators of seasonal rainfall performance on maize yield in a rain-fed agricultural system: case study of Mt. Darwin District in Zimbabwe. *Theoretical and Applied Climatology*, 129(3), 1167-1173.

<sup>30</sup> Koyraty, N., Jones, A. D., Schuster, R., Kordas, K., Li, C. S., Mbuya, M. N., ... & Shine Trial Team. (2021). Food insecurity and water insecurity in rural Zimbabwe: development of multidimensional household measures. *International journal of environmental research and public health*, 18(11), 6020.

<sup>31</sup> Zimbabwe Vulnerability Assessment Committee (ZimVAC) (2022). *Rural Livelihoods Assessment Report*. Food and Nutrition Council.

climate shocks. Further to this, the human impacts of recent droughts illustrate the stakes: for example, the 2018–2020 drought led to massive crop failures, livestock die-offs, and water shortages, contributing to rural poverty and migration.

20. **Gender and Youth dimensions:** Climate change is magnifying existing social inequalities in Zimbabwe. Women are disproportionately vulnerable to climate shocks. About **80% of women in Zimbabwe live in rural areas**, and women constitute 60–70% of subsistence farmers<sup>32</sup>. However, they have *less access to productive resources*, only an estimated 20% of women hold land rights, and female-headed households (which make up 35% of rural households) have poverty rates around 70%<sup>32</sup>. Recurrent droughts increase women’s labor burdens (as they must walk ever-longer distances for water and firewood and find ways to feed their families from failing crops) and threaten their economic security. Gender disparities in land ownership and decision-making power also mean women have fewer options to adapt or diversify livelihoods. The project’s target regions include many women farmers who need support to implement climate-smart practices and access finance, inputs, and irrigation. Only 5.5% of rural households have piped (safe) water access. This means women and girls must spend hours each day collecting water (UNDP).
21. **Youth in rural Zimbabwe** face a related challenge, with few formal jobs, they rely on agriculture yet often do not control land or capital, and many young people have been leaving farming communities due to unviable incomes. Notably, “*age disparities in land allocation*” have been identified, meaning younger farmers struggle to obtain land to farm. Climate stress is further driving rural-to-urban migration among youth, as farming becomes less reliable. Engaging and empowering youth in climate-resilient agriculture and value chains is therefore critical to both create livelihood opportunities and harness their energy and innovation for adaptation. Zimbabwe has an extremely young population, about 68% of Zimbabweans are underage<sup>33</sup>. However, formal employment for young people is very scarce: UNICEF reports that roughly 84% of Zimbabwean youths are engaged only in the informal sector due to lack of formal jobs (i.e. youth unemployment is extremely high). Combined with scarce land access, this leaves many young people with little stake in agriculture sectors.
22. **Climate impacts on Agriculture and Water:** Agriculture plays an important significance of Zimbabwe’s rural economy and is inherently climate sensitive. The sector is already strained by decades of rainfall variability and episodic disasters<sup>34</sup>. Every major drought result in sharp drops in crop production, for instance, the severe drought of 2015/16 caused maize production to decline by over 50%<sup>35</sup>.
23. A World Bank assessment found that without adaptation, a “dry climate” scenario could cause a **2-5% annual reduction in agricultural GDP** in the coming decade, undermining overall economic growth<sup>7</sup>. Rainfed crop yields for staples like maize, sorghum and groundnuts show strong positive correlation with rainfall trends, indicating the outsized influence of weather on food production<sup>36</sup>.
24. In the vulnerable regions farmers report that *rainfall has become not only scarcer but more erratic*, with rains starting late or ending early, often punctuated by mid-season droughts that wither crops at critical growth stages<sup>37</sup>. Livestock production particularly cattle raising, is also impacted by increasing drought frequency, as rangeland pastures dry out and water points evaporate, leading to animal starvation and disease. For example, in southern provinces, **drought-related cattle mortality has increased in recent years**, with thousands of herd losses reported in 2019-2020 due to lack of forage and water. These climate-driven agricultural losses threaten rural incomes, food security and nutrition.
25. The **horticulture sub-sector is especially vulnerable** to climate change. Horticultural crops (fruits, vegetables) are high-value but often water-intensive and sensitive to temperature extremes<sup>38</sup>. Once a flourishing export industry earning over US\$100 million annually in the 1990s, Zimbabwe’s horticulture sector has seen output plummet to around US\$10 million in exports currently, due to a combination of factors including the collapse of commercial farms, inadequate investment, and increasing climate stresses<sup>39</sup>. Smallholder farmers struggle with unreliable rainfall and limited irrigation

<sup>32</sup> IFAD Design Report (2022) – *Horticulture Enterprise Enhancement Project (HEEP), Zimbabwe*.

<sup>33</sup> EU: [https://www.eeas.europa.eu/delegations/zimbabwe/call-applications-youth-between-age-18-30-years-be-member-team-europe-youth-sounding-board-ysb\\_en#:~:text=In%20Africa%2C%20three%20quarters%20of,them%20from%20realising%20their%20full](https://www.eeas.europa.eu/delegations/zimbabwe/call-applications-youth-between-age-18-30-years-be-member-team-europe-youth-sounding-board-ysb_en#:~:text=In%20Africa%2C%20three%20quarters%20of,them%20from%20realising%20their%20full)

<sup>34</sup> Mwadingeni, L., Mugandani, R., & Mafongoya, P. (2022). Risks of climate change on future water supply in smallholder irrigation schemes in Zimbabwe. *Water*, 14(11), 1682.

<sup>35</sup> Frischen, J., Meza, I., Rupp, D., Wietler, K., & Hagenlocher, M. (2020). Drought risk to agricultural systems in Zimbabwe: A spatial analysis of hazard, exposure, and vulnerability. *Sustainability*, 12(3), 752.

<sup>36</sup> World Bank & GFDRR (2019). *Zimbabwe Agriculture Sector Disaster Risk Assessment*.

<sup>37</sup> Ndlovu, E., Prinsloo, B., & Le Roux, T. (2020). Impact of climate change and variability on traditional farming systems: Farmers' perceptions from south-west, semi-arid Zimbabwe. *Jambá: Journal of Disaster Risk Studies*, 12(1), 1-19.

<sup>38</sup> Dube, N. (2021). Climate Change Risks in Horticultural Value Chains: A Case Study from Zimbabwe. In *Climate Change in Asia and Africa-Examining the Biophysical and Social Consequences, and Society's Responses*. IntechOpen.

<sup>39</sup> Government of Zimbabwe – Horticultural Recovery & Growth Plan (2020). (Cited in IFAD HEEP documents

infrastructure to support horticulture. Many communal irrigation schemes and community nutrition gardens depend on boreholes or small dams that are strained by lower rainfall and higher evaporation<sup>40</sup>.

26. **Water security is a major limiting factor:** Zimbabwe's Internal Renewable Water per capita has declined, and seasonal water scarcity in the south is acute. By September of drought years, many rivers and shallow wells run dry. Women and girls often walk long distances to fetch water, and competition for water for people, livestock and crops intensifies<sup>41 42</sup>. The existing irrigation assets are insufficient of an estimated 120,000 ha of land under irrigation nationally, only around 11% is in smallholder schemes<sup>9</sup>. Most communal farmers in Regions IV and V therefore rely on rainfed production or rudimentary watering of gardens, leaving them highly exposed to rainfall failure.
27. **Climate change is expected to worsen water stress**, with projections of 10-20% reduced runoff in key catchments by 2050<sup>4</sup>. This translates to smaller stream flows, lower reservoir levels, and faster depletion of groundwater in dry zones. In turn, that will further constrain crop production and even basic consumption needs. The cyclical droughts have already led to episodes of drinking water shortages and livestock dying of thirst in Matabeleland South and Masvingo<sup>43</sup>. In already water-stressed catchments, these trends are interacting with land degradation, deforestation and unsustainable drainage of wetlands to reduce baseflows, lower reservoir levels and accelerate depletion of shallow groundwater.
28. Where vegetative cover has been removed, intense rainfall episodes increasingly translate into rapid runoff, flash floods and high sediment loads, rather than slow infiltration and gradual release of water. This combination of reduced recharge, higher evaporation losses and sedimentation of small dams and canals amplifies drought risk for downstream users and further undermines the reliability of water supplies for horticulture and domestic use. Therefore, there is a **need to prioritize ecosystem-based and land restoration measures**, such as stabilization of gullies and riverbanks, protection and re-vegetation of riparian buffers, and agroforestry in upper catchments, as **climate adaptation interventions** that restore infiltration, groundwater recharge and flow regulation, thereby increasing the resilience of water and horticulture systems to future climate extremes.
29. **Policy context and baseline programs:** Zimbabwe has developed a comprehensive climate policy framework that recognizes the significant threats climate change poses to national development. The recently finalized National Adaptation Plan (2023), Nationally Determined Contribution (2021), Vision 2030, and National Development Strategy 1 all emphasize urgent adaptation in water and agriculture, particularly through irrigation development, climate-smart agriculture, early warning systems, and the empowerment of vulnerable groups such as women and youth. The forthcoming Climate Change Act and existing National Climate Policy (2017) further embed climate resilience in national planning, with Zimbabwe's participation in SADC initiatives ensuring regional coordination and early warning integration.
30. Zimbabwe has also strengthened strategic alignment between climate action and medium-term development planning. National development frameworks (including the emerging National Development Strategy 2 -NDS2 direction) position climate resilience as an enabling condition for macroeconomic stability, food security and inclusive growth, particularly in climate-sensitive rural economies<sup>44</sup>. In parallel, Zimbabwe's National Adaptation Plan (NAP) provides the backbone for prioritising adaptation actions, sequencing investments, and improving coordination across institutions and partners; the NAP sets out the governance arrangements, stakeholder engagement approach and technical workstreams needed to operationalise the plan at scale<sup>45</sup>.
31. **Baseline Programs and Strategic Fit:** Z-ADAPT builds on a strong baseline of complementary donor and government programs. This includes the GCF FP127<sup>46</sup> project in southern Zimbabwe (UNDP)<sup>47</sup>, IFAD's Smallholder Irrigation Revitalisation Programme<sup>48</sup>, WFP's rural resilience initiatives<sup>49</sup>, and AfDB's Agricultural Value Chain and Livelihoods

<sup>40</sup> Mwadzingeni, L., Mugandani, R., & Mafongoya, P. L. (2021). Assessing vulnerability to climate change in smallholder irrigation schemes of Zimbabwe. *Sustainability*, 13(18), 10023.

<sup>41</sup> Nzombe, A. M. (2021). *Climate Change and the Socio-Economic Livelihoods of Rural Women in Semi-Arid Region of Mbire District in Zimbabwe* (master's thesis, University of South Africa (South Africa)).

<sup>42</sup> Chigavazira, T. (2019). *The vulnerability of women to droughts in Mudzi District, Zimbabwe: The complexities of livelihood strategies and responses* (Doctoral dissertation, University of the Witwatersrand, Johannesburg (South Africa)).

<sup>43</sup> Simba, F. M., Chikodzi, D., & Murwendo, T. (2012). Climate change scenarios, perceptions and crop production: a case study of Semi-arid Masvingo Province in Zimbabwe. *Journal of Earth Science & Climatic Change*, 3(3), 1-7.

<sup>44</sup> Republic of Zimbabwe (Office of the President and Cabinet). Public address/statement referencing national development planning direction including NDS2.

<sup>45</sup> National Adaptation Plans – Zimbabwe (2024): <https://unfccc.int/documents/641981>

<sup>46</sup> GCF: <https://www.greenclimate.fund/project/fp127#:~:text=Southern%20Zimbabwe%20has%20experienced%20increasing,related%20livestock%20deaths>

<sup>47</sup> UNDP: <https://www.undp.org/zimbabwe/projects/building-climate-resilience-vulnerable-gcf>

<sup>48</sup> IFAD:

<https://www.ifad.org/en/w/projects/2000001233#:~:text=SIRP%20is%20designed%20to%20help,operating%20and%20maintaining%20irrigation%20schemes.>

<sup>49</sup> WFP 2022: <https://www.wfp.org/publications/zimbabwe-r4-rural-resilience-initiative-masvingo-and-rushinga-evaluation>

Enhancement Project (AVCLEP)<sup>50</sup>. These efforts have introduced climate-smart agriculture, rehabilitated water infrastructure, and piloted inclusive approaches in drought-prone districts. Z-ADAPT complements these initiatives by addressing critical adaptation gaps, such as water security, community-scale horticulture resilience, and climate risk financing, while ensuring coherence, scalability, and equitable access to adaptation benefits. Consistent with the IFAD-supported Horticulture Enterprise Enhancement Project (HEEP), Z-ADAPT's Component 3 will build on the planned participatory CIS with MSD (SMS, community radio and extension-based agro-advisories) and further strengthen it by incorporating data from new weather stations, community rain gauges and groundwater monitoring points established under Component 1.

32. **Problem Statement:** Zimbabwe is already experiencing severe climate impacts, with recurrent droughts, rising temperatures and intra seasonal rainfall variability causing direct losses to agricultural production, water availability and rural livelihoods, particularly in the semi-arid western and southern provinces. These regions are seeing a confluence of intensifying hazards including prolonged droughts, mid-season dry spells, heatwaves, and erratic rainfall patterns that are undermining rain-fed and irrigated agriculture, water security, and rural livelihoods. Local assessments show that droughts are the most frequently cited hazard by communities (reported by over 90% of respondents), followed by heatwaves (64%) and erratic rainfall patterns. Chiredzi in the Lowveld, for example, experiences peak temperatures of around 39 °C and evaporation rates of 10 -13 mm/day. Climate projections indicate that these stressors will worsen: the annual mean temperature in Zimbabwe's semi-arid zones is projected to increase by approximately 2.2 °C by mid-century under a high-emissions scenario, accompanied by reduced and more variable rainfall across all seasons.
33. These hazards are particularly acute in Natural Regions IV and V, where soils are degraded, adaptive capacity is low, and vulnerability is high. Smallholder farmers in these regions especially women and youth depend heavily on climate-sensitive livelihoods, yet lack access to resilient infrastructure, diversified income sources, and timely climate information. The adaptive capacity (AC) remains constrained by poor access to finance, insecure land tenure, and low coverage of resilient water infrastructure. Limited access to affordable, climate-resilient financial services (seasonal credit, input loans, savings and micro-insurance) prevents farmers from investing in irrigation, improved seed and diversification, making climate-resilient financial inclusion a critical adaptation gap that Z-ADAPT will address through Component 2.
34. Using the Intergovernmental Panel on Climate Change –(IPCC) 2014 Risk Factors<sup>51</sup> (exposure, vulnerability, and hazard), and the Development-Adaptation Continuum<sup>52</sup>. Key criteria included:
35. **Climate Vulnerability (Exposure and Hazard):** As per the IPCC 2014 Risk Factors, exposure to hazards including prolonged droughts, mid-season dry spells, heatwaves, and erratic rainfall patterns was a key determinant. Vulnerability mapping aligned with the Development-Adaptation Continuum, focusing on regions where adaptive capacity can be enhanced through targeted interventions such as climate resilient infrastructure and livelihood strategies.
36. **Socioeconomic Vulnerability (Vulnerability):** IPCC 2014 emphasizes vulnerability as a combination of susceptibility to harm and limited capacity to cope. The **four districts (Chiredzi, Masvingo, Matobo, and Mwenezi)** were recognized as having economically disadvantaged communities dependent on agriculture and rural livelihoods, making them particularly vulnerable to climate shocks. Gender considerations have been included, focusing on regions with active women-led cooperatives and identifying potential to empower women and youth through training and initiatives to build capacity.

### Project Targeting: Geographic Focus and Beneficiaries

37. The Z-ADAPT project directly targets the semi-arid districts of Masvingo Province (Chiredzi, Mwenezi, Masvingo), Matabeleland South Province (Matobo) and Midlands Province (Gokwe South / relevant Midland's target wards as applicable), in the south and west of Zimbabwe, corresponding to drought-prone **Natural Regions IV and V**, where climate risk, exposure and socio-economic vulnerability intersect most acutely. Within these districts, the project will prioritise wards and communities that: (i) have high concentrations of poor, food-insecure smallholder farmers; (ii) are already engaged or pre-identified under HEEP horticulture value chains; and (iii) exhibit high climate risk (recurrent agricultural droughts, crop failures, water scarcity) based on national risk profiles and local consultations.

<sup>50</sup> AfDB: <https://www.afdb.org/en/documents/zimbabwe-agricultural-value-chain-and-livelihoods-enhancement-project>

<sup>51</sup> Intergovernmental Panel on Climate Change (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability: [https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA_FINAL.pdf)

<sup>52</sup> Singh, H., & Bose, I. (2021). Artificial distinction between climate change adaptation and development restricts access to climate finance for developing countries.

38. Targeted **beneficiaries** include smallholder households engaged in or transitioning to horticulture, with a strong focus on **women- and youth-headed households and other vulnerable groups** identified through participatory vulnerability assessments. The primary beneficiaries are smallholder farmers, women, youth and communities already linked to HEEP-supported producer organisations and irrigation/garden sites. Transparent criteria, including poverty status, climate vulnerability, gender, age and existing engagement in horticultural value chains, will guide the selection of schemes, gardens and Farmer Field School groups, with explicit quotas (at least 50% women and 30% youth) in line with AF gender equity and inclusion principles for participation in project-supported committees, training and financial mechanisms.
39. **Gender Assessment:** Building on the national evidence base and the stakeholder consultations undertaken the preliminary gender assessment confirms that climate shocks and stresses (particularly recurrent droughts and flood events) have differentiated impacts on women, men, girls and boys in the targeted rural districts. Zimbabwe continues to face pronounced gender inequalities (Gender Inequality Index: 0.53 in 2021), and women's adaptive capacity is constrained by unequal access to productive assets, finance, extension services and decision-making. Women are highly represented in climate-sensitive rural livelihoods, about 57 percent of those whose livelihoods are linked to agriculture are women, and women account for around 81 percent of contributing family workers yet they remain under-represented among landholders, including under customary tenure<sup>53</sup>. The Global Gender Gap Index for Zimbabwe remains below parity (0.747 in 2025), reinforcing the need for deliberate gender-responsive targeting and empowerment measures<sup>54</sup>. Climate variability and resource scarcity amplify women's time poverty (unpaid care and domestic work), increase the distance and time spent collecting water and fuelwood, and heighten exposure to safety risks at and on routes to water points<sup>55</sup>. Qualitative evidence notes that women and girls may travel long distances to access water (including reported trips of up to 15 km) and queue for extended periods during drought, reducing time for income-generating activities and increasing exposure to harassment and violence<sup>56</sup>. Empirical evidence from rural Zimbabwe indicates that drought shocks are associated with increased water-point violence, and this effect is statistically significant for households where the water-fetcher is a woman or girl<sup>57</sup>. These pressures intersect with persistent risks of gender-based violence and early marriage; recent data indicate that 33.7 percent of women aged 20–24 were married before 18 (2019) and 18.2 percent of women aged 15-49 experienced physical and, or sexual intimate partner violence in the past 12 months (2019)<sup>58</sup>. Peer-reviewed evidence also points to high lifetime exposure to physical, emotional and sexual violence among Zimbabwean women, underscoring the importance of safe engagement modalities and referral pathways<sup>59</sup>. The Government has articulated commitments to gender-responsive climate action, including through the Zimbabwe Climate Change Gender Action Plan<sup>60</sup>.
40. To address these gaps, the project will adopt a gender-responsive targeting and implementation approach consistent with the Adaptation Fund Gender Policy and IFAD's gender and social inclusion commitments. At least 50 percent of direct beneficiaries will be women and girls and at least 30 percent will be youth; women's representation will be ensured in community institutions supported by the project (e.g., water user committees, farmer groups and local adaptation planning platforms), including in leadership roles. The project will undertake a detailed gender assessment during full proposal preparation to refine gender-differentiated vulnerability, needs and constraints, identify barriers to participation and benefit-sharing, and develop a costed Gender Action Plan. The Gender Action Plan will operationalize three strategic pathways: (i) strengthen women's and girls' voice, agency and leadership in local climate-risk governance and planning; (ii) improve women's access to, and control over, climate-resilient assets and services (climate information, water infrastructure, inputs, finance and market linkages), including labour-saving measures that reduce unpaid care burdens; and (iii) reduce gender-based violence and safety risks exacerbated by climate stress (e.g., safer water-point design/management, awareness, and referral linkages), with tailored support for female-headed households and other vulnerable groups. Practical measures will include: targeted outreach through women's groups and local leaders; facilitation by female extension workers where feasible; separate consultation spaces for women and girls when needed;

<sup>53</sup> World Bank (2023). Zimbabwe Gender Assessment. <https://documents1.worldbank.org/curated/en/099062823005513984/pdf/P179911-42c466aa-ebc8-4252-906b-a5f4a115199d.pdf>

<sup>54</sup> Statbase: Zimbabwe – Gender Gap Index (Global Gender Gap Index series). <https://statbase.org/data/zwe-gender-gap-index/>

<sup>55</sup> UN Economic Commission for Africa (ECA). Zimbabwe situation analysis report: gender statistics, gender monitoring and reporting systems (section on Gender, Environment and Climate Change). [https://www.uneca.org/eca-events/sites/default/files/resources/documents/gender-poverty-social-policy/workshop-gender-statistics-gender-monitoring-and-reporting-systems/zimbabwe\\_situation\\_analysis\\_report.pdf](https://www.uneca.org/eca-events/sites/default/files/resources/documents/gender-poverty-social-policy/workshop-gender-statistics-gender-monitoring-and-reporting-systems/zimbabwe_situation_analysis_report.pdf)

<sup>56</sup> Leadership Initiative for Climate Justice (LINCZ). Gendered impacts of climate change in Zimbabwe. <https://www.lincz.ca/hub/gendered-impacts-of-climate-change-in-zimbabwe>

<sup>57</sup> Chigusiwa, L., Kembo, G., and Kairiza, T. (2023). Drought and social conflict in rural Zimbabwe: Does the burden fall on women and girls? *Review of Development Economics*, 27(1), 178–197. <https://doi.org/10.1111/rode.12944>

<sup>58</sup> UN Women Data Hub – Zimbabwe country profile and key gender statistics. <https://data.unwomen.org/country/zimbabwe>

<sup>59</sup> Bengesai, A. V. & Chikhungu, L. (2024). Violence Against Women and Girls in Zimbabwe: A Review of a Decade of the Empirical Literature. *Trauma, Violence, & Abuse*, 26(4), 769–788. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12397546/>

<sup>60</sup> UNDP (2022). Zimbabwe Climate Change Gender Action Plan (publication page). <https://www.undp.org/zimbabwe/publications/zimbabwe-climate-change-gender-action-plan>

training schedules and venues that accommodate care responsibilities (including provision for childcare and safe transport as feasible); materials adapted for low literacy; and a project Grievance Redress Mechanism with safe, confidential channels and SEA/SH-sensitive procedures. Monitoring and evaluation will track sex- and age-disaggregated indicators, conduct periodic audits of project processes to identify exclusion risks, and apply corrective actions throughout implementation.

### Theory of Change:

41. Zimbabwe's semi-arid regions are increasingly exposed to recurrent droughts, higher temperatures, and erratic rainfall that together undermine water availability, land productivity and rural livelihoods. Degraded micro-catchments, high evaporation losses, siltation and fragile sandy soils reduce the ability of landscapes and water systems to buffer climate shocks. As water reliability declines, households face a tightening "risk trap": crop failure and livestock stress reduce income and food security; households cope through distress sales of assets, reduced dietary diversity, curtailed farm investment, and- in some contexts- temporary migration. These impacts are not evenly distributed: women and girls bear disproportionate time burdens in water collection and unpaid labour, while youth face limited viable opportunities in climate-stressed rural economies.
42. Smallholder horticulture producers and climate-exposed rural value-chain actors are therefore both highly vulnerable to climate shocks and pivotal to building resilience in these districts. The theory of change underpinning Z-ADAPT is that **if** (i) reliable, climate-resilient water access is restored and protected, (ii) farmers and producer groups adopt proven climate-smart horticulture practices and strengthen market linkages and basic financial capability, and (iii) climate information and early warning are operationalised for last-mile use and embedded in local institutions, **then** households can shift from reactive coping to risk-informed production and livelihood strategies reducing drought-related exposure and losses, stabilising food and income outcomes, and improving adaptive capacity over time. This is achieved through three reinforcing pathways:
43. **Water security and asset governance (Component 1; Outcomes 1.1 and 1.2):** a diversified "water security shield" (solar pumping with storage, sand/sub-surface storage, and strengthened O&M/governance) reduces drought and heat sensitivity. Targeted EbA protects recharge zones, reduces erosion/sedimentation and safeguards water assets—framed as **adaptation functions** (drought buffering, recharge protection, reduced climate-driven degradation).
44. **Climate-smart production, markets and financial capability (Component 2; Outcome 2.1):** Farmer Field Schools and seasonal coaching drive adoption of water-efficient, heat-stress-reducing practices/technologies in water-secure sites, while strengthening producer organisations for aggregation and market engagement. Financial literacy and climate-risk awareness are integrated as a social resilience benefit, especially for women and youth.
45. **Last-mile EWS/CIS and institutional capacity (Component 3; Outcome 3.1):** locally relevant advisories are disseminated through accessible channels, users are trained to convert information into early actions, and feedback loops improve service quality. Meteorological Services Department (MSD), Department of Agricultural Technical and Extension Services, Rural District Councils (RDCs) and the responsible ministry strengthen risk-informed planning and services, supported by safeguards, gender actions, learning and M&E.

**Key assumptions:** Feasible site selection and sustainable abstraction; inclusive governance prevents elite capture; extension/advisory capacity is adequate; and safeguards/GRM are consistently applied to avoid harm and ensure equitable benefits.

### Project/Programme Objectives:

46. The project addresses climatic change impacts, in particular drought, water scarcity, and rising temperatures, in the project area or targeted districts. It addresses climate extremes in Zimbabwe's most vulnerable semi-arid districts by enhancing resilience in agriculture and water management.
47. Across Components 2 and 3, proposed livelihood diversification and institutional capacity-building measures are therefore framed as climate adaptation actions that directly respond to the projected increase in temperature, declining and more variable rainfall, and more frequent agricultural droughts in the project districts, rather than as business-as-usual rural development. These gender and age-differentiated constraints directly shape the project design: Component 1 prioritizes water and horticulture infrastructure that reduces women's time burden and improves safe water access; Component 2 promotes diversified, climate-resilient value chains and technologies where women and youth already play key roles; and Component 3 strengthens women's and youth's voice and leadership in local climate-risk governance.

48. The project aligns with national adaptation priorities (Vision 2030<sup>61</sup>, NDC 2021, NAP 2023) that highlight climate-smart agriculture, irrigation and water harvesting, early warning systems, and the empowerment of women and youth<sup>62</sup>. It complements but not duplicates existing projects like IFAD's Development Smart Innovation through Research in Agriculture (DeSIRA)<sup>63</sup> and HEEP, ensuring distinct value improvement. There are four objectives:

**Objective 1: Increase resilience of smallholder water and horticulture systems** by expanding solar-powered irrigation, rainwater harvesting, and sustainable water management in semi-arid zones, targeting water-stressed, drought-prone communities.

**Objective 2: Enhance climate-smart horticultural production, diversification, and access to improved inputs and services** through strengthened community savings practices, financial literacy, and climate-risk-informed business planning).

**Objective 3: Improve climate risk governance and access to climate information** by equipping communities with localized early warning services, training on data use, and integration with national systems. Early warning services will be delivered through Zimbabwe's MSD in collaboration with Department of Agricultural Technical and Extension Services, RDCs, and relevant line ministries, with community structures supporting dissemination and feedback.

**Objective 4: Strengthen adaptive capacity and equity** through gender responsive Ecosystem-based Adaptation (EbA) practices, youth inclusion, and capacity building of producer groups and institutions for long-term resilience.

Each objective targets the risks outlined in Part I.A (drought, crop failure, water stress) and aligns with Zimbabwe's adaptation objectives (e.g., water harvesting to alleviate drought, climate-smart agriculture). Complementing HEEP, a particular focus will be directed towards smallholder horticulture value chains and inclusive participation, targeting for at least 50% women and 30% youth involvement.

## Project Components and Financing:

**Table 2: Projects Components, Outputs Outcomes and Budgets**

Project Components	Expected Outcomes	Expected Concrete Outputs	Amount (US\$)
Component 1. Climate-proofed water supply and irrigation for climate-resilient horticulture in targeted districts	Outcome 1.1: Reliable, climate-proofed water access for vulnerable households and community production systems in the project area, reducing drought-related exposure and losses.	<b>Output 1.1.1</b> <b>Solar-Powered Irrigation Systems (SPIS):</b> 200 (SPIS) installed/upgraded with 10,000 – 20,000 litre storage per site, serving 5,000 households (average 25 HH per SPIS) and supporting year-round horticulture.	3,600,000
		<b>Output 1.1.2</b> <b>Climate-resilient water storage:</b> 35 climate-resilient water storage structures (e.g., 25 sand dams + 10 sub-surface dams) constructed/rehabilitated in priority seasonal rivers to buffer dry-season water availability for horticulture/livestock and protected abstraction.	1,600,000
		<b>Output 1.1.3</b> <b>Water Governance; O&amp;M:</b> 200 water user, water point committees established, strengthened (aligned to SPIS schemes + water storage sites), with 50% women and 30% youth, including O&M systems and basic asset management.	380,000
	Outcome 1.2: Ecosystem services and local water governance strengthened to sustain climate-resilient infrastructure and reduce exposure of assets to climate extremes.	<b>Output 1.2.1 :</b> <b>Ecosystem-based Adaptation (EbA) for micro-catchment</b> rehabilitation implemented (fenced recharge zones, gully stabilisation with vetiver/native species, agroforestry belts and windbreaks) and Water Point/Water User Committees strengthened with O&M and groundwater monitoring plans, including simple reporting of groundwater levels and water availability into the CIS/information system	320,000

<sup>61</sup> Vision 2030 : <https://zimembassydc.org/wp-content/uploads/2023/12/Zimbabwe-Vision-2030.pdf>

<sup>62</sup> Zimbabwe Revised Nationally Determined Contribution (2021): <https://unfccc.int/sites/default/files/NDC/2022-06/Zimbabwe%20Revised%20Nationally%20Determined%20Contribution%202021%20Final.pdf#:~:text=on%20four%20high,resilient%20and%20sustainable%20water%20resources>

<sup>63</sup> DeSIRA: A multi-country initiative aiming to strengthen agricultural research and innovation to support the agroecological transition within food systems in Sub-Saharan Africa: [Development Smart Innovation through Research in Agriculture](#)

<b>Total Component 1</b>			<b>5,900,000</b>
<b>Component 2.</b> Climate-smart horticulture production, diversification & resilient livelihoods	<b>Outcome 2.1:</b> Enhanced adaptive capacity and livelihood resilience of vulnerable households through climate-resilient practices, technologies and inclusive market linkages	<b>Output 2.1.1:</b> Adaptive capacity strengthened through Farmer Field Schools (FFS) and seasonal training/coaching (150 FFS; 7,500 individual farmers trained, 50% women; 30% youth)	1,200,000
		<b>Output 2.1.2:</b> Climate-resilient production technologies deployed and demonstrated in water-secure sites linked to Component 1 (e.g., micro-irrigation efficiency packages, shade-net/low tunnels, demonstration plots for water-saving/heat-stress reduction practices)	1,550,000
		<b>Output 2.1.3:</b> Producer organisations strengthened (approx. 30-40) on governance, aggregation and market engagement; linkages facilitated to existing off-takers, 4P arrangements and existing finance, insurance services (financial literacy + matchmaking; no project-managed revolving fund)	450,000
<b>Total Component 2</b>			<b>3,200,000</b>
<b>Component 3.</b> Climate information, early warning & institutional capacity (incl. safeguards, gender, learning/M&E)	<b>Outcome 3.1:</b> Operational last-mile early warning and climate advisory services in targeted wards and strengthened institutions for sustained risk-informed planning and response	<b>Output 3.1.1:</b> Early warning and climate advisory services strengthened for last-mile delivery in targeted wards (locally relevant advisories, dissemination pathways, user training and community feedback loops)	450,000
		<b>Output 3.1.2:</b> Institutional capacity strengthened across MSD, Department of Agricultural Technical and Extension Services, Rural District Councils and Ministry responsible for Environment, Climate to integrate climate risk information into planning and services (inclusive access for women/youth/vulnerable groups)	250,000
		<b>Output 3.1.3.</b> Cross-cutting safeguards, gender, learning and M&E delivered (AF ESP screening and FP-stage ESMP preparation; Gender Assessment and budgeted Gender Action Plan; learning and results monitoring)	300,373
<b>Total Component 3</b>			<b>1,000,373</b>
<b>Project Subtotal (Components 1–3)</b>			<b>10,100,373</b>
Project/Programme Execution cost (8.7%)			959,535
<b>Total Project/Programme Cost</b>			<b>11,059,908</b>
Project Cycle Management Fee charged by the Implementing Entity (8.5%)			940,092
<b>Amount of Financing Requested</b>			<b>12,000,000</b>

**Projected Calendar:**  
**Table 3: Project Milestones**

Milestones	Expected Dates
Start of Project/Programme Implementation	Q2 2028
Mid-term Review (if planned)	Q4 2030
Project/Programme Closing	Q4 2032
Terminal Evaluation	Q2 2033

- 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.**

### **Project Overview and Climate Vulnerability Context**

49. The project focuses on the semi-arid regions of Natural Regions IV and V in **southern** and **western Zimbabwe**, where climate change is significantly affecting the hydrological system and impacting smallholder livelihoods. A prolonged **drying trend**, characterized by a decrease in rainfall which is projected to decrease further by mid-century, is further aggravated by a projected **rise in temperatures** of around 2.2°C by 2060, which will intensify evapotranspiration and shorten the growing season. These rises result in increased frequencies of **droughts**, mid-season dry seasons, and flash floods, which significantly impact water supply, agricultural productivity, rangeland productivity, and ecosystem resilience.

The climate risk profile of the target districts is characterized by:

- **High Hazard (H):** increasing frequency and intensity of droughts, heatwaves above 35°C, erratic onset and cessation of rains, and localized flash floods that damage infrastructure and cause soil erosion.
  - **High Exposure (E):** critical water points, irrigation schemes, and community gardens are often located in dry zones; settlements and livelihoods cluster around fragile, shallow groundwater sources and small, unlined earthen dams.
  - **High Sensitivity (S):** farming systems are dominated by low-input, rain-fed maize monocropping on sandy soils with low water-holding capacity; less than 5% of cultivated land is irrigated; poverty levels are high, and households have limited savings or assets to buffer shocks.
  - **Low Adaptive Capacity (AC):** rural households have poor access to irrigation, climate-resilient technologies, inputs, credit, and markets; local institutions have limited capacity to integrate climate information into planning; and women and youth face structural barriers in land tenure, decision-making, and access to services and finance.
50. **Climate change is increasing the already existing adaptation gap:** the current water and agricultural systems were built for a climate that no longer exists. Rising evaporation rates and a lot of runoffs make simple clay dams, shallow wells, and open canals not enough. In many seasons, traditional rain-fed maize systems are no longer useful. Climate risk has not yet been properly integrated into decision-making by local institutions and information systems.

The programme is structured into three components:

- **Component 1: Climate-proofed water supply and irrigation for climate-resilient horticulture in targeted districts**
  - **Component 2: Climate-smart horticulture production, diversification & resilient livelihoods**
  - **Component 3: Climate information, early warning & institutional capacity (incl. safeguards, gender, learning/M&E)**
51. **Alignment with the Adaptation Fund Results Framework:** Z-ADAPT is fully aligned with the Adaptation Fund Results Framework (AF-RMF). Based on the refined results structure and the updated outcomes/outputs and budgets, the project's **primary contributions** are to **AF Outcome 4, Outcome 6 and Outcome 3**, with **secondary contributions** to **AF Outcome 5** and other outcomes as relevant.

Specifically, Z-ADAPT contributes at outcome level to:

- **AF Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level (primary)** - through strengthened last-mile climate information and early warning services, user training and feedback mechanisms that convert advisories into early actions and strengthened institutional capacity for risk-informed planning and service delivery.
- **AF Outcome 4: Increased adaptive capacity within relevant sectors and development services (primary)** - through climate-proofed water supply and irrigation assets (SPIS with storage, climate-resilient sand/sub-surface dams) and strengthened O&M/governance systems that keep services functioning under drought and heat stress.
- **AF Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas (primary)** - through Farmer Field Schools and seasonal coaching, deployment/demonstration of climate-resilient horticulture and water-efficient technologies in water-secure sites, and strengthened producer organisations and inclusive market linkages (including facilitation to existing finance/insurance services, without establishing a project-managed revolving fund).

In addition, the project makes **secondary contributions** to:

- **AF Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses (secondary)** - through strengthened capacities of MSD, Department of Agricultural Technical and Extension Services, Rural District Councils and local governance structures to integrate climate risk information into planning, O&M and services, including inclusive governance arrangements for water assets.
- **AF Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress(secondary)** - through targeted Ecosystem-based Adaptation (EbA) and micro-catchment rehabilitation measures that protect priority water assets and reduce exposure of infrastructure and production systems to erosion, sedimentation and drought impacts.

## 52. **Component 1 – Climate-proofed water supply and irrigation for climate-resilient horticulture in targeted districts (USD 5.9 million)**

**Rationale and adaptation gap:** In the semi-arid southern and western regions, **water availability** and **reliability** are the primary barriers to adaptation for smallholders. Decreasing and increasingly erratic precipitation, along with high temperatures, are reducing effective surface water flows and groundwater replenishment, while increasing evapotranspiration losses. The current rural water and irrigation infrastructure, including shallow wells, unlined conveyance systems, small earthen dams, and boreholes lacking sufficient storage and management, is unsuitable for increasingly hotter and drier conditions. It is prone to rapid seasonal interruptions, significant seepage and evaporation losses, siltation, and damage from flash floods, while offering minimal resilience during extended dry periods.

Component 1 addresses this adaptation gap by climate-proofing rural water supply and irrigation through a streamlined “water security shield” that combines: (i) reliable solar-powered abstraction with on-site storage buffers; (ii) climate-resilient sub-surface storage in seasonal sandy rivers; and (iii) strengthened local water governance and micro-catchment rehabilitation to sustain water yields, protect assets, and ensure equitable access during droughts. Activities are consolidated to prioritize high-impact, scalable measures and avoid dispersed pilots; site lists, final designs, and Bills of Quantities will be confirmed at Full Proposal stage based on hydrological and social screening.

## 53. **Outcome 1.1: Reliable, climate-resilient water supply for horticulture and (where feasible) domestic use established in drought-prone communities of vulnerable districts.**

### 54. **Output 1.1.1: Solar-powered irrigation systems (SPIS)** with storage installed, upgraded and operational (approximately 200 SPIS sites with 10,000-20,000 storages per site), serving 5,000 households and supporting year-round horticulture (USD 3,600,000).

This output ensures reliable, low-cost water access for community gardens and smallholder production by installing/upgrading approximately **200 SPIS sites**, each integrated with **10,000- 20,000 liters** of elevated storage (for short-term buffering) to provide short term buffering and operational flexibility. The output is designed to serve around **5,000 households** (average **25 households per SPIS site**) and enable year-round horticulture in drought-prone wards where water access constraints and increasing climate variability are driving high livelihood sensitivity. SPIS sites will be prioritised in locations where horticulture potential is demonstrably viable and where solar pumping can sustainably supplement existing water resources. **Indicative irrigated area per household** supported through these shared schemes/gardens is expected to be in the range of **0.05–0.15 ha per household** (*site-specific cropping patterns, water availability and scheme design to be confirmed at Full Proposal stage*).

#### **Activity 1.1.1.1: Site selection and Climate-resilient SPIS design.**

- Undertake **hydro-geological screening** at each proposed SPIS site to confirm sustainable abstraction and climate-robust yields (including dry-season performance assumptions).
- Apply selection criteria that prioritize: (i) drought exposure and high livelihood dependence on rain-fed production; (ii) existing or planned community garden/irrigation scheme potential; (iii) inclusion potential for women/youth and vulnerable households; and (iv) feasibility of community management, O&M.
- Prepare standard SPIS technical specifications (pump sizing, head, pipework, tank sizing, and safety measures) that are fit-for-purpose under hotter conditions and more frequent dry spells.

#### **Activity 1.1.1.2: Procurement, installation and commissioning (SPIS + storage)**

- Procure and install **200 solar pumping systems** with **10,000–20,000** elevated storage at each site, including site works, mounting structures, basic distribution to gardens, and protection measures against damage/theft.
- Commission systems with performance testing and handover protocols to user committees, including basic water safety arrangements where domestic access is feasible.

#### **Activity 1.1.1.3: Operation and maintenance systems and skills**

- Train at least 400 local technicians and caretakers (minimum 40% women, 30% youth) in basic SPIS maintenance and troubleshooting.
- Establish practical O&M arrangements (tool kits, simple maintenance schedules, spare-parts planning) and community-approved cost-sharing approaches for minor repairs.

**Adaptation logic (drought/heat focus):** SPIS investments reduces climate vulnerability by decoupling irrigation access from increasingly erratic rainfall and reducing exposure to fuel price volatility associated with diesel pumping. The integration of on-site storage provides immediate buffering during overcast periods and short supply disruptions and supports more stable water delivery during peak heat stress, thereby reducing the likelihood of crop failure and income losses in drought-prone hot conditions. Overall, Output 1.1 enables a scalable and maintainable pathway to climate-resilient horticulture by combining sustainable abstraction, buffering capacity and local O&M capability in the most climate-vulnerable wards.

#### **55. Output 1.1.2: Climate-resilient water storage increased through sand dams/sub-surface dams (streamlined: 35 structures total), buffering dry-season water availability for horticulture/livestock and protected abstraction where feasible (USD 1,600,000).**

This output increases reliable dry-season water availability by constructing approximately **35** climate-resilient water storage structures on priority seasonal sandy rivers (indicatively a mix of **sand dams** and **sub-surface dams**; final mix confirmed at Full Proposal stage). These structures function primarily as **drought-buffering adaptation assets** by enhancing shallow groundwater storage in the riverbed, alluvial sediments, reducing evaporation losses compared to open surface storage, and sustaining localized baseflow/soil moisture during prolonged dry spells. Sites will be selected through hydrological screening (sediment characteristics, river geometry, expected recharge and storage performance under projected rainfall variability) and social screening (equitable access, customary water rights, downstream users, and community willingness/capacity to manage the asset). Designs will follow climate-resilient standards and include, as required, spillways, abutment/bank protection, scour/erosion control, and safe access points to reduce failure risk under flash floods and high-flow events. Construction will be implemented through qualified contractors with community oversight and accompanied by community-validated use rules (including priority uses during drought), basic monitoring arrangements, and O&M responsibilities linked to local committees.

**Use of water (domestic vs productive):** The primary use is for productive water security (community horticulture and livestock watering) because this is the core adaptation pathway for stabilizing food and income in drought-prone wards. Where feasible and appropriate, designs will also incorporate protected abstraction arrangements for domestic use (e.g., lined collection points and/or handpumps) consistent with local water safety requirements and community management plans.

**Indicative storage capacity:** Storage varies by riverbed flow and sediments. As an indicative planning range at this stage, structures are expected to store 1,000-5,000 m<sup>3</sup> of water per structure (combined sub-surface storage within the sand/alluvial matrix and associated accessible storage), with exact capacities to be confirmed through Full Proposal-stage hydrological assessments and engineering design. **Cost:** *With USD 1.6 million for 35 structures, the indicative average is USD 45,700 per structure, inclusive of site screening/design, civil works and protection works, basic abstraction arrangements where applicable, community mobilization, and O&M set-up.*

#### **Activity 1.1.2.1: Site selection, safeguards screening, and climate resilient technical design.**

- Identify approximately 35 priority sites for construction (indicatively 25 sand dams and 10 sub-surface dams), based on: hydrology and sediment suitability, drought exposure, beneficiary demand, environmental and social sensitivity, and feasibility/cost. *A typical sand/sub-surface dam in a seasonal sandy riverbed of this scale can be expected to store approximately 1,000-5,000 m<sup>3</sup> of water within the sand/alluvial matrix (sub-surface storage), depending on riverbed width/depth, sediment characteristics and local recharge/flow conditions. The site designs will specify an estimated storage volume (m<sup>3</sup>) for each structure, based on surveyed cross-sections and assumed effective porosity of the sand body, and will define the reliable dry season yield for planned uses (horticulture/livestock, and protected domestic abstraction where feasible).*

- Prepare concept designs and indicative storage estimates for shortlisted sites to maximise sub-surface storage (minimising evaporation/open water exposure), including protection work's needs (spillways, bank stabilisation) based on climate risk.
- Undertake inclusive community consultations during site confirmation through local authorities and representative groups (ensuring women/youth participation) to validate needs and governance arrangements.

**Activity 1.1.2.2: Construction and community participation.**

- Procure qualified contractors to construct sand/sub-surface dams using reinforced masonry/concrete and agreed technical standards, with engineer supervision and quality assurance (materials testing, compaction, spillway/overflow design, and safety).
- Target at least 3–5 structures per micro-catchment, benefiting 8,000–10,000 people downstream.

**Activity 1.1.2.3: Operation, water safety, equitable access and monitoring arrangements.**

- Establish or strengthen site-level governance arrangements (Water User/Water Point Committees or sub-committees) with 50% women and 30% youth, including simple water allocation rules for drought periods and grievance/feedback mechanisms.
- Introduce basic water safety and public health measures where abstraction is planned (protected collection points where relevant; hygiene messaging), and agree protocols to avoid contamination while preserving natural filtration benefits.
- Implement simple monitoring indicators (e.g., sand level/structure integrity, groundwater response in adjacent wells, water availability logs) and integrate reporting into local systems (Department of Agricultural Technical and Extension Services, RDC) and the broader climate information service strengthened under Component 3.

**56. Output 1.1.3: Water Governance and O&M: 200 water user, water point committees established, strengthened (aligned to SPIS schemes + water storage sites), with 50% women and 30% youth, including O&M systems and basic asset management**

This output ensures that the water infrastructure financed under Component 1 (SPIS with storage and sand and sub-surface storage structures) remains functional, safe and equitably managed over time by strengthening local governance and operations and maintenance (O&M) systems. The project will establish and strengthen approximately 200 Water User and Water Point Committees linked to SPIS sites and water storage structures, meeting inclusion targets (at least 50% women and 30% youth) and applying transparent, accountable management arrangements. Committees will be supported to operationalise clear governance routines (roles and responsibilities, meeting schedules, record-keeping and transparent decision-making), and practical asset management systems that reduce downtime and protect investments under climate extremes. This includes preventive maintenance schedules, minor repair planning and cost-sharing mechanisms, procedures to manage theft and vandalism risks, and basic water safety/hygiene practices where domestic abstraction is feasible. Committees will also adopt equitable water allocation rules for drought periods (including explicit provisions for the most vulnerable users), maintain coordination with agencies and advisories for drought and heat-risk management, and link to the project's GRM for complaints, feedback and conflict resolution reducing the likelihood of exclusion and water-related disputes during scarcity.

**Activity 1.1.3.1: Establishment/strengthening of inclusive water governance structures:** Establish or strengthen site-level governance arrangements (Water User/Water Point Committees or sub-committees) with 50% women and 30% youth, including simple water allocation rules for drought periods and grievance/feedback mechanisms.

- Identify committee coverage and confirm the appropriate management unit for each asset (SPIS site and water storage structure), including use of sub-committees/clustered committees where multiple nearby assets share the same user group.
- Establish and/or strengthen approximately 200 committees, ensuring minimum inclusion targets (50% women; 30% youth) and representation of vulnerable households, with transparent selection/rotation arrangements and leadership opportunities for women and youth.
- Provide governance coaching and simple management tools (committee by-laws/charters, meeting templates, record-keeping and transparency practices) aligned with local authorities and relevant line agencies.

**Activity 1.1.3.2: Practical O&M systems, skills and minor repair readiness:**

- Develop and roll out site-level preventive maintenance schedules and functionality checklists for SPIS and storage assets, including routines for cleaning, inspection, and basic troubleshooting.

- Train committee members and caretakers/technicians in basic O&M and asset protection (including safe operating procedures) and establish practical arrangements for minor repairs (toolkits where relevant, spare-parts planning and access pathways, and community-approved cost-sharing for minor maintenance).
- Put in place procedures to reduce downtime and climate-related degradation (e.g., rapid response steps after extreme rainfall/flash floods, inspection protocols for erosion/scour, and protection measures against vandalism/theft where required).

**Activity 1.1.3.3: Equitable allocation, water safety, monitoring, and accountability (incl. GRM linkages)**

- Facilitate development of equitable water allocation rules for dry-season and drought periods (priority uses, rationing triggers, conflict resolution steps), explicitly reflecting the needs of women, youth and vulnerable households.
- Where domestic abstraction is feasible, apply basic water safety arrangements (protected access points where relevant, hygiene messaging, contamination prevention practices) consistent with community management plans.
- Establish simple monitoring and reporting routines (asset functionality logs; seasonal water availability notes; rapid reporting of breakdowns and risks), with linkages to systems and the climate information service (Component 3) where relevant.
- Operationalise accountability through the project GRM and feedback mechanisms (complaints intake, response timelines, escalation pathways), ensuring that exclusion/elite capture and GBV/SEA/SH concerns can be safely reported and addressed.

**Adaptation logic (sustained service delivery under drought/heat):** Strengthened local governance and O&M reduce climate vulnerability by improving the reliability and uptime of water assets during drought and heat stress, preventing rapid degradation and ensuring that scarce water resources are managed transparently and equitably. By institutionalising allocation rules, maintenance routines and accountability mechanisms, the project reduces conflict and exclusion during scarcity and safeguards the long-term adaptation benefits of Component 1 investments.

**57. Outcome 1.2: Ecosystem services and local water governance strengthened to sustain climate-resilient infrastructure and reduce exposure of assets to climate extremes.**

Outcome 1.2: Ensures that the “grey” assets financed under Outcome 1.1 (SPIS sites and sand/sub-surface storage structures) are sustained by targeted “green” and governance measures that reduce climate risks that typically undermine water infrastructure in semi-arid settings- namely declining recharge, erosion and sedimentation, and inequitable access during drought. All measures under this outcome are adaptation actions (drought buffering, recharge-zone protection, reduced erosion/siltation and protection of water assets).

**58. Output 1.2.1: Ecosystem-based Adaptation (EbA) for micro-catchment rehabilitation implemented (fenced recharge zones, gully stabilization with vetiver/native species, agroforestry belts and windbreaks) and Water Point/Water User Committees strengthened with O&M and groundwater monitoring plans, including simple reporting of groundwater levels and water availability into the CIS/information system (USD 320,000).**

This output focuses on **micro-catchment protection and local governance** around the priority water assets, to improve dry-season reliability and protect investments from climate extremes (prolonged droughts and episodic intense rainfall events). This output safeguards water yields and protects infrastructure by implementing EbA-based micro-catchment rehabilitation measures linked to SPIS sites and sub-surface storage structures, targeting at least 5,000 ha across priority micro-catchments. Interventions will be selected through participatory micro-catchment planning and will include, as appropriate: recharge zone protection, gully stabilisation and erosion control using vetiver/native species, agroforestry belts and windbreaks, vegetative buffer strips, and complementary soil and water conservation measures to reduce runoff velocity and sediment transport. Maintenance responsibilities will be agreed with local institutions and committees, and simple monitoring (e.g., visible erosion, vegetative cover, functionality checks) will be embedded in routine O&M to sustain performance.

**Activity 1.2.1.1: Targeted micro-catchment rehabilitation (EbA) to protect recharge and reduce asset exposure**

- Implement EbA measures on at least 5,000 ha of priority micro-catchments, directly linked to SPIS and sand/sub-surface storage sites including:
- Gully stabilisation using vetiver and native grasses to reduce erosion and sediment loads.

- Protection and re-vegetation of riparian buffers and recharge zones, including fencing/controlled access where needed) to safeguard infiltration and reduce contamination.
- Agroforestry belts and windbreaks around community gardens and reservoirs, to reduce heat/wind stress and protect infrastructure from erosion/sand deposition.
- Prioritize EbA interventions where catchment degradation is measurably increasing drought sensitivity (rapid runoff, declining infiltration, sedimentation of structures, and damage risks under intense rainfall).

#### **Activity 1.2.1.2: Strengthening local water governance structures aligned to the scale of assets**

- **Align committee coverage to the infrastructure footprint** financed under Component 1 by strengthening/establishing governance arrangements for:
  - 200 site-level Water User/Water Point Committees aligned to the 200 SPIS sites (where committees exist, they will be formally strengthened; where absent, they will be established at FP stage once sites/beneficiaries are confirmed); and
  - Governance arrangements for 35 sand/sub-surface dam sites, either as site-level sub-committees under the nearest SPIS/community water committee or as clustered committees where 2-3 nearby assets share the same user group and management structure
- Facilitate development of simple water allocation rules, drought contingency plans and equitable access arrangements, reflecting the needs of women, youth and vulnerable households.

#### **Activity 1.2.1.3: Community-based groundwater/water availability monitoring and reporting into CIS.**

- Equip committees with simple tools (e.g. dip meters, logbooks) to monitor groundwater levels in 50-70 priority boreholes and track functionality of SPIS and dams. Basic water availability indicators at SPIS and storage sites (functionality and seasonal performance).
- Establish a simple reporting workflow so that core indicators (groundwater level trends, water availability constraints, and asset functionality) are periodically shared with Department of Agricultural Technical and Extension Services /RDCs and fed into the climate information service / CIS supported under Component 3.

**Adaptation logic (drought/heat focus):** Under drier and hotter conditions, maintaining shallow groundwater, baseflows and dry-season water availability depends on protecting recharge zones and reducing erosion/sedimentation that damages and degrades water infrastructure. Targeted EbA interventions strengthen drought buffering by improving infiltration and reducing siltation, while inclusive governance and basic monitoring ensure scarce water is managed equitably during drought periods and that AF-financed assets remain functional, maintained and climate-resilient over time.

### **59. Component 2 –Climate-smart horticulture production, diversification & resilient livelihoods (USD 3.20 million)**

**Rationale and adaptation gap:** In the target districts of Natural Regions IV and V, farming systems are highly **sensitive to drought, heat and rainfall variability**. Rain-fed maize monocropping dominates, yet maize is particularly vulnerable to heat stress above 32–35°C and to mid-season dry spells that frequently occur during flowering and grain filling. Sandy soils with low organic matter exacerbate water stress by holding little moisture, while limited access to water-efficient irrigation practices, protected horticulture, and climate-smart agronomy constrains households’ ability to translate water access into stable production and income. Even where water becomes available (through Component 1), farmers often lack the skills and practical technologies needed to maximise “crop per drop” and manage heat and dry-spell risks across the production cycle. Livelihoods also remain concentrated in a few climate-exposed activities, leaving households with limited buffers when droughts occur.

Component 2 addresses this adaptation gap by pairing the climate-resilient water investments under Component 1 with field-level adoption of climate-smart horticulture practices and technologies, and with inclusive producer organisation strengthening and market linkages that enable scaling and sustained uptake. The component facilitates access to existing finance, savings and micro-insurance options through partnerships and financial literacy, reducing fiduciary and policy risks while maintaining adaptation impact.

### **60. Outcome 2.1: Enhanced adaptive capacity and livelihood resilience of vulnerable households through climate-resilient production practices, technologies and inclusive market linkages.**

This output establishes a structured learning and advisory platform to ensure households adopt drought- and heat-resilient practices and can use climate information in farm decisions. Training is organised through approximately

150 FFS, reaching about 7,500 individual farmers (with targets of 50% women and 30% youth) across the target wards.

**61. Output 2.1.1: Adaptive capacity strengthened through Farmer Field Schools (FFS) and seasonal coaching (150 FFS; 7,500 individual farmers trained; 50% women; 30% youth) (USD 1,200,000)**

**Description:** This output strengthens adaptive capacity and accelerates adoption of climate-resilient practices through approximately 150 Farmer Field Schools (FFS) reaching 7,500 farmers (minimum 50% women; 30% youth) in the target districts. FFS curricula will be aligned to the production calendar and climate risks and will deliver hands-on learning on: climate-resilient horticulture and crop diversification; water-efficient irrigation scheduling linked to SPIS availability; soil moisture conservation and soil health (mulching, composting, organic matter improvement); heat and drought risk management (variety selection, planting windows, protective agronomy); integrated pest management and safe agrochemical use; and post-harvest handling and quality. The approach will prioritise demonstration and peer learning and will integrate climate advisories (Output 3.1) to support risk-informed decisions.

**Activity 2.1.1.1: Design and rollout of drought/heat focused FFS curricula**

- Develop and apply FFS modules covering water productivity and irrigation scheduling, heat stress management, soil moisture conservation, climate-risk-informed cropping calendars, pest/disease management under warmer conditions, and post-harvest loss reduction.
- Integrate practical sessions linked to Component 1 sites (schemes/gardens) to ensure learning is action oriented.

**Activity 2.1.1.2: Training on irrigation scheduling and maintenance under drought. Delivery training/ coaching and farmer-to-farmer learning**

- Facilitate FFS sessions across seasons, including demonstration-based learning and farmer exchange visits within/across districts.
- Provide structured coaching for women and youth groups to support leadership and adoption.

**Activity 2.1.1.3: Climate information uptake at farmer level (linked to Component 3)**

- Train FFS participants to interpret local advisories (e.g., dry-spell alerts, heat advisories) and apply them to planting, irrigation, and marketing decisions.
- Establish feedback loops so farmer experiences inform advisory refinement.

**Adaptation logic:** Knowledge and decision-support reduce vulnerability by improving timing and practices under erratic rainfall, and by enabling households to translate climate-resilient water access into stable yields and incomes.

**62. Output 2.1.2: Climate-resilient production technologies deployed and demonstrated in water-secure sites linked to Component 1 (micro-irrigation efficiency packages; shade-net/low tunnels; demonstration plots) (USD 1,550,000)**

**Description:** This output demonstrates climate-resilient production technologies in water-secure sites linked to Component 1, including installation of micro-irrigation efficiency packages and establishment of protective cultivation structures (e.g., shade nets/low tunnels; indicative 40-60 ha) to reduce heat stress and water losses, supported by approximately 50 demonstration and learning plots that bundle the technologies with improved agronomic practices. Technology selection will be site-appropriate and guided by water availability, crop choice and affordability, and will include training on correct installation, use, and maintenance to ensure performance and reduce failure rates. Demonstrations will be used to validate yield and water-saving benefits under local conditions and accelerate replication through FFS and producer organisations.

**Activity 2.1.2.1: Micro-irrigation efficiency packages for targeted households**

- Provide and install micro-irrigation efficiency packages for approximately 1,000-1,500 households linked to Component 1 schemes
- Prioritize women-headed households and youth groups to reduce labour and time burdens while improving water productivity.

**Activity 2.1.2.2: Protected horticulture for heat and wind stress reduction**

- Support installation of approximately **100-150** shade-net and/or low-tunnel structures (indicatively **40-60 ha** total), focused on the most heat- and drought-prone sites with reliable water access.

- Train users on micro-climate management (ventilation/shading), water scheduling under high heat, and integrated pest management.

#### **Activity 2.1.2.3: Demonstration plots and performance tracking**

- Establish around **50 demonstration plots** to compare water-saving practices and protected vs open-field performance during hot/dry periods.
- Track simple indicators (water use, yield stability, quality) to support replication through extension and producer organisations. Adaptation logic: Strong farmer organizations and FFS are essential to embed climate-smart practices in local systems, ensure collective learning on dealing with drought and heat stress, and improve bargaining power and market access for climate-resilient products. Micro-irrigation and protected horticulture directly reduce sensitivity to drought and heat by lowering evapotranspiration losses, stabilizing crop growth and fruit set during heatwaves, and improving “crop per drop” in water-scarce conditions.

#### **63. Output 2.1.3: Producer organisations strengthened (approx. 30–40) on governance, aggregation and market engagement; facilitation of linkages to existing off-takers/4P arrangements and existing finance/insurance services (financial literacy + matchmaking) (USD 450,000)**

**Description:** This output strengthens the organisational and market systems needed for scaling climate-resilient horticulture beyond isolated beneficiaries. In response to AF review guidance, the project will facilitate access to **existing** financial services and risk management options.

##### **Activity 2.1.3.1: Strengthen producer organisation governance and service delivery**

- Strengthen 30-40 **producer organisations** on governance, record-keeping, group procurement, quality standards, and aggregation/marketing.
- Ensure women and youth leadership representation in organisational structures and decision-making.

##### **Activity 2.1.3.2: Market linkages and off-taker engagement (scalable pathways)**

- Facilitate structured engagement with off-takers and value chain partners (e.g., 4P-style arrangements where applicable) to improve market access and price stability for climate-resilient horticulture.

##### **Activity 2.1.3.3: Financial literacy and facilitated linkages to existing finance/insurance**

- Deliver targeted financial literacy modules (costing, savings, risk management, basic business planning) and facilitate matchmaking/linkages to existing savings groups, micro-insurance and financial institutions (where available and appropriate), without establishing any AF-funded credit facility.

**Adaptation logic:** Strong producer organisations and stable market linkages reduce vulnerability by improving incomes, reducing post-harvest losses, and enabling sustained adoption of climate-resilient technologies and practices without dependence on short-lived grant inputs.

#### **64. Component 3 – Climate information, early warning & institutional capacity (including safeguards, gender, learning/M&E) (USD 1,000,373)**

**Rationale and adaptation gap:** Even with climate-resilient water infrastructure (Component 1) and climate-smart livelihoods and practices (Component 2), households and local institutions will remain highly exposed to drought, heatwaves and rainfall variability if they lack: (i) **timely, locally actionable climate and early warning information**; (ii) **reliable last-mile dissemination pathways** that reach women, youth and vulnerable groups; and (iii) **institutional capacity** and procedures to translate warnings into risk-informed planning, prioritisation and response at ward and district levels.

Zimbabwe has an established national hydro-meteorological and early warning architecture led by the MSD under the Ministry responsible for Environment/Climate, with dissemination via national/local channels and partnerships; however, the system still faces **last-mile constraints** in semi-arid districts, including uneven observation coverage, limited localisation into ward-level advisories, variable extension capacity to translate warnings into decisions, and weak two-way feedback loops between users and service providers.

Component 3 therefore **strengthens and operationalises existing national systems** (not creating a parallel EWS) by improving: (a) risk knowledge and thresholds relevant to drought/heat impacts; (b) observation, forecasting and advisory “packaging”; (c) dissemination and inclusive access; (d) community/user capacity to act; and (e) institutional SOPs, coordination and learning—so that early warnings consistently translate into early actions in the project area.

**65. Outcome 3.1: Operational last-mile early warning and climate advisory services in targeted wards and strengthened institutions for sustained risk-informed planning and response**

**Output 3.1.1: Early warning and climate advisory services strengthened for last-mile delivery in targeted wards (locally relevant advisories, dissemination pathways, user training and community feedback loops)**

This output strengthens last-mile early warning and climate advisory services so that vulnerable households, producer groups and local institutions can access and act on timely, location-relevant information for drought, heat stress and extreme rainfall and flash flood risk. The project will support a structured approach led by the MSD in coordination with district and ward authorities and frontline service providers. First, advisories will be co-produced and tailored to user needs by translating technical forecasts (seasonal outlooks, short- and medium-range forecasts, drought/heat indicators and heavy rainfall alerts) into actionable messages aligned to horticulture and water management decisions (e.g., planting windows and crop/variety choice, irrigation scheduling, water rationing triggers, soil moisture conservation practices, and protective measures for infrastructure and crops). Second, dissemination will use multiple, redundant channels to maximise reach and inclusion building on community platforms and local service delivery structures (including ward committees, producer organisations and district communication mechanisms) and, where feasible, radio and mobile/SMS/WhatsApp pathways so that messages reach women, youth and remote households. Third, the project will strengthen user capacity to interpret and apply advisories through short, practical trainings and scenario-based planning at community level, linking advisories to early action checklists and to committee decisions under Component 1 (water allocation and O&M). Finally, community feedback loops will be established through designated focal points and simple reporting/feedback mechanisms so users can provide inputs on relevance, comprehension and observed outcomes, enabling iterative improvement in message content, timing and delivery.

**Activity 3.1.1.1: Early warning and climate advisory services strengthened for last-mile delivery in targeted wards (locally relevant advisories, dissemination pathways, user training and community feedback loops) (USD 450,000)**

**Description:** This output finances the minimum operational package required for a functioning last-mile drought/heat EWS in the project area, centred on five practical building blocks:

1. Risk information & thresholds (drought/heat triggers relevant for crops, livestock and water availability).
2. Monitoring & advisory generation (MSD forecasting products translated into local agro-advisories with Department of Agricultural Technical and Extension Services).
3. Dissemination (multi-channel, accessible formats, agreed schedules and responsibility).
4. Preparedness and response actions (simple early action checklists, community drills, and linkage to district contingency mechanisms); and
5. Feedback loops & continuous improvement (two-way user validation each season).

**Core agencies and roles:**

- MSD: technical lead for hazard monitoring/forecasting products and alert protocols.
- Department of Agricultural Technical and Extension Services: translates forecasts into locally actionable agro-advisories and supports extension delivery.
- Rural District Councils (RDCs): convene ward-level dissemination/coordination, link advisories to local planning and response.
- Ministry responsible for Environment/Climate (and relevant national DRM coordination structures): oversight, harmonisation with national early warning/DRM architecture and sustainability pathways.

**Activity 3.1.1.2: Risk communication and last-mile delivery design (baseline + SOPs).**

- Map the existing last-mile dissemination pathways in the targeted wards (who receives what, when, how).
- Agree “drought/heat trigger thresholds” and message templates (watch/warning/action) with MSD/ Department of Agricultural Technical and Extension Services /RDCs.
- Establish simple **Standard Operating Procedures (SOPs)** for issuing and cascading warnings (roles, timelines, approvals).

**Activity 3.1.1.3: Co-production of localized advisories (MSD + Department of Agricultural Technical and Extension Services).**

- Produce ward-relevant seasonal outlooks and agro-advisories that explicitly address onset/cessation, dry spells, heat stress periods, and practical farm decisions (planting windows, irrigation scheduling, livestock water prioritisation).

**Activity 3.1.1.4: Inclusive dissemination, user uptake and continuous improvement (end-to-end last-mile delivery)**

- Deliver locally relevant climate and risk advisories through a bundle of last-mile channels suited to local access constraints (e.g., Department of Agricultural Technical and Extension Services extension visits/meetings, community radio, SMS/USSD/WhatsApp where feasible, and public notice points), using local language and accessible formats (including audio/low-literacy friendly messaging) to ensure inclusive reach for women, youth and vulnerable groups.
- Build user capacity for early action by training extension agents and community focal points (with participation targets for women/youth) to interpret advisories and translate them into practical measures (e.g., planting adjustments, irrigation scheduling, livestock water prioritisation, and protection of productive assets during extreme events).
- Establish seasonal feedback loops with farmers and local institutions to assess usefulness, trust and actionability of advisories, and systematically integrate lessons into subsequent advisory products and dissemination practices.

**Adaptation logic:** Safeguards and gender measures protect people and ecosystems while ensuring equitable access to benefits; M&E and learning ensure the EWS, and institutional strengthening remain effective and improve over time; coordination resources ensure deliverability and compliance.

**66. Output 3.1.2: Institutional capacity strengthened across MSD, Department of Agricultural Technical and Extension Services, Rural District Councils and Ministry responsible for Environment/Climate to integrate climate risk information into planning and services (inclusive access for women/youth/vulnerable groups) (USD 250,000)**

**Description:** This output strengthens institutional capacity across MSD, Department of Agricultural Technical and Extension Services, RDCs and relevant environment/climate agencies to mainstream climate risk management into local planning and service delivery. It will support coordination protocols for warnings and advisories, integration of climate information into extension packages and seasonal planning, and targeted training and coaching for staff and frontline officers to deliver inclusive services. Special attention will be given to gender-responsive communication and outreach approaches to ensure women and vulnerable households can access and act on climate information and project services.

**Activity 3.1.2.1: AF ESP compliance and safeguards instruments.**

- Confirm/update ESP screening at implementation start and prepare FP-stage instruments as required (e.g., ESMP and any targeted management plans), including stakeholder engagement, grievance/feedback procedures, and monitoring of mitigation measures.

**Activity 3.1.2.2: Gender Assessment and budgeted Gender Action Plan (GAP).**

- Undertake a project Gender Assessment early in implementation and produce a budgeted GAP with practical measures and indicators (women/youth participation in decision-making, leadership targets, equitable benefit access, and sex-disaggregated monitoring).

**Activity 3.1.2.3: Results monitoring, learning and knowledge capture.**

- Establish baselines for key indicators (reach and uptake of advisories; institutional integration milestones; inclusion metrics), routine monitoring, and annual learning reviews; produce concise learning products to support replication through national systems.

**Activity 3.1.2.4: Project coordination inputs linked to Component 3 delivery.**

- Provide essential coordination resources for implementation quality (planning, reporting, safeguards/gender/M&E coordination, and audit/financial management support as applicable)

**Adaptation logic:** Safeguards and gender measures protect people and ecosystems while ensuring equitable access to benefits; M&E and learning ensure the EWS, and institutional strengthening remain effective and improve over time; coordination resources ensure deliverability and compliance.

**67. Output 3.1.3: Cross-cutting safeguards, gender, learning and M&E delivered (AF ESP screening and ESMP preparation; Gender Assessment and budgeted Gender Action Plan; learning and results monitoring)**

This output ensures quality, compliance and adaptive management through strengthened safeguards, gender, learning and M&E systems. It includes confirmation of AF ESP screening and preparation and implementation E&S instruments (ESMF/ESMP and stakeholder engagement measures), operation of a project Grievance Redress Mechanism (GRM) aligned with IFAD and national systems, and systematic gender mainstreaming. The project will maintain a results and learning system with clear sex- and age-disaggregated indicators, periodic reflection, and course correction to ensure effectiveness under evolving climate risks.

**Activity 3.1.3.1: A stakeholder Engagement Plan will be prepared** and implemented to ensure inclusive participation of women, youth and vulnerable groups, with clear information disclosure and feedback mechanisms at community and district levels, including transparent communication of selection criteria and benefit allocation.

**Activity 3.1.3.2: A project-level GRM** will be operationalised with multiple intake channels, defined response timelines and escalation pathways, and confidential, victim-centred sexual exploitation and abuse (SEA) and sexual harassment (SH)-sensitive procedures and referral pathways; grievances will be logged and used to trigger corrective actions as needed.

**Activity 3.1.3.3: Gender mainstreaming** measures will be applied from mobilisation, and a detailed, costed Gender Action Plan will be prepared and integrated into implementation workplans and reporting, with systematic collection of sex- and age-disaggregated results. Finally, the project will finalise a results-based M&E plan aligned to the Adaptation Fund results framework, conduct periodic learning and reflection reviews, and apply adaptive management to adjust implementation based on evidence and evolving climate risks.

**B. 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. 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.**

68. **Environmental benefits:** The project focuses on the semi-arid regions of Chiredzi, Mwenezi, Masvingo, and Matobo within Natural Regions IV and V, characterized by annual rainfall generally below 450-600 mm, a failure rate of one in three seasons, and over 70% of cultivable land comprising sandy soil with limited water and nutrient retention capabilities. Recurrent droughts, intensifying heat and degraded micro-catchments have reduced harvests, increased sedimentation in small reservoirs and accelerated runoff, placing already vulnerable ecosystems under growing stress.

Component 1 delivers environmental (adaptation) benefits by climate-proofing water and horticultural infrastructure and protecting micro-catchments. Specifically, the project will support: (i) installation/upgrading of approximately **200 solar-powered irrigation systems (SPIS) with storage** to reduce reliance on rainfall and stabilise dry-season water access; (ii) construction of approximately **35 engineered sand dams/sub-surface water storage** structures in seasonal sandy rivers to increase sub-surface storage and reduce evaporation losses; and (iii) **ecosystem-based micro-catchment** rehabilitation of at least **5,000 ha** to improve infiltration/recharge, reduce gullying and sediment loads, and regenerate vegetation cover in priority recharge and erosion hotspots. Together, these measures are expected to improve soil stability and moisture retention, strengthen local drought buffering and water regulation under hotter, drier conditions, and reduce climate-driven degradation around water assets and productive areas.

The project aims to generate these environmental benefits while mitigating adverse effects. All infrastructure is on a modest scale and managed by the community; groundwater extraction is enhanced by monitoring and recharge initiatives; and Ecosystem-based Adaptation (EbA) interventions utilize local or well-suited species. An Environmental and Social Management Plan (ESMP), consistent with AF Environmental and Social Policy, will direct the screening, siting, construction practices, and ongoing monitoring of localized hazards (e.g., erosion at worksites, strain on water resources). The ESMP will guide site screening and siting (including avoidance of sensitive areas), good construction practice (erosion/sediment control, waste management, worker OHS), and operational monitoring (water availability and basic abstraction rules), ensuring that water and ecosystem measures are implemented as adaptation-first actions (drought buffering, recharge-zone protection and asset protection), with any co-benefits treated as secondary.

69. **Social benefits:** Social benefits focus on the most vulnerable rural households, especially women and youth, in some of Zimbabwe’s poorest and most food-insecure districts. In these areas, over 76% of rural households live below the poverty line, about 35% are female-headed, youth make up roughly 68% of the population yet face unemployment rates above 80%, and 2.7 million rural people (26% of the rural population) were food insecure during the 2021/22 lean season. By improving reliable access to water for domestic use and nutrition-sensitive horticulture close to homesteads, the project will support approximately **5,000 households** through climate resilient horticulture water access and will strengthen inclusive governance arrangements through approximately 200 water user and water point committees (with a target of 50% women and 30% youth). In addition, capacity building under the project will reach approximately **7,500 farmers** through **150 Farmer Field Schools**, and at least 400 local technicians/caretakers will be trained to support basic O&M and functionality of water assets.

To avoid social harm and exclusion, there is no planned physical resettlement, and targeting will be transparent and criteria-based, including quotas/targets for women-headed households, youth groups and other vulnerable households. Stakeholder engagement will be continuous and inclusive, and a functional GRM will be established and communicated locally to address complaints related to access, committee decisions, labour practices, or potential conflict around water allocation, consistent with the AF ESP requirement to prevent harm and ensure accountability.

70. **Economic benefits:** Z-ADAPT seeks to mitigate the cycle in which droughts and rainfall variations increase poverty, asset depletion, and humanitarian reliance in Zimbabwe’s semi-arid southern and western regions. A significant number of households in the target regions depend on climate-sensitive rainfed agricultural systems, that have insufficient irrigation infrastructure and considerable vulnerability to mid-season droughts and heatwaves.

The project will enhance dependable water access and support a transition to higher-value, water-efficient horticulture and diversified livelihood options. Through approximately **200 SPIS sites** serving **5,000 households**, the project will enable more reliable dry-season production; based on indicative command areas **of 0.05-0.15 ha per household**, this corresponds to roughly **250-750 ha** of smallholder horticulture supported through shared schemes/community gardens (final design and command areas confirmed at Full Proposal stage). Productivity and climate resilience will be further improved through training and adoption support for **7,500 farmers** (via 150 FFS) and deployment of water-saving and heat-risk management practices and technologies (e.g., irrigation efficiency and protective production solutions), which are expected to increase returns per unit of land and water, stabilise production across seasons and reduce climate-related crop losses. Strengthening of **30-40 producer organisations** and market linkages will improve aggregation, quality management and access to buyers, supporting more stable incomes and reinvestment in adaptive practices.

Potential negative economic impacts such as elite capture of assets, exclusion of poorer households from higher-value opportunities, or unsustainable groundwater use will be mitigated through transparent targeting, inclusive governance of infrastructure, and clear, locally agreed water-use and O&M arrangements. The project will also apply AF ESP-aligned safeguards measures (site screening, monitoring, and grievance mechanisms) to ensure equitable access and sustainable resource use. This approach supports “do no harm” principles while delivering concrete, measurable resilience and economic benefits for vulnerable households.

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

71. **Overall approach.** Z-ADAPT is designed to maximize adaptation impact per dollar by (i) concentrating investments in the most drought- and heat-exposed, food-insecure districts in Natural Regions IV–V; (ii) prioritizing decentralized, low-lifecycle-cost measures that communities and local institutions can operate and maintain; and (iii) leveraging IFAD/GoZ baseline delivery systems (HEEP/ Department of Agricultural Technical and Extension Services / RDC structures) so AF resources fill the incremental climate-resilience gap rather than financing generic rural development.
72. Cost-effectiveness is strengthened through the integrated “water–production–information–governance” package: Component 1 climate-proofs water access (solar + storage + sub-surface storage + recharge protection), Component 2 ensures “crop-per-drop” and diversified income so water investments translate into resilient livelihoods, and Component 3 ensures climate risk information, institutional capacity and safeguards, gender and M&E keep assets functional, inclusive and risk-informed.
73. **Comparison with alternatives (“business as usual”).** In the absence of Z-ADAPT, the most likely path is a continuation of **reactive, humanitarian responses** to recurrent droughts in the south-west, including food aid, emergency borehole drilling and water trucking, coupled with conventional, non-climate-informed credit schemes. A single national drought response can cost the Government and partners tens of millions of dollars while creating no durable assets and leaving households trapped in a cycle of crisis borrowing and asset sales. By contrast, Z-ADAPT

invests **USD 10.24 million in Components 1–3 (USD 12 million including execution and IE costs)** in permanent, climate-resilient water and horticulture systems, diversified livelihoods and climate-resilient finance that reduce the need for repeated relief operations and protect livelihoods year after year. Even modest reductions in drought-related crop and livestock losses in the four target districts would already offset a substantial share of programme costs over its lifetime. Global evidence indicates that every US\$1 invested in climate-resilient infrastructure and adaptation can generate multiple dollars in avoided losses and wider economic benefits, underlining the strong economic case for a proactive programme such as Z-ADAPT.<sup>64</sup>

74. **Cost-effectiveness by component.** Table 3 below summarises the cost-effectiveness logic of each component, highlighting the indicative scale of beneficiaries, the types of losses averted or benefits generated, and the main alternatives that were considered and found less cost-effective. Beneficiary numbers are indicative and partly overlapping across components (e.g. a household benefiting from water infrastructure may also receive climate-resilient finance and CIS advisories).

**Table 4: Project cost-effectiveness by Component**

Benefits generated – losses averted	Alternative to project
<b>Component 1. Climate-proofed water supply and irrigation</b>	
<ul style="list-style-type: none"> <li>• <b>200 SPIS</b> sites installed/upgraded with 10,000-20,000 storage per site, serving 5,000 households (25 HH/site), enabling year-round horticulture and priority domestic water where feasible.</li> <li>• <b>35 climate-resilient storage</b> structures (indicatively 25 sand dams +10 sub-surface dams; final mix at FP stage) constructed on seasonal sandy rivers to buffer dry-season availability for horticulture/livestock, with protected abstraction for domestic use where feasible.</li> <li>• Governance and O&amp;M aligned to the asset base: <b>200 site-level committees</b> for SPIS + governance arrangements for 35 storage sites (site-level sub-committees or clustered committees where assets share user groups), meeting inclusion targets (50% women; 30% youth).</li> <li>• Water availability monitoring established at <b>50-70 priority boreholes/wells</b> and/or asset clusters feeding simple reporting into the climate information service (CIS).</li> <li>• EbA micro-catchment protection targeted to protect climate-resilient assets: recharge-zone protection, gully stabilisation and vegetative buffers implemented in priority erosion/recharge hotspots directly linked to SPIS/storage sites (final footprint confirmed at FP stage).</li> </ul>	<p><b>Business-as-usual water investments remain conventional and fragmented:</b> Water access would continue to rely on scattered borehole rehabilitation, small earthen dams and ad hoc repairs, often <b>without storage, recharge protection, or climate-risk-informed design</b>. This results in higher failure rates during prolonged dry spells (wells run dry; pumps fail; canals silt up) and repeated rehabilitation costs.</p> <p><b>Reactive drought response dominates:</b> Local authorities and households would continue coping through emergency measures (water trucking, temporary water points, relief distributions), which are <b>recurrent-cost, short-lived and do not build durable resilience assets</b>.</p> <p><b>Higher lifecycle costs and exposure to energy constraints:</b> Where irrigation is possible, diesel pumping or non-optimised systems remain common, creating exposure to fuel price volatility and supply disruptions and increasing O&amp;M burdens, reducing reliability precisely when drought/heat risks peak.</p> <p><b>Catchment degradation undermines infrastructure:</b> Without targeted EbA and governance measures, erosion, gullying and sedimentation continue to reduce storage capacity and damage water works, meaning even funded infrastructure delivers diminishing returns over time.</p>
<b>Component 2 – Climate-smart horticulture and diversified livelihoods</b>	
<ul style="list-style-type: none"> <li>• <b>150 Farmer Field Schools (FFS)</b> operational, reaching <b>7,500 farmers</b> (50% women; 30% youth) with drought/heat modules (irrigation scheduling, soil moisture management, protected production, climate-risk-informed decisions).</li> <li>• <b>1,000-1,500 households</b> supported with micro-irrigation efficiency packages linked to Component 1 water-secure sites (final numbers/typology confirmed at FP stage), improving “crop per drop” during dry spells/heatwaves.</li> <li>• <b>100-150 shade-net/low tunnel structures</b> installed (indicatively 40-60 ha total), reducing heat/wind stress and stabilising yields in the most drought/heat-prone water-secure sites.</li> <li>• <b>50 demonstration plots</b> established (micro-irrigation vs conventional; protected vs open field), with simple performance tracking (water use, yield stability) to support replication via extension/producer systems.</li> <li>• <b>30-40 producer organisations</b> strengthened on governance/aggregation/marketing: structured engagement with off takers/market partners to reduce price volatility and post-harvest losses.</li> <li>• <b>Financial literacy</b> and facilitated linkages to existing savings/micro-insurance/finance services (reduces AF policy risk while supporting adoption).</li> </ul>	<p><b>Rainfed dependence persists and yields remain highly climate-sensitive:</b> Households remain concentrated in climate-exposed rainfed systems with limited water-efficient practices; drought/heat years trigger sharp production losses, forcing distress coping (selling livestock, reducing meals, migrating).</p> <p><b>Water investments do not translate into resilience:</b> Even where Component 1-like water infrastructure is partially provided through baseline programmes, <b>lack of training and on-farm technology packages</b> means water is often used inefficiently (high losses, suboptimal scheduling), reducing “crop-per-drop” and limiting returns from water assets.</p> <p><b>Scattered pilots or input handouts remain unsustainable:</b> Stand-alone demonstrations or one-off input support are typically small, dispersed and not anchored in producer organisations/extension systems, resulting in low adoption after project support ends.</p> <p><b>High-risk financing approaches:</b> Introducing project-managed credit/revolving funds would be administratively heavy, prone to elite capture and repayment challenges after drought shocks, and often</p>

<sup>64</sup> <https://www.worldbank.org/en/news/press-release/2019/06/19/42-trillion-can-be-saved-by-investing-in-more-resilient-infrastructure-new-world-bank-report-finds>

	considered problematic under AF—making it a less feasible alternative than facilitated links to existing finance/savings/insurance mechanisms.
<b>Component 3. Climate information, EWS and institutional capacity (incl. safeguards, gender, learning/M&amp;E)</b>	
<ul style="list-style-type: none"> <li>15,000 farmers/households reached with locally actionable drought/heat advisories through bundled last-mile channels (extension/community meetings + radio + mobile channels where feasible).</li> <li>End-to-end “functioning EWS” package operationalised: co-produced advisories (MSD+ Department of Agricultural Technical and Extension Services dissemination SOPs, intermediary/user training for early action, and seasonal feedback loops to improve trust/actionability over time.</li> <li>200-250 institutional actors (MSD/ Department of Agricultural Technical and Extension Services /RDCs and Ministry responsible for Environment/Climate + ward focal points) trained/supported to integrate climate risk information into planning, service delivery and response coordination (final numbers confirmed at FP stage).</li> <li>AF ESP compliance strengthened: FP-stage safeguards screening and ESMP preparation (and other instruments as needed), plus functional GRM and monitoring of mitigation measures.</li> <li>AF Gender Policy alignment delivered: FP-stage Gender Assessment and budgeted Gender Action Plan, with sex-/age-disaggregated monitoring across components; learning/M&amp;E system established, and annual learning reviews conducted.</li> </ul>	<p><b>EWS remains “forecasting without last-mile action”:</b> National forecasts and occasional alerts continue, but without funded last-mile strengthening (local advisory translation, dissemination bundles, user training and feedback loops), warnings <b>do not consistently trigger early actions</b> at community level.</p> <p><b>Weak institutional integration into planning and service delivery:</b> MSD/ Department of Agricultural Technical and Extension Services /RDC coordination remains ad hoc; climate risk information is not systematically embedded into seasonal planning, asset O&amp;M prioritisation or drought response decision-making, limiting the effectiveness and sustainability of Components 1 and 2.</p> <p><b>Higher safeguards and inclusion risk:</b> Without dedicated resources for AF ESP screening/FP-stage ESMP preparation, GRM strengthening, Gender Assessment and a budgeted GAP, there is greater risk of implementation delays, inconsistent mitigation of site-specific risks, exclusion of women/youth from benefits, and weaker accountability.</p> <p><b>Learning and replication remain limited:</b> Results and lessons are not captured in a structured way, reducing the ability to replicate and scale successful approaches through HEEP/national systems.</p>

**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.**

75. **Consistency with national development strategies (Vision 2030, NDS1):** Z-ADAPT is fully consistent with Zimbabwe’s overarching development agenda. Vision 2030 and the National Development Strategy 1 (NDS1, 2021–2025) prioritise climate-resilient, inclusive growth, with a focus on food and nutrition security, resilient agricultural value chains, expanded irrigation and reliable rural water supply, and strengthened disaster risk management systems<sup>65</sup>. By investing in climate-resilient water and horticulture infrastructure (Component 1), climate-smart production systems and diversified livelihoods (Component 2), and climate information and institutional capacity (Component 3) in some of the most drought-prone districts of Natural Regions IV–V, Z-ADAPT directly supports NDS1 pillars on “Food Security and Nutrition, Agriculture Productivity and Climate Resilience” and “Environmental Protection, Climate Resilience and Natural Resources Management.”

76. **Alignment with climate policy, NDC and NAP processes:** The project is directly aligned with Zimbabwe’s Revised Nationally Determined Contribution (2021), which prioritises: (i) scaling up climate-smart agriculture and resilient agricultural value chains; (ii) strengthening early warning and climate-related disaster risk reduction systems, including information management; (iii) ensuring climate-resilient infrastructure; and (iv) developing and promoting resilient and sustainable water resources management, with gender and youth mainstreamed across all adaptation measures<sup>66</sup>. Z-ADAPT operationalises these priorities in drought-prone districts by investing in climate-resilient irrigation and water storage, water-efficient irrigation technologies and conservation agriculture, climate-adapted crop varieties and diversification, and post-harvest and value-chain support with a focus on women and youth. The project is consistent with the *National Climate Policy* (2017) and the *National Climate Change Response Strategy* (NCCRS), which together provide the overarching framework for mainstreaming climate change into water, agriculture, disaster risk management and other climate-sensitive sectors, and call for multi-stakeholder, community-based adaptation and integration of climate risk management in development planning.

77. Z-ADAPT also contributes to implementation of Zimbabwe’s National Adaptation Plan (NAP) process including the NAP Roadmap and the 2024–2030 NAP<sup>67</sup>, which prioritize adaptation in agriculture, water resources, disaster risk

<sup>65</sup> Assessment of the Impact of Zimbabwe’s Financial Sector Reforms on the Growth of the Agriculture Credit Market: <https://rsisinternational.org/journals/ijriss/articles/assessment-of-the-impact-of-zimbabwes-financial-sector-reforms-on-the-growth-of-the-agriculture-credit-market>

<sup>66</sup> NDC: <https://unfccc.int/sites/default/files/NDC/2022-06/Zimbabwe%20Revised%20Nationally%20Determined%20Contribution%202021%20Final.pdf>

<sup>67</sup> NAP: <https://unfccc.int/sites/default/files/resource/NAP-Zimbabwe-2024.pdf>

management and vulnerable groups and are costed at approximately US\$10.3 billion to 2030 by piloting district-level climate risk assessments, Local Adaptation Plans and climate-risk-informed by-laws in the target districts. Finally, the project advances the priorities set out in Zimbabwe's 2022 *Initial Adaptation Communication*, which highlights transformative adaptation anchored in weather and climate services, solar water provision, climate-smart agriculture and post-harvest processing, by combining solar water infrastructure, participatory climate information services and climate-resilient livelihood support at community level.

78. **Alignment with agriculture and food security strategies:** Z-ADAPT is closely aligned with the National Agriculture Policy Framework (2018–2030)<sup>68</sup> and the Agriculture and Food Systems Transformation Strategy (2020–2025)<sup>69</sup>, which emphasize climate-smart agriculture, irrigation expansion, sustainable land and water management, and resilient horticulture and livestock value chains. By supporting climate-resilient community gardens, micro-irrigation, conservation agriculture, integrated soil fertility management, protected agriculture, and climate-smart extension services, the project provides practical means to implement these strategies in semi-arid districts. It also directly supports the Horticulture Recovery and Growth Plan under both the Conventional pillar (strengthening commercial horticulture partnerships) and the Presidential pillar (community gardens for food and nutrition security).
79. **Alignment with water, drought risk and disaster management frameworks:** The project is consistent with the National Water Policy, which promotes integrated water resources management, protection of catchments and aquifers, and improved rural water supply as key responses to increasing climate variability and drought<sup>70</sup>. Z-ADAPT's package of solar water supply systems, sand and sub-surface dams, managed aquifer recharge and ecosystem-based catchment rehabilitation provides cost-effective options to operationalize this policy in drought-prone catchments. The project also contributes to the National Drought Risk Management Strategy and related early warning frameworks by strengthening climate and hydrological information services, community-based early warning and response, and diversified drought-resilient livelihoods in the most exposed districts<sup>71</sup>.
80. **Alignment with gender, youth and financial inclusion policies:** Z-ADAPT's focus on women's and youth's leadership, access to resources and climate-resilient finance is aligned with the National Gender Policy (2017)<sup>72</sup>, the National Youth Policy (2020-2025)<sup>73</sup> and the National Financial Inclusion Strategy (2022-2026)<sup>74</sup>, which call for expanding tailored financial services, skills and livelihood opportunities for rural women, youth and smallholder farmers. Through gender-transformative methodologies (such as GALs), targeted support to women- and youth-led enterprises, and the design of strengthened community savings groups and financial literacy, the project translates these policy commitments into concrete, on-the-ground adaptation actions.
81. **Consistency with sub-national planning processes:** Finally, the project is fully consistent with ongoing efforts to integrate climate change into provincial and district development planning, including under the NAP process and pilots on climate-proofed local development plans<sup>71</sup>. By supporting the preparation of Local Adaptation Plans and climate-risk-informed by-laws in the four target districts, and by working through Rural District Councils, ward structures and producer organisations, Z-ADAPT ensures that its investments are embedded in sub-national development plans, owned by local institutions and scalable through government system.
- 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.**
82. **Overall approach and screening framework:** The project follows Zimbabwe's legal and regulatory framework and with the Environmental and Social Policy (ESP) and Gender Policy of the Adaptation Fund. The Implementing Entity (IFAD), through its SECAP/ESMS system, will ensure that all activities are screened at an early stage, that environmental and social risks are assessed proportionate to their significance, and that appropriate mitigation and monitoring measures are integrated into an Environmental and Social Management Plan (ESMP), in line with the Adaptation Fund ESP guidance on risk screening, categorization and ESMP development.

<sup>68</sup> [https://climate-laws.org/document/national-agriculture-policy-framework-2018-2030\\_9ffb](https://climate-laws.org/document/national-agriculture-policy-framework-2018-2030_9ffb)

<sup>69</sup> <https://www.agric.gov.zw/wordpress/wp-content/uploads/2020/07/AFSRTS-2-FINAL-SIGNED.pdf>

<sup>70</sup> National Water Policy 2012: [https://wsaz.wordpress.com/wp-content/uploads/2019/02/zimbabwe-national-water-policy\\_2012.pdf](https://wsaz.wordpress.com/wp-content/uploads/2019/02/zimbabwe-national-water-policy_2012.pdf)

<sup>71</sup> World Bank: Zimbabwe's new National Water Policy: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/620391467996737275>

<sup>72</sup> National Gender Policy 2017: <https://catalogue.safajids.net/sites/default/files/publications/2013%20national%20gender%20policy%20-%20final%20april%2020th.pdf>

<sup>73</sup> National Youth Policy (2020-2025): <https://zgc.co.zw/wp-content/uploads/2022/10/NATIONAL-YOUTH-POLICY-2020-2025.pdf>

<sup>74</sup> National Financial Inclusion Strategy (2022-2026): [https://www.afi-global.org/wp-content/uploads/2024/10/Zimbabwe\\_National\\_Financial\\_Inclusion\\_Strategy\\_II\\_2022-2026.pdf](https://www.afi-global.org/wp-content/uploads/2024/10/Zimbabwe_National_Financial_Inclusion_Strategy_II_2022-2026.pdf)

83. Given the nature and scale of proposed activities (small-scale water infrastructure, on-farm climate-smart practices, community-level services), the project is a **Category B (medium risk)** intervention under IFAD SECAP and the AF ESP, with site-specific, reversible risks that can be managed through standard good practice measures and robust stakeholder engagement. A full E&S screening against all 15 AF ESP principles (compliance with the law, access and equity, marginalized groups, human rights, gender equality, core labour rights, indigenous peoples, involuntary resettlement, natural habitats, biodiversity, climate change, pollution prevention, public health, physical and cultural heritage, lands and soil conservation) is presented in the checklist in Part II (H) and will be updated when exact coordinates / site specific location is confirmed.
84. **Environmental assessment and permitting:** All physical investments (e.g. community water supply schemes, small sand and sub-surface dams, irrigation rehabilitation, storage works) will comply with the **Environmental Management Act** <sup>75</sup>and the **Environmental Management (Environmental Impact Assessment and Ecosystems Protection) Regulations, SI 7 of 2007**<sup>76</sup>, which govern EIA requirements and licensing for projects with potential environmental impacts. The Project Management Unit (PMU), in coordination with the Ministry of Environment and Wildlife and Environmental Management Agency will: (i) screen subprojects to determine whether a full EIA, prospectus or exemption applies; (ii) prepare and submit the required documentation for review and approval; and (iii) implement all conditions attached to environmental certificates through contractor obligations and the project ESMP. No construction or rehabilitation works will commence before obtaining the relevant EMA clearances.
85. **Water resources, groundwater and dam safety standards:** Water abstraction, use and discharge under Components 1 and 2 will be fully consistent with the **Water Act** <sup>77</sup>and regulations administered by the Zimbabwe National Water Authority, including requirements for water permits, groundwater abstraction, protection of water sources and allocation within catchments. Designs of sand and sub-surface dams, storage tanks and associated works will respect Zimbabwe National Water Authority technical guidance on small dam safety, spillway sizing and flood routing; site selection will avoid structures on major rivers or in locations where failure would pose significant downstream risk. Routine inspection and maintenance procedures will be integrated into Water Point Committees' O&M plans and supervised by relevant catchment and sub-catchment councils.
86. **Public health, drinking water quality and sanitation:** Community water supply, storage and sanitation measures will comply with the **Public Health Act** <sup>78</sup>and applicable Ministry of Health and Child Care guidelines on drinking water quality, hygiene and prevention of water-borne diseases. This includes protection of wellheads and boreholes against contamination, safe siting of sanitation facilities relative to water points, and promotion of safe water handling and hygiene practices through extension and Farmer Field Schools. Any pesticide use under climate-smart agriculture demonstrations will follow national integrated pest management (IPM) guidance to minimize risks to public health and ecosystems.
87. **Construction standards, occupational health and safety:** Civil works will adhere to Zimbabwe's standards for occupational health and safety under the **Factories and Works Act**<sup>79</sup> and related regulations, including the Factories and Works (Building) and (Construction) Regulations, which set requirements for safe workplaces, protective equipment and accident prevention on construction sites. Contractors will be required, through bidding documents and contracts, to implement site-specific Health, Safety and Environment (HSE) plans covering use of personal protective equipment (PPE), safe excavation, traffic and machinery management, emergency procedures, and training of workers. Where applicable, local building standards and council by-laws will be followed for small structures (pump houses, storage facilities, shade houses), with appropriate supervision by qualified engineers.
88. **Land use, local planning and rural district standards:** Implementation will be consistent with the **Rural District Councils Act** <sup>80</sup>, which assigns RDCs responsibilities for local development, land use and service provision, as well as with planning instruments under the **Regional, Town and Country Planning Act**<sup>81</sup> for any activities requiring development approval. Local Adaptation Plans and climate-risk-informed by-laws to be developed under Component 3 will be prepared in close coordination with RDCs, Department of Agricultural Technical and Extension Services and

<sup>75</sup> Environment Act: 2002: <https://faolex.fao.org/docs/pdf/zim83837.pdf>

<sup>76</sup> Environment Management Act (EIA & Ecosystem Protection): 2007:

<sup>77</sup> Water Act: 2005: <https://faolex.fao.org/docs/pdf/zim26168.pdf>

<sup>78</sup> Public Health Act 2007: <https://zimlil.org/akn/zw/act/2018/11/eng@2018-08-31/source.pdf>

<sup>79</sup> Factories and Works Act: <https://www.law.co.zw/download/factories-and-works-act-chapter-1408/>

<sup>80</sup> Rural District Council Act 2002: <https://faolex.fao.org/docs/pdf/zim83837.pdf>

<sup>81</sup> Regional, Town and Country Planning Act 1988: [https://ucaz.org.zw/wp-content/uploads/2019/08/REGIONAL\\_TOWN\\_AND\\_COUNTRY\\_PLANNING\\_ACT\\_29\\_12.pdf](https://ucaz.org.zw/wp-content/uploads/2019/08/REGIONAL_TOWN_AND_COUNTRY_PLANNING_ACT_29_12.pdf)

catchment councils to ensure alignment with existing district development plans, land use zoning and communal land tenure arrangements. Any minor land acquisition or voluntary land use agreements for micro-infrastructure will follow IFAD and AF requirements for avoiding involuntary resettlement and ensuring transparent, documented community consent.

89. **Waste management, pollution prevention and resource efficiency**<sup>82</sup>: Construction waste, spoil and packaging materials will be handled in line with EMA guidelines and local authority by-laws, with an emphasis on minimizing waste generation, re-using materials where safe and feasible, and disposing of residual waste in approved sites. The project's focus on solar pumping, efficient micro-irrigation and integrated soil fertility management directly supports the AF ESP principles on climate change, pollution prevention and resource efficiency, while the EbA measures under Component 1 (micro-catchment rehabilitation, agroforestry, gully stabilization) promote conservation of biodiversity, natural habitats and productive soils.
90. **Adaptation Fund ESP and Gender Policy compliance**: In line with the Adaptation Fund ESP and its Guidance for Implementing Entities, the project will: (i) document the applicable national legal and regulatory requirements (permits, licenses, approvals) for each type of subproject; (ii) integrate ES risk screening against all 15 AF principles into the project cycle; (iii) prepare and update an ESMP with proportionate mitigation measures; (iv) ensure meaningful, inclusive consultation of women, youth and vulnerable groups; and (v) establish a project-level grievance redress mechanism linked to IFAD's existing systems.
91. The Gender Action Plan and targeting approach (see Sections II.B and II.H) will operationalize the AF Gender Policy by ensuring that women and youth have equitable access to project benefits, participate in decision-making bodies and are not exposed to disproportionate risks.

**Table 5: National Technical Standards**

Activity	Applicable National Standards	Compliance Requirement	Responsible Agency
<b>Installation/upgrading of solar-powered irrigation systems (SPIS) with storage and associated conveyance (Component 1 / Output 1.1)</b>	<ul style="list-style-type: none"> <li>Environmental Management Act</li> <li>Environmental Management (Environmental Impact Assessment and Ecosystems Protection) Regulations, SI 7 of 2007</li> <li>Water Act</li> <li>Public Health Act (current consolidated Act)</li> </ul>	<ul style="list-style-type: none"> <li>EMA screening of each scheme and, where required, preparation and approval of an EIA/prospectus and environmental management plan before works start.</li> <li>Water abstraction/use permits obtained from /catchment councils for all new boreholes and irrigation schemes.</li> <li>Protection of water points and distribution systems to meet public health and drinking water standards.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Management Agency (EMA)</li> <li>Zimbabwe National Water Authority and Catchment/Sub-catchment Councils</li> <li>Ministry of Health and Child Care (Environmental Health Units)</li> <li>Rural District Councils (RDCs)</li> </ul>
<b>Construction/rehabilitation of sand dams and sub-surface dams (Component 1 / Output 1.2)</b>	<ul style="list-style-type: none"> <li>Environmental Management Act and EIA Regulations SI 7/2007</li> <li>Water Act</li> <li>Relevant Zimbabwe National Water Authority small-dam and hydraulic design guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Environmental screening and, where required, EIA/EMP and environmental licence by EMA prior to construction.</li> <li>Technical design and siting consistent with dam safety and catchment protection requirements; registration of works where applicable.</li> <li>Operation procedures agreed with catchment councils to avoid over-abstraction and downstream conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>EMA</li> <li>Zimbabwe National Water Authority and Catchment/Sub-catchment Councils</li> <li>Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (water infrastructure units)</li> <li>Ministry of Environment and Wildlife</li> <li>RDCs</li> </ul>
<b>Ecosystem-based Adaptation (EbA) and micro-catchment rehabilitation linked to water assets (Component 1 / Output 1.2.1)</b>	<ul style="list-style-type: none"> <li>Environmental Management Act (ecosystems, land degradation, restoration) \n</li> <li>Water Act (catchment protection) \n</li> <li>Rural District Councils Act \n</li> <li>Forestry/trees-related rules and local by-laws (where relevant)</li> </ul>	<ul style="list-style-type: none"> <li>Site screening to avoid sensitive habitats and ensure voluntary community participation</li> <li>Implementation of gully control, revegetation, recharge-zone protection and agroforestry/windbreak measures consistent with land/catchment protection requirements</li> <li>Use of appropriate/local/native species; avoidance of invasive species</li> <li>Integration of simple monitoring/reporting arrangements linked to CIS (where feasible)</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Environment and Wildlife; EMA (screening/oversight as applicable)</li> <li>RDCs and traditional leadership (local approvals/coordination)</li> <li>Department of Agricultural Technical and Extension Services /Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (extension/land conservation services)</li> <li>Catchment/Sub-catchment Councils (where relevant)</li> </ul>
<b>Strengthening water governance and O&amp;M systems aligned to</b>	<ul style="list-style-type: none"> <li>Rural District Councils Act</li> <li>Water Act and catchment council rules</li> </ul>	<ul style="list-style-type: none"> <li>Formalization/strengthening of water user/point committees aligned to assets (SPIS sites and storage structures)</li> </ul>	<ul style="list-style-type: none"> <li>RDCs</li> </ul>

<sup>82</sup> EMA 2004: <https://www.law.co.zw/download/environmental-management-actchapter-2027/>

<b>financed assets (Component 1 / Output 1.3 and Output 1.2.1 governance elements)</b>	<ul style="list-style-type: none"> <li>National/Local DRR and water governance arrangements (where applicable)</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of basic O&amp;M, water allocation rules and drought-period prioritisation; grievance/feedback arrangements</li> <li>Inclusion targets met (50% women; 30% youth) and documented</li> <li>Basic groundwater/asset monitoring and reporting arrangements established (as applicable)</li> </ul>	<ul style="list-style-type: none"> <li>Zimbabwe National Water Authority /Catchment/Sub-catchment Councils</li> <li>Department of Agricultural Technical and Extension Services (community facilitation/extension)</li> <li>Project Management Unit (PMU)</li> </ul>
<b>Deployment/demonstration of climate-resilient horticulture technologies in water-secure sites (micro-irrigation efficiency packages, shade-net/low-tunnels, demo plots) (Component 2 / Output 2.2)</b>	<ul style="list-style-type: none"> <li>Environmental Management Act (pollution, hazardous substances)</li> <li>Public Health Act</li> <li>Agricultural input and pesticide regulations</li> <li>RDC/local planning by-laws (small structures)</li> <li>Factories and Works Act (OSH, where applicable during installation)</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Management Act (pollution, hazardous substances)</li> <li>Public Health Act</li> <li>Agricultural input and pesticide regulations</li> <li>RDC/local planning by-laws (small structures)</li> <li>Factories and Works Act (OSH, where applicable during installation)</li> </ul>	<ul style="list-style-type: none"> <li>Department of Agricultural Technical and Extension Services (technical lead)</li> <li>EMA</li> <li>MoHCC Environmental Health Units</li> <li>RDCs/local authorities</li> <li>Producer groups/FFS networks under PMU oversight</li> </ul>
<b>Strengthening producer organizations and facilitating inclusive market and finance/insurance linkages (Component 2 / Output 2.3)</b>	<ul style="list-style-type: none"> <li>Cooperative/association rules (as applicable)</li> <li>Consumer protection and relevant commercial frameworks</li> <li>National financial sector rules (where applicable to partner products)</li> </ul>	<ul style="list-style-type: none"> <li>Transparent membership/beneficiary selection and benefit-sharing (avoid elite capture)</li> <li>Financial literacy and matchmaking to existing finance/insurance products</li> <li>Grievance redress and inclusion monitoring</li> </ul>	<ul style="list-style-type: none"> <li>PMU</li> <li>Department of Agricultural Technical and Extension Services</li> <li>RDCs</li> <li>Partner off takers/financial/insurance service providers (as applicable)</li> </ul>
<b>Climate Information Services, early warning and digital surveillance systems (Component 3)</b>	<ul style="list-style-type: none"> <li>National climate and meteorological regulations and guidelines</li> <li>National ICT and data-protection frameworks</li> <li>Relevant disaster risk management policies/strategies</li> </ul>	<ul style="list-style-type: none"> <li>Installation and operation of automatic weather stations and community rain gauges in line with MSD standards.</li> <li>Integration of CIS and early-warning messages with national DRM and sectoral systems; protection of personal data in digital reporting tools.</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Environment and Wildlife MSD</li> <li>Department of Civil Protection / line ministries responsible for DRM</li> <li>Ministry of ICT, Postal and Courier Services (for digital platforms)</li> <li>RDCs and local disaster committees</li> </ul>
<b>Institutional capacity strengthening for risk-informed planning/services (MSD, Department of Agricultural Technical and Extension Services, RDCs, Ministry of Environment and Wildlife) (Component 3 / Output 3.2)</b>	<ul style="list-style-type: none"> <li>National planning and DRM frameworks</li> <li>Sectoral guidelines (agriculture/water/climate)</li> <li>Relevant public service and training rules</li> </ul>	<ul style="list-style-type: none"> <li>Training/technical support to integrate climate-risk information into plans, service delivery, and O&amp;M systems</li> <li>Documentation of planning tools/guidance and institutional adoption</li> <li>Inclusion/participation measures tracked</li> </ul>	<ul style="list-style-type: none"> <li>MSD</li> <li>Department of Agricultural Technical and Extension Services</li> <li>RDCs</li> <li>Ministry responsible for Environment/Climate</li> <li>PMU</li> </ul>
<b>Cross-cutting safeguards, gender, learning and M&amp;E (Component 3 / Output 3.3)</b>	<ul style="list-style-type: none"> <li>Environmental Management Act and EIA Regulations (as applicable)</li> <li>AF Environmental and Social Policy requirements; IFAD SECAP alignment</li> <li>AF Gender Policy / Gender Guidance</li> <li>National gender frameworks (where applicable)</li> </ul>	<ul style="list-style-type: none"> <li>ESMP and any required plans (e.g., waste/OSH, GBV/SEA measures, land access arrangements)</li> <li>Gender Assessment and costed Gender Action Plan prepared and implemented</li> <li>GRM operational; monitoring and learning products delivered</li> </ul>	<ul style="list-style-type: none"> <li>PMU/Implementing Entity</li> <li>EMA (where applicable)</li> <li>Relevant line ministries and RDCs</li> <li>Contractors (contractual compliance)</li> </ul>

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

92. Zimbabwe already hosts several climate-resilient agriculture and water projects financed by the Adaptation Fund, GCF, IFAD, AfDB, the EU and UN agencies. Z-ADAPT is designed as **incremental**, not duplicative, by: (i) focusing on a limited set of drought-prone districts in Natural Regions IV–V with a strong horticulture and water–finance focus; (ii) using HEEP as its main baseline platform instead of creating parallel structures; and (iii) filling clearly identified gaps in climate-resilient water infrastructure for horticulture, climate-resilient finance and integrated climate information services that are only partially addressed by existing projects.
93. With respect to other **Adaptation Fund and GCF projects**, Z-ADAPT does not operate in the UNESCO AF groundwater project districts (Binga and Buhera) and instead applies compatible groundwater/MAR approaches in

other semi-arid districts while sharing lessons nationally. It is fully consistent with the GCF project “Building Climate Resilience of Vulnerable Agricultural Livelihoods in Southern Zimbabwe (FP127)”, but is more geographically focused and horticulture specific. In any districts where FP127 is also active, Z-ADAPT will target different irrigation schemes and horticultural clusters, align extension and climate information with Department of Agricultural Technical and Extension Services /MSD, and concentrate on climate-resilient finance and horticulture technologies that FP127 covers only at pilot scale, avoiding double-financing.

94. **HEEP** and legacy programmes (notably SIRP) provide the core baseline for Z-ADAPT. HEEP’s existing producer organisations and the existing infrastructure pipeline (with pre-identified schemes/garden sites and implementation arrangements) will be leveraged for targeting and delivery; however, Z-ADAPT does not rely on other projects for completion or financing, and all activities and outputs in this concept are funded through Adaptation Fund resources. Adaptation Fund resources will finance climate-proofed water and horticulture investments and associated capacity support (e.g., solarisation, MAR, shade nets and CSA packages). For former SIRP schemes, the project will build on existing completed infrastructure (where relevant) to climate-proof and extend benefits in consultation with government, rather than revisiting basic rehabilitation already completed.
95. Finally, Z-ADAPT will coordinate closely with **AfDB, EU/DeSIRA and UN-supported programmes**. AfDB’s AVCLEP project and EU’s RAIZ/DeSIRA initiative inform the design of CSA packages and value-chain support, while Z-ADAPT focuses its investments on horticulture water–energy–finance packages and scaling of proven CSA options in wards not already covered. WFP and similar partners provide short-term safety nets and community assets; Z-ADAPT complements these efforts by building long-term water security, climate-smart production systems and climate-resilient finance, ensuring synergy rather than overlap.

**Table 6: On-going Projects and Synergies**

Other Projects / Partners	Summary	Geographic Overlap	Identified Synergies
<b>1. Adaptation Fund</b> – “Strengthening Local Communities’ Adaptive Capacity and Resilience to Climate Change through Sustainable Groundwater Utilisation in Zimbabwe” (UNESCO, US\$5m)	AF project (2023–2027) in Binga and Buhera districts (Lower Gwayi and Upper Save sub-catchments) strengthening groundwater assessment and monitoring, integrated catchment management plans and piloting groundwater-based livelihoods and ecosystem restoration.	No direct geographic overlap focuses on Binga (Matabeleland North) and Buhera (Manicaland), outside the proposed Z-ADAPT districts.	<b>Synergies:</b> Z-ADAPT will apply compatible MAR/groundwater monitoring approaches in other semi-arid districts and share data/methods via MSD/EMA and catchment councils. <b>Non-duplication:</b> no AF funds used in UNESCO project sites or for the same groundwater assessments.
<b>2. GCF</b> – “Building Climate Resilience of Vulnerable Agricultural Livelihoods in Southern Zimbabwe (FP127)” (UNDP, US\$26.6m)	Seven-year project (2020–2027) supporting 2.3 million people in southern Zimbabwe to access climate-resilient water for agriculture, adopt climate-resilient practices and cropping systems, and use climate information and early warning services.	Operates across several southern provinces (including Masvingo and Matabeleland South). Potential partial overlap with Z-ADAPT provinces, but not necessarily the same irrigation schemes or horticulture clusters.	<b>Synergies:</b> Z-ADAPT will coordinate with FP127 through Department of Agricultural Technical and Extension Services /MSD to harmonise extension packages, rainfall/seasonal forecast products and farmer training. <b>Non-duplication:</b> AF resources will target specific horticulture-oriented schemes and climate-resilient finance mechanisms (revolving funds, savings/insurance) not financed by FP127, and will avoid investing in FP127’s existing irrigation or CIS sites.
<b>3. IFAD</b> – Horticulture Enterprise Enhancement Project (HEEP, US\$66.55m)	National programme (2022–2032) to increase incomes, food security and empowerment of smallholders in profitable horticulture value chains, through investments in production, aggregation, processing and market linkages.	Strong overlap in overall focus on horticulture and in some target districts; HEEP is the core baseline for Z-ADAPT.	<b>Synergies:</b> Z-ADAPT will use HEEP producer organisations as its main delivery platform. <b>Non-duplication:</b> AF financing is strictly incremental, limited to climate-resilience gaps (solarisation, MAR, shade

			nets, CSA packages, climate-resilient finance and CIS) that are not financed under the HEEP loan. No AF funds will support purely commercial, or marketing activities already funded by HEEP.
<b>4. IFAD – Smallholder Irrigation Revitalisation Programme (SIRP, US\$53.8m)</b>	Government/IFAD programme (2016–2023) which rehabilitated and modernised smallholder irrigation schemes in arid and semi-arid areas to strengthen resilience to climate and economic shocks.	Historical geographic overlap in some irrigation schemes in Matabeleland South and Masvingo, but SIRP has closed and most works are completed.	<b>Synergies:</b> Z-ADAPT may build on SIRP legacy infrastructure (e.g. adding solar pumps, MAR or CSA packages) where appropriate, in consultation with authorities. <b>Non-duplication:</b> no AF financing of basic rehabilitation works already financed under SIRP; focus is on incremental climate-proofing and O&M capacities.
<b>5. AfDB – Zimbabwe Agricultural Value Chain and Livelihoods Enhancement Project (AVCLEP, US\$10.12m)</b>	Four-year project to enhance sustainable crop and livestock production, strengthen value chains and build climate resilience in drought-prone rural regions, benefiting about 7,000 livestock farmers and 42,000 crop farmers.	Works in selected drought-prone districts; some broad regional overlap with Z-ADAPT but focus is on mixed crop–livestock value chains rather than horticulture clusters.	<b>Synergies:</b> coordination through government platforms to align CSA packages and market support, and explore joint use of infrastructure where feasible. <b>Non-duplication:</b> Z-ADAPT will prioritise horticulture-specific water/finance interventions and wards not targeted by AVCLEP; it will not fund the same value-chain infrastructure.
<b>6. EU DeSIRA – RAIZ “Resilience Building through Agroecological Intensification in Zimbabwe”</b>	Research-for-development project led by CIMMYT, CIRAD and the University of Zimbabwe, testing agroecological and climate-smart practices in selected districts (e.g. Mutoko) to generate evidence for policy and scaling.	Limited geographic overlap: mainly research sites in specific districts outside the main Z-ADAPT focus area.	<b>Synergies:</b> Z-ADAPT will use RAIZ evidence to inform its CSA technology packages and policy dialogue, and may invite RAIZ partners to national learning events. <b>Non-duplication:</b> AF resources will not fund research trials already financed by RAIZ; instead, they will support scaling of validated practices through FFS and producer organisations.
<b>7. Other resilience and food-security programmes (e.g. WFP and FAO climate resilience and ZRBF-type initiatives)</b>	Humanitarian and resilience-building projects combining food assistance with climate-adaptive practices and community asset creation in selected rural districts.	Possible overlap at ward/district level in broader southern Zimbabwe, but with different instruments and timeframes.	<b>Synergies:</b> Z-ADAPT will coordinate targeting with these programmes through district coordination fora, and may use their community structures as entry points. <b>Non-duplication:</b> AF resources will not be used for short-term food assistance or public works already funded by these programmes; they focus on long-term water, CSA and finance systems.

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

96. The project Z-ADAPT will generate and package evidence on “what works” in climate-resilient horticulture, groundwater management, climate-smart finance and participatory climate information services in semi-arid districts of Zimbabwe. Lessons will be captured systematically through Farmer Field Schools, Water Point/Water User Committees, Local Adaptation Plan processes, and regular reflection sessions with district and national partners (Department of Agricultural Technical and Extension Services, MSD, EMA, RDCs, financial institutions and HEEP PMU). Simple, gender-sensitive monitoring tools (e.g. seasonal learning logs, outcome stories) will be used so that women and youth can document changes in workloads, incomes, decision-making and risk exposure.
97. A dedicated knowledge management workstream under Component 3 (Output 3.3.1) will translate this field experience into user-friendly products and processes. These include: (i) technical briefs and step-by-step guides on solar-powered irrigation, sand and sub-surface dams, climate-smart horticulture and revolving funds; (ii) case studies and “resilience stories” co-produced with communities, highlighting gender and youth leadership; (iii) short videos, radio programmes and social media content in local languages; and (iv) policy notes for national platforms on groundwater governance, CIS and climate-resilient finance. All materials will be aligned with national extension curricula and stored in HEEP and government knowledge platforms, so they remain accessible beyond the project period.
98. Learning will be embedded in multi-level exchange mechanisms. At local level, cross-visits among schemes and wards will allow Water Point Committees, FFS groups and savings/credit groups to compare different technologies and governance arrangements. At national level, the project will organise periodic learning events with ministries, development partners and civil society to feed evidence into implementation of the NDC, NAP and sector strategies. Regionally and globally, Z-ADAPT will contribute lessons and products to IFAD and Adaptation Fund knowledge platforms and South-South exchanges (particularly with other AF and GCF projects in Southern Africa), ensuring that Zimbabwe’s experience with climate-resilient horticulture, groundwater recharge and climate-resilient finance informs replication and scaling in other fragile dryland contexts.

**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.**

99. **Overall approach:** The Z-ADAPT design has been informed by a systematic, multi-tiered consultative approach that leverages HEEP targeting and stakeholder interaction frameworks. Consultations were conducted to: (i) validate the climate risk assessment for semi-arid horticulture value chains; (ii) identify priority adaptation strategies for water, agriculture, finance, and information services; and (iii) ensure that women, youth, and other marginalized groups were able to articulate their specific challenges and preferences. The approach combines national-level policy dialogue, province and district-level workshops, community-level discussions and dedicated gender and youth consultations, in line with the Adaptation Fund Environmental and Social Policy (ESP) and Gender Policy.
100. **Provincial and district-level consultations:** A provincial stakeholder engagement was conducted throughout four districts: Masvingo, Midlands, Matabeleland South, and Manicaland, adopting a structured KoboToolbox<sup>83</sup> survey and led workshops. More than 118 respondents participated, representing members from smallholder farmer groups, producer organizations, Department of Agricultural Technical and Extension Services, EMA, Zimbabwe National Water Authority, ARDA, RIDA, municipal authorities, and civil society organizations.
101. Participants concurred that droughts, heatwaves, and prolonged dry spells are the key hazards impacting horticulture, causing lower yields, constrained irrigation systems, and declining soil health. They prioritized climate-smart irrigation, water harvesting, integrated soil and water conservation, and climate-resilient livelihood strategies as the most essential interventions. The previously mentioned priorities directly determined the three components of Z-ADAPT: climate-resilient water and horticulture infrastructure (Component 1), climate-smart agriculture and climate-resilient financing (Component 2), and integrated climate information and institutional capacity (Component 3).
102. **Validation of project components and geographic targeting:** Subsequent district meetings in potential districts, including Masvingo and Midlands, carried out with farmers' groups, local authorities, and technical agencies, with

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<sup>83</sup> IFAD HEEP Design Report:

attendance records duly documented. The sessions confirmed the emphasis on community solar boreholes, sand and sub-surface dams, managed aquifer recharge, micro-irrigation kits, protected agriculture, and climate-resilient revolving finances. Stakeholders assisted in enhancing geographic targeting (ward/scheme clusters), validated community preparedness to provide labor and in-kind resources, and determined preferred channels for climate information (SMS/USSD, community radio, Farmer Field Schools, and extension services). The outcomes are directly represented in Components 1–3.

103. **Gender-responsive and youth-focused consultations:** A consultation with focused women and youth civic organizations was held to ensure compliance to the AF Gender Policy and IFAD's SECAP standards. The meeting convened representatives from the Ministry of Women Affairs, Community, Small and Medium Enterprise Development; the Ministry of Youth Empowerment, Development and Vocational Training; the MLAFWRD Gender Mainstreaming, Inclusivity and Wellness Department; the Community Technology Development Organisation (CTDO); UNDP's Smallholder Agricultural Climate Programme (SACP); and the HEEP Project Management Unit. The objectives were to: (i) assess the feasibility and relevance of proposed climate-resilient interventions responsive to women and youth; (ii) find synergies with existing programs; and (iii) assure conformity with national gender and youth priorities.
104. **Key findings from gender and youth consultations:** Stakeholders identified significant knowledge gaps regarding gender-responsive climate-smart technologies in rural regions; inadequate partnerships and coordination concerning women- and youth-oriented climate technologies; limited participatory and inclusive planning; and low adoption of suggested technologies due to insufficient research, trials, and customized financing. Recommendations included: (i) conducting inclusive needs assessments applying participatory and gender-sensitive methodologies such as GALS; (ii) implementing targeted capacity-building initiatives for women and youth focused on climate-smart agriculture, water stewardship, and community-based water monitoring; (iii) creating climate-adaptive microfinance products and "gender-smart accelerator" funds for agribusinesses led by women and youth; (iv) enhancing mapping and collaboration among stakeholders advocating for gender-climate initiatives; and (v) implementing gender- and age-disaggregated indicators systematically in monitoring and evaluation processes.
105. **Integration into project design:** The findings from the consultation with women and youth civic organizations have been fully incorporated into the Z-ADAPT design. Component 2 includes climate-resilient financial instruments, value-chain training, and business development services aimed at women and youth, whereas Component 3 facilitates inclusive Local Adaptation Plans, gender-sensitive community-based water and climate information systems, and a gender- and age-disaggregated monitoring and evaluation framework. This guarantees that women and youth are not merely recipients but also proactive participants in the formulation, execution, and governance of adaptation strategies, according with the AF ESP principles regarding access and equity, marginalized and vulnerable populations, gender equality, and women's empowerment.

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

106. The requested Adaptation Fund (AF) grant of **USD 12 million** will finance the full **incremental cost of climate adaptation** in Zimbabwe's drought-prone Natural Regions IV and V, targeting Chiredzi, Mwenezi, Masvingo and Matobo. Consistent with the AF's incremental cost principle, the project focuses on those investments that **directly address current and projected climate risks (drought, heat stress, increasingly erratic rainfall)** and are not "business-as-usual" rural development.
107. Without AF financing, baseline programmes would continue to address water and agricultural development needs, but would be unable to systematically finance the *additional* design, technology, and institutional measures required to perform under a hotter, drier, more variable climate such as solar with storage buffers, sub-surface storage to reduce evaporation losses, managed recharge to protect groundwater reliability, climate-proofed conveyance, and last-mile climate services that translate forecasts into early action. AF financing therefore pays for the **adaptation-specific "additionality"** needed to ensure assets and services remain functional during prolonged dry spells and heatwaves, and to reduce exposure of livelihoods and infrastructure to climate extremes. **Budget structure and full-cost reasoning (USD 12.0m):** The project's activity costs are concentrated in three components that deliver measurable, climate-risk-reducing outputs at scale, including **5,000 households (25,000 people)** reached through water security and climate-smart production packages. Component costs at Concept Note stage are **Component 1: USD 5.90m** (climate-proofed water supply/irrigation and drought buffering). **Component 2: USD 3.20m** (CSA technologies, diversified livelihoods and climate-resilient finance linkages). and **Component 3: USD 1.00m** (last-mile early warning/climate advisory services plus safeguards, gender and learning/M&E). These activity costs are complemented by AF-eligible execution support and the Implementing Entity fee in line with AF cost norms (9.5% project execution cost and 8.5% IE fee), to ensure adequate implementation, fiduciary assurance, safeguards delivery and results monitoring.

**Table 7. Adaptation Fund additionality**

Business as usual scenario Climate change risks and challenges (baseline scenario)	Adaptation Fund additionality
<b>Component 1. Climate-proofed water supply and irrigation</b>	
<p>Recurrent and <b>longer droughts, higher temperatures</b> and <b>increased evapotranspiration</b> are reducing surface water flows and groundwater recharge, making dry-season water access unreliable for horticulture and priority domestic use. Increasing rainfall variability and occasional intense storms raise runoff, erosion and sedimentation risks, damaging small reservoirs and water points and reducing effective storage.</p> <p>Under the baseline, rural water and irrigation investments may continue, but <b>assets remain partly conventional and climate-sensitive</b> (limited storage buffers; high evaporation and conveyance losses; weak drought-period governance/O&amp;M), leading to seasonal interruptions and repeated rehabilitation.</p>	<ul style="list-style-type: none"> <li>Climate-resilient water security package (drought buffering + reduced losses + governance):</li> <li>200 SPIS sites installed/upgraded with 10,000-20,000 L storage per site, serving 5,000 households (25 HH/site) for year-round horticulture and priority domestic use where feasible.</li> <li>35 sand/sub-surface storage structures (indicatively 25 sand dams + 10 sub-surface dams; final mix at FP stage) on seasonal rivers to buffer dry-season water for horticulture/livestock and protected abstraction where feasible.</li> <li>Governance and O&amp;M coverage aligned to assets: 200 site-level water user committees for SPIS and governance arrangements for 35 storage sites (site committees/sub-committees or clustered committees), meeting inclusion targets (50% women; 30% youth).</li> <li>Micro-catchment protection (EbA) linked to assets (recharge-zone protection, gully stabilisation, vegetative buffers/windbreaks) and basic groundwater/asset monitoring/reporting into CIS (final footprint and site list confirmed at FP stage).</li> </ul> <p><b>Adaptation benefit:</b> reliable dry-season access + reduced evaporation/seepage losses + reduced siltation/damage risk + sustained asset functionality under drought/heat extremes.</p>
<b>Component 2 – Climate-smart horticulture and diversified livelihoods</b>	
<p>Hotter and drier seasons, more frequent mid-season <b>dry spells</b> and <b>heat waves</b> shorten growing periods and increase crop water demand, raising the risk of crop failure and quality losses. <b>Water scarcity constrains</b> smallholder horticulture and pushes households to rely on low-return, rain-fed systems and coping strategies that can undermine long-term resilience.</p> <p>Under the baseline, households remain <b>highly dependent on rain-fed</b>, heat-sensitive production with limited access to efficient irrigation application, protective production, soil moisture conservation and diversified income options; standalone pilots and input support may occur, but with weak uptake and limited scalability, and finance/revolving schemes remain vulnerable to drought shocks.</p>	<ul style="list-style-type: none"> <li>CSA adoption at scale linked to water-secure sites (quality over scattered pilots):</li> <li>150 Farmer Field Schools (FFS) operational, reaching 7,500 farmers trained (50% women; 30% youth) on drought/heat-responsive practices and seasonal decision-making.</li> <li>Water-efficient horticulture packages for households linked to Component 1 water assets, including micro-irrigation adoption and scheduling support (final unit numbers confirmed at FP stage, aligned with water-secure sites).</li> <li>100-150 protected production structures (shade-nets/low tunnels) installed in the most drought/heat-prone water-secure sites (to be confirmed at FP stage).</li> <li>50 demonstration plots (micro-irrigation vs conventional; protected vs open field) with performance tracking to support replication via extension systems.</li> <li>Producer organisation strengthening (indicatively 30-40 groups) for aggregation/marketing and facilitated linkages to existing finance/savings/insurance services</li> </ul> <p><b>Adaptation benefit:</b> higher “crop-per-drop”, reduced heat stress losses, improved soil moisture buffering, diversified income less sensitive to drought years, and scalable adoption through existing systems.</p>
<b>Component 3. Climate information, EWS and institutional capacity (incl. safeguards, gender, learning/M&amp;E)</b>	
<p>Increasing drought frequency, heat stress and erratic rainfall require timely, <b>localised early warning</b> and <b>climate advisory services</b> to enable anticipatory actions (e.g., planting and irrigation scheduling, water allocation decisions, and protection of water assets) and to reduce losses from extremes. However, last-mile dissemination, user decision-support and feedback loops remain limited in vulnerable rural areas, and information is not systematically linked to community planning, water governance and early action protocols.</p> <p>Under the baseline, <b>hydro-meteorological services</b> and dissemination pathways <b>exist</b>, but are <b>insufficiently resourced</b> to deliver tailored advisories at scale in the targeted districts; institutional capacity for early action planning, and for safeguards, gender mainstreaming and learning/M&amp;E remains constrained-</p>	<ul style="list-style-type: none"> <li>Operational last-mile EWS/CIS + enabling capacity and compliance:</li> <li>Output 3.1 (USD 450,000): locally actionable advisories strengthened for last-mile delivery (co-produced advisories, dissemination bundles, user training/early action uptake, feedback loops), reaching ~15,000 farmers/households through combined channels (final reach confirmed at FP stage).</li> <li>Output 3.2 (USD 250,000): institutional capacity strengthened across MSD, Department of Agricultural Technical and Extension Services, RDCs and Ministry responsible for Environment/Climate to integrate climate risk information into planning and services (inclusive access for women/youth/vulnerable groups).</li> <li>Output 3.3 (USD 300,373): AF compliance and learning delivered: ESP screening and FP-stage ESMP preparation, functional GRM support, Gender Assessment and budgeted</li> </ul>

<p>raising risks of delayed response, exclusion and unmitigated E&amp;S impacts.</p>	<p>Gender Action Plan (GAP), results monitoring and learning/knowledge capture.  <b>Adaptation benefit:</b> converts forecasts into early action; strengthens sustained risk-informed planning; reduces implementation, exclusion and harm risks through funded safeguards/gender/M&amp;E.</p>
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**J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.**

**108. Overall sustainability approach:** Z-ADAPT has been designed for ensuring that the benefits of climate-resilient water, horticulture, and livelihood systems in the drought-prone areas of Masvingo and Matabeleland South persist long after the funding's term. Sustainability is aimed at across five dimensions: (i) institutional and policy foundation; (ii) financial and economic feasibility; (iii) technical resilience and operation and maintenance (O&M); (iv) environmental coherence; and (v) social, gender, and youth engagement. The project leverages IFAD's sustained involvement in Zimbabwe's semi-arid Natural Regions IV and V, along the strong national policy framework for climate-resilient agriculture and water management.

**109. Institutional and policy sustainability:** The project will be implemented using existing national frameworks, specifically the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MLAFWRD), in collaboration with Ministry of Environment and Wildlife (MoEW) and ARDA, instead of establishing parallel entities. Ward and district-level entities (Rural District Councils, Department of Agricultural Technical and Extension Services, Water Point/Water User Committees, producer organizations, and financial institutions) are assigned explicit responsibilities for the development, operation, and governance of the new assets and services. Local Adaptation Plans and climate-risk-informed by-laws will legally integrate these roles into local planning and regulatory frameworks, guaranteeing the persistence of climate-resilient water allocation regulations, land-use controls, and gender-equitable governance structures post-project completion. The design is consistent with the National Climate Policy, the Climate Change Response Strategy, the Nationally Determined Contributions (NDC), and the National Adaptation Plan (NAP) process, enabling the replication of project models with domestic and international financing.

**110. Financial and economic sustainability:** The project intentionally integrates grant-supported public assets (such as water infrastructure, climate information services, and ecosystem restoration) and with sustainable operations and maintenance (O&M) arrangements to ensure continued functionality beyond Adaptation Fund (AF) financing. Sustainability will be achieved through: (i) community-agreed tariff/user charge frameworks for solar-powered water systems that cover routine O&M and minor repairs, supported by transparent rules and gender-equitable oversight by Water User/Water Point Committees; (ii) practical asset management systems (preventive maintenance schedules, minor repair planning, spare-parts access pathways, and trained local caretakers/technicians); and (iii) strengthened producer organisation capacity and market linkages that improve the economic viability of climate-resilient horticulture and incentivise continued maintenance of assets.

**111. Technical and operational sustainability:** All significant investments emphasize cost-effective, low-maintenance technologies that can be locally installed, operated, and repaired: solar pumps in lieu of diesel engines; gravity-fed or low-pressure drip irrigation; sand and sub-surface dams; uncomplicated managed aquifer recharge structures; and climate-resilient seed varieties and agronomic practices. Designs adhere to national technical requirements and are guided by climate projections to ensure infrastructure is appropriately scaled for hotter, drier conditions. Local professionals, extension officials, and community technicians, including youths, will receive training in installation, troubleshooting, and proactive upkeep, accompanied by user-friendly operation and maintenance manuals and spare parts plans for each project. This reduces dependence on external contractors and reduces the risk of non-operational "stranded" assets.

**112. Environmental and social sustainability (including gender and youth):** By combining ecosystem-based adaptation (such as gully and riverbank rehabilitation, vegetative buffers, agroforestry, and soil-moisture conservation) with grey infrastructure, the project supports or improves ecosystem services that enhance water and agricultural resilience, thus increasing the effectiveness and impact of physical investments. Effective implementation of the Adaptation Fund Environmental and Social Policy, IFAD's SECAP, and national safeguard mechanisms will prevent maladaptation and mitigate site-specific hazards (e.g., groundwater over-extraction, land tenure disputes). Consultations that are gender-responsive and youth-focused have guided the design; quotas for women and youth in committees, specialized capacity development, and customized financial products ensure that those who support a greater portion of the climate and household challenges are granted authority to make decisions while gaining direct economic benefits. This inclusive strategy enhances local ownership and the probability that the practices,

institutions, and finance mechanisms established by Z-ADAPT will be sustained, modified, and expanded by communities and government following the project's conclusion.

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

113. **Overall categorisation and approach:** Z-ADAPT has been classified as **Substantial** environmental and social risk under IFAD's SECAP, given the nature of its infrastructure and natural resource management investments. In line with SECAP, Z-ADAPT therefore adopts an overall E&S risk categorisation of **Substantial**. Under the Adaptation Fund Environmental and Social Policy (ESP), Z-ADAPT is preliminarily categorised as **Category B**, as potential adverse impacts are site-specific, reversible and can be effectively managed through standard mitigation measures. E&S requirements and mitigation measures (including the Environmental, Climate and Social Management Framework - ESCMF) will be applied to Z-ADAPT investments in the four target districts.

114. Consistent with the Adaptation Fund Environmental and Social Policy (ESP 2016), and IFAD's SECAP, the project will apply a risk-proportionate safeguards approach. Concept Note screening confirms an overall Category B classification under the Adaptation Fund ESP and an overall Substantial E&S risk categorisation under IFAD SECAP. At full proposal stage and prior to commencement of civil works, screening will be confirmed and updated and the relevant instruments (updated ESCMF and project-specific ESMPs, Stakeholder Engagement Plan and Gender Action Plan, Pesticide/Agrochemical Management Plan, and project-level GRM procedures) will be prepared, disclosed and implemented in accordance with AF and IFAD requirements.

115. **Consistency between AF ESP and IFAD SECAP:** Screening has been undertaken using both IFAD's SECAP tools and the Adaptation Fund's checklist against the ESP's 15 environmental and social principles. The SECAP screening tool has been reviewed and revised to reflect the specific Z-ADAPT activities. While IFAD's system provides granular, sector-specific questions (e.g. on invasive species, labour influx, agrochemicals, land tenure, GBV), the AF ESP focuses on higher-level principles such as compliance with the law, access and equity, marginalized groups, natural habitats, pollution prevention and resource efficiency. The Z-ADAPT risk screening therefore:

- Maps "Substantial" SECAP risks to the AF framework,
- Confirms that all relevant AF principles are triggered at least at a low or moderate level, and
- Identifies a limited set of priority risks requiring focused mitigation, as summarised below.

At full proposal stage, an updated ESMP, Stakeholder Engagement Plan (SEP), Gender Action Plan and project-specific GRM procedures will be prepared or updated to ensure full compliance with both IFAD SECAP and AF ESP requirements, following the guidance for Category B projects.

116. **Key environmental risks:** The main environmental risks consistent with an overall **Substantial** E&S risk categorisation under IFAD SECAP and **Category B** under the Adaptation Fund ESP include:

- **Water resources and aquifers (Natural habitats, Biodiversity, Climate change, Pollution prevention and resource efficiency).**
- **Soil erosion, land degradation and vegetation loss (Conservation of biological diversity, Lands and soil conservation).**
- **Agrochemicals and pollution (Pollution prevention and resource efficiency, public health).**
- **Construction-related impacts and waste.**

117. **Key social risks:** Social risks are largely linked to access, equity and inclusion, assessed as moderate but manageable through the project's strong social inclusion and gender approaches and complementarity with HEEP's ESCMF.

- **Access, equity and conflict over land and water.**
- **Marginalized and vulnerable groups (Gender equity, marginalized groups, human rights).**
- **Labour, OHS and child labour (Core labour rights, public health).**
- **Gender-based violence (GBV), SEA/SH and elite capture.**

118. **Risk management and next steps:** Given these characteristics, Z-ADAPT's overall E&S risk profile is Substantial under IFAD SECAP and Category B under the Adaptation Fund ESP, with impacts that are site-specific, reversible and manageable through standard mitigation measures. At full proposal stage, the following instruments will be prepared or updated and disclosed in line with AF and IFAD requirements:

- Updated Environmental, Climate and Social Management Framework (ESCMF).
- Detailed Stakeholder Engagement Plan and Gender Action Plan.

- Strengthened Pesticide/Agrochemical Management Plan.
- Project-specific GRM aligned with both IFAD and national systems.
- Targeted Adaptation Assessment to refine and prioritise climate risk management measures, consistent with the Substantial climate risk screening results.

**Table 8: Overview of ESP Risk Assessment (Adaptation Fund Category B; IFAD SECAP Substantial)**

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>ESP 1: Compliance with the Law</i>		<b>Low risk (C).</b> Project will comply with national laws (Environmental Management, Water, Public Health, Labour, land) and IFAD SECAP / AF ESP. FP-stage screening will confirm permits/approvals and embed legal compliance measures in the ESMP and contractor clauses.
<i>ESP 2: Access and Equity</i>		<b>Low risk / positive impact (C).</b> Design expands equitable access to climate-resilient water, services and finance using pro-poor targeting, gender/youth quotas and a GRM to avoid exclusion or elite capture. FP-stage stakeholder engagement will confirm targeting criteria and benefit-sharing arrangements, with disaggregated monitoring.
<i>ESP 3: Marginalized and Vulnerable Groups</i>		<b>Low risk / positive impact (C).</b> Z-Project explicitly targets food-insecure smallholders, women, youth and persons with disabilities in high-risk wards; SEP and Gender & Youth Action Plan ensure their needs are identified and addressed.
<i>ESP 4: Human Rights</i>		<b>Low risk (C).</b> Supports rights to food, water and information via improved water security, resilient livelihoods and CIS; participation, FPIC-based consultations and GRM safeguard civil and socio-economic rights.
<i>ESP 5: Gender Equality and Women's Empowerment</i>		<b>Moderate risk, strong positive potential (B).</b> Scaling up horticulture and infrastructure may increase women's time burden and GBV/SEA risks. A detailed Gender Action Plan, gender-responsive targeting, safe design of water points and GBV/SEA prevention and response measures will be implemented and monitored in the <b>ESMP</b> .
<i>ESP 6: Core Labour Rights</i>		<b>Moderate risk (B).</b> Construction and farm activities may pose OSH and labour-rights risks. The project will apply the Labour Act and IFAD standards (no child/forced labour, OSH clauses in contracts, safety training and supervision under the <b>ESMP</b> ).
<i>ESP 7: Indigenous Peoples</i>		<b>No risk (C).</b> No Indigenous Peoples as defined by the AF ESP in target districts; areas are inhabited mainly by smallholder farming communities with customary land rights. Zimbabwe does not formally recognise Indigenous Peoples as a distinct legal category; therefore, the project does not assume the presence of "officially recognised" Indigenous Peoples in the target districts. However, some communities self-identify as Indigenous although not formally recognised by the Government <sup>84</sup> Where identified, the project will apply culturally appropriate engagement, inclusive targeting and documented consultations. If differentiated impacts are possible, Free, Prior and Informed Consultation will be applied and FPIC will be sought where required by the AF ESP. Implementation will be monitored through the GRM, beneficiary feedback and disaggregated participation tracking.
<i>ESP 8: Involuntary Resettlement</i>		<b>Moderate risk (B).</b> Works are largely within existing schemes/communal lands, but small areas may be needed for pipes, tanks or recharge structures and new water-use rules may affect access. A Land Access Framework and site agreements will ensure voluntary land contributions or fair compensation/benefit sharing and avoid involuntary physical/economic displacement.
<i>ESP 9: Protection of Natural Habitats</i>		<b>Moderate risk (B).</b> Sand/sub-surface dams, boreholes and irrigation rehabilitation near rivers or wetlands could disturb habitats or alter flows. Screening will exclude critical habitats; <b>ESMPs</b> will define buffer zones, abstraction limits and site rehabilitation using EbA measures.
<i>ESP 10: Conservation of Biological Diversity</i>		<b>Moderate risk (B).</b> Local vegetation clearance and intensification may affect on-farm biodiversity and human-wildlife interactions (as flagged in HEEP SECAP). Project promotes diversified cropping, agroforestry and IPM, avoids invasive species and uses <b>site-level ESMPs</b> and extension to maintain/enhance biodiversity.
<i>ESP 11: Climate Change</i>		<b>Low risk / positive impact (C).</b> Core objective is to reduce climate vulnerability. Solar pumps and efficient irrigation reduce emissions vs diesel baselines; no large dams or high-emission activities are planned. A simple GHG/climate-risk check will avoid maladaptation.
<i>ESP 12: Pollution Prevention and Resource Efficiency</i>		<b>Substantial risk (B; consistent with IFAD SECAP "Substantial" rating).</b> Expanded irrigation/horticulture will increase water abstraction and fertiliser/pesticide use. The project will apply IWRM and water-use plans, promote efficient irrigation, ISFM and IPM, and enforce safe storage/handling/disposal of agro-chemicals and containers, plus resource-efficiency measures in <b>ESMPs</b> .
<i>ESP 13: Public Health</i>		<b>Moderate risk (B).</b> New water storage/irrigation may raise vector- and water-borne disease risks; agro-chemical exposure and GBV/SEA are also concerns. WASH and health promotion, safe agro-chemical protocols (PPE, IPM) and GBV/SEA mitigation and response procedures will be integrated into the <b>ESMP and GRM</b> .
<i>ESP 14: Physical and Cultural Heritage</i>		<b>Low risk (C).</b> No known heritage sites in proposed schemes and works are small-scale within existing footprints; chance-find procedures will be included in ESMPs and contractor contracts.
<i>ESP 15: Lands and Soil Conservation</i>		<b>Low risk (C).</b> Z-ADAPT supports CA/ISFM, contouring, mulching, agroforestry/windbreaks and gully control, with soil/erosion measures

<sup>84</sup> <https://iwgja.org/en/zimbabwe.html>

## PART III: IMPLEMENTATION ARRANGEMENTS

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

119. The project contributes directly to **AF Outcomes 3, 4, and 6**, and secondarily to Outcome 8, by: (i) generating and disseminating climate and hazard information and strengthening local early-warning and advisory systems; (ii) climate-proofing critical water and horticulture infrastructure; (iii) scaling climate-smart horticulture, soil and water conservation, and ecosystem-based adaptation; and (iv) diversifying and strengthening climate-resilient livelihoods and financial inclusion for women, youth and other vulnerable groups. The table below summarizes the alignment between Z-ADAPT outcomes and the Adaptation Fund Results Framework.

**Table 9: Alignment with AF Results Framework**

Project Outcomes	Project Outcome indicators	Adaptation Fund Outcome	Fund Outcome Indicator	AF Grant Amount (USD)
<b>Component 1. Climate-proofed water supply and irrigation</b>				
<b>Outcome 1.1</b> Reliable, climate-resilient water supply for horticulture (and priority domestic use where feasible) established in targeted wards.	-Number of households with reliable dry-season access to climate-resilient water supply for horticulture (and where feasible domestic use) through operational climate proofed water assets (SPIS and sub-surface storage structures)	<b>Outcome 4:</b> Increased adaptive capacity within relevant sectors and development services.	<b>4.2</b> Physical infrastructure improved to withstand climate change and variability-induced stress.	<b>5,200,000</b>
<b>Outcome 1.2:</b> Ecosystem services and local water governance strengthened to sustain climate-resilient infrastructure and reduce exposure of assets to climate extremes.	- Area (ha) under ecosystem-based adaptation / micro-catchment rehabilitation protection of project supported water assets. Support by functional water use / water points committees with O&M and drought allocations rules (including 50% women; and 30% youth).	<b>Outcome 5:</b> Increased ecosystem resilience in response to climate change and variability-induced stress.	<b>5</b> Natural resource assets maintained or improved under climate change and variability-induced stress.	<b>320,000</b>
<b>Component 2 – Climate-smart horticulture and diversified livelihoods</b>				
<b>Outcome 2.1</b> Enhanced adaptive capacity and livelihood resilience of vulnerable households through climate-resilient practices, technologies and inclusive market linkages	Beneficiary households adopting climate-resilient production practices and accessing climate-resilient finance/income diversification options.	<b>Outcome 6:</b> Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.	<b>6.1</b> % of households and communities having more secure access to livelihood assets	<b>3,200,000</b>
<b>Component 3. Climate information, EWS and institutional capacity (incl. safeguards, gender, learning/M&amp;E)</b>				
<b>Outcome 3.1</b> Operational last-mile early warning and climate advisory services in targeted wards and strengthened institutions for sustained risk-informed planning and response.	Targeted people and institutions receiving and using climate advisories and early warnings and applying risk-informed planning and action protocols, supported by operational accountability and learning systems (sex and age disaggregated).	<b>Outcome 3:</b> Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level. <i>(also contributes to Outcomes 1 &amp; 2 through EWS coverage and capacity strengthening)</i>	<b>3.2</b> % targeted population applying appropriate adaptation responses.	<b>1,000,373</b>
<b>Project Outputs</b>	<b>Project Output Indicators</b>	<b>Fund Output</b>	<b>Fund Output Indicator</b>	<b>Grant Amount (USD)</b>
<b>Component 1. Climate-proofed water supply and irrigation</b>				
<b>Output 1.1.1.</b> Solar-powered irrigation systems (SPIS) with storage installed/upgraded and operational (approx. 200 SPIS sites), serving 5,000 households.	- Number of SPIS sites installed/upgraded with storage and operational (approx. 200).	<b>Output 4:</b> Vulnerable physical assets strengthened to withstand climate variability and change.	<b>4.1.2</b> Total number of physical assets strengthened or constructed to withstand climate variability and change (by type).	3,600,000
<b>Output 1.1.2.</b> Climate-resilient water storage increased through sand/sub-surface dams (streamlined: 35 structures total).	- Number of sand/sub-surface storage structures constructed and operational (approx. 35).	<b>Output 4:</b> Vulnerable physical assets strengthened to withstand climate variability and change.	<b>4.1.2</b> Total number of physical assets strengthened or constructed to withstand climate variability and change (by type).	1,600,000
<b>Output 1.1.3.</b> Water governance and O&M strengthened for	- Number of functional water user and water points committees managing project	<b>Output 2.1:</b> Strengthened institutional capacity to	<b>2.1.2:</b> No. of targeted institutions with increased	380,000

climate-resilient assets (50% women; 30% youth).	supported water assets (meeting 50% women; 30% youth)	reduce risks associated with climate-induced losses	capacity to minimize exposure to climate risks	
<b>Output 1.2.1.</b> EbA for micro-catchment rehabilitation implemented and linked to protection of water assets and basic monitoring/reporting into CIS.	- Area (ha) under EbA / micro-catchment rehabilitation measures implemented (5,000 ha)	<b>Output 5:</b> Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	<b>5.1:</b> No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	320,000
<b>Component 2 – Climate-smart horticulture and diversified livelihoods</b>				
<b>Output 2.1.1.</b> Adaptive capacity strengthened through Farmer Field Schools (FFS) and seasonal training/coaching.	- Number of farmers trained and coached through Farmer Field Schools on climate-resilient horticulture and water management (sex and age disaggregated).	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	<b>6.1.1:</b> No. and type of adaptation assets created/strengthened supporting livelihood strategies	1,200,000
<b>Output 2.1.2.</b> Climate-resilient production technologies deployed and demonstrated in water-secure sites linked to Component 1.	- Number and type of climate-resilient production technology packages and structures installed and demonstrated (e.g., micro-irrigation efficiency packages, shade nets/low tunnels).	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	<b>6.1.1:</b> No. and type of adaptation assets created/strengthened supporting livelihood strategies	1,550,000
<b>Output 2.1.3</b> Producer organisations strengthened and linkages facilitated to off-takers/4P arrangements and existing finance/insurance services.	- Number of producer organisations strengthened with functional aggregation and markets linkages for climate resilient horticulture.	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	<b>6.2.1:</b> No. of targeted households with sustained climate-resilient alternative livelihoods	450,000
<b>Component 3. Climate information, EWS and institutional capacity (incl. safeguards, gender, learning/M&amp;E)</b>				
<b>Output 3.1.1</b> Early warning and climate advisory services strengthened for last-mile delivery in targeted wards (locally relevant advisories, dissemination pathways, user training and community feedback loops).	- Number of targeted people reached with actionable climate advisories and early warnings (sex and age disaggregated).	<b>Output 1.2:</b> Targeted population groups covered by adequate risk reduction systems	<b>1.2.1:</b> % of targeted population covered by adequate risk reduction systems	450,000
<b>Output 3.1.2.</b> Institutional capacity strengthened across MSD, Department of Agricultural Technical and Extension Services, Rural District Councils and Ministry responsible for Environment/Climate to integrate climate risk information into planning and services.	- Number of targeted institutions applying climate risk information/tools in plans and services	<b>Output 2.1:</b> Strengthened institutional capacity to reduce risks associated with climate-induced losses	<b>2.1.2:</b> No. of targeted institutions with increased capacity to minimize exposure to climate risks	250,000
<b>Output 3.1.3.</b> Cross-cutting safeguards, gender, learning and M&E delivered (AF ESP screening and FP-stage ESMP; Gender Assessment and budgeted GAP; learning and results monitoring).	Number of safeguards, gender and learning and M&E tools and systems developed and disclosed and operational (e.g., ESMF, ESMP, SEP, GRM, budgeted GAP, learning products).	<b>Output 3.2:</b> Strengthened capacity to capture, disseminate and implement knowledge and lessons learned	<b>3.2.2:</b> No. of tools/guidelines/knowledge products developed and shared	300,373

<sup>1</sup> The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology, but the overall principle should still apply

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

### A. Record of endorsement on behalf of the government<sup>2</sup>

Mr Washington Zhakata Chief Director Climate Change and Wildlife Ministry of Environment, Climate, and Wildlife, Zimbabwe	Date: December 18, 2025
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### B. Implementing Entity certification

<sup>6</sup> 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.

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 Zimbabwe and subject to the approval by the Adaptation Fund Board, 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.

<b>Implementing Entity Coordinator</b>	
Mr Pierre Yves Guedez, Lead, Multilateral Climate and Environmental Funds ECG Division, IFAD Email: <a href="mailto:p.guedez@ifad.org">p.guedez@ifad.org</a>	
	
<b>Director</b>	
Juan Carlos Mendoza Casadiegos Environment, Climate, Gender, and Social Inclusion Division	
Date: 02/06/2026	Tel. and email: <a href="mailto:ecgmailbox@ifad.org">ecgmailbox@ifad.org</a>
<b>Project Contact Person:</b>	
Mr Claus Reiner Regional Climate and Environment Specialist East and Southern Africa, ECG Division, IFAD Tel : +254 793 484 367 Email : <a href="mailto:c.reiner@ifad.org">c.reiner@ifad.org</a>	
<b>Country Director</b>	
Francesco Rispoli Country Director for Zimbabwe, ESA, IFAD Email <a href="mailto:r.rispoli@ifad.org">r.rispoli@ifad.org</a>	

## Annex 1. Endorsement Letter

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

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



ZIMBABWE

MINISTRY OF ENVIRONMENT,  
CLIMATE AND WILDLIFE  
11<sup>th</sup> Floor, Kaguvi Building  
Cnr 4th Street/Central Avenue  
Harare

Your Ref.:  
Our Ref:

18 December 2025

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

**Subject: Endorsement for Zimbabwe Adaptation for Drought and Agro-Production Transformation in Semi-arid Regions (Z-ADAPT)**

In my capacity as the Designated Authority for the Adaptation Fund in Zimbabwe, I confirm that the above national grant 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 Zimbabwe.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by International Fund for Agriculture Development and executed by Ministry of Lands, Agriculture, Fisheries, Water and Rural Development in collaboration with Ministry of Environment, Climate and Wildlife.

Sincerely,

A handwritten signature in blue ink, appearing to be 'W. Zhakata'.

Mr Washington Zhakata  
Chief Director - Environment, Climate and Wildlife & Adaptation Fund Designated Authority  
**Ministry of Environment, Climate and Wildlife, Zimbabwe**



**Revised PFG Submission Form<sup>1</sup>**  
**Project Formulation Grant (PFG)**

**Submission Date:**

**Adaptation Fund Project ID:**

**Country/ies:** Angola

**Title of Project:** Zimbabwe Adaptation for Drought and Agro-Production Transformation in Semi-arid Regions (Z-ADAPT)

**Country:** Zimbabwe

**Type of IE (NIE/RIE/MIE):** MIE

**Implementing Entity:** International Fund for Agricultural Development (IFAD)

**Executing Entity/ies:** IFAD for the PFG and Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MLAFWRD); in collaboration with Ministry of Environment and Wildlife for the project

**A. Project Preparation Timeframe**

<b>Start date of PFG</b>	Upon Concept Note approval date
<b>Completion date of PFG</b>	(10 months) after Concept Note approval date

**B. Proposed Project Preparation Activities (\$)**

<b>List of Proposed Project Preparation Activities</b>	<b>Output of the PFG Activities</b>	<b>US\$ Amount</b>	<b>Budget note<sup>2</sup></b>
Stakeholder consultations and participatory design	Stakeholder consultation reports; validated problem analysis; gender-responsive and youth-inclusive inputs integrated into project design.	18 000	Ensures national and local ownership; validates adaptation priorities in target districts (Natural Regions IV & V); complies with AF ESP and Gender Policy requirements

<sup>1</sup> As presented in AFB/PPRC.33/40 Annex 1.

<sup>2</sup> The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

Technical, climate risk and feasibility assessments	Climate risk and vulnerability assessment; technical feasibility studies for SPIS, sand/sub-surface dams, EbA interventions, and CIS/EWS strengthening	30 000	Provides evidence-based justification for adaptation investments; confirms climate rationale, site feasibility, and cost-effectiveness.
Environmental and social safeguards studies	Updated ESP screening; draft ESMP and related safeguard instruments (as required at FP stage).	15 000	Ensures compliance with AF Environmental and Social Policy; identifies and mitigates potential risks early in design
Multi-disciplinary project formulation team	Full Funding Proposal; refined results framework and logframe; detailed budget; implementation arrangements; integration of stakeholder and technical inputs	74 250	Covers consultancy fees, technical writing, design workshops, travel and coordination required to meet AF Full Proposal standards
Project formulation grant for concept note		137 250	Total PFG allocation for concept preparation
Implementing Entity (IE) Fee (8.5%)		12 750	IE fee based on 8.5% of total PFG
Project Formulation Grant + IE fee		150 000	Total PFG budget inclusive of IE fee

Please describe below each of the PFG activities and provide justifications for their need and for the amount of funding required:

### C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation. The PFG will be executed by the IE. The EE will be responsible for execution of the project once approved.

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr Pierre Yves Guedez, Lead, Multilateral Climate and Environmental Funds, ECG Division, IFAD		23/12/2025	Mr Claus Reiner, Regional Climate and Environment Specialist, IFAD	+254 11 5492302	E - mail: p.guedez@ifad.org  E - mail: c.reiner@ifad.org

## Annex 2: Summary of stakeholder consultations for Z-ADAPT

Date	Consultation	Location / format	Stakeholder groups consulted	Participants	Key issues raised	How feedback was incorporated into Z-ADAPT design
16 Sept 2025	District validation meeting – <b>Midlands Province</b> (validation of components, ward/scheme clustering, delivery channels)	Midlands – in-person validation meeting(s); attendance register captured	Farmers' groups; local authorities; technical agencies (e.g., Department of Agricultural Technical and Extension Services, water/environment actors)	38 (signed attendance register)	Confirmed demand for community solar boreholes/SPIS, water storage and recharge options; preferred CIS channels (SMS/USSD, community radio, FFS/extension); willingness for labour/in-kind contributions; operational/O&M concerns	Strengthened <b>targeting and clustering</b> logic; reinforced inclusion of O&M and water-governance strengthening; confirmed CIS delivery modalities to be budgeted under <b>Component 3</b>
18 Sept 2025	District validation meeting – <b>Masvingo Province</b> (validation of components, ward/scheme clustering, delivery channels)	Masvingo – in-person validation meeting(s); attendance register captured	Farmers' groups; local authorities; technical agencies (e.g., Department of Agricultural Technical and Extension Services, water/environment actors)	59 (signed attendance register)	Similar to Midlands: validation of SPIS + storage options; strong emphasis on water harvesting (sand/sub-surface dams), recharge/groundwater security; governance/O&M needs and inclusion	Reinforced the <b>Component 1</b> package (SPIS + storage + governance/O&M) and ensured EbA/micro-catchment rehabilitation and simple monitoring/reporting linkages were treated as a design requirement
23 Oct 2025	Provincial stakeholder consultation (needs, risks, priorities)	4 provinces (Masvingo, Midlands, Matabeleland South, Manicaland) – structured survey + facilitated engagement	Farmer groups/producer orgs; Department of Agricultural Technical and Extension Services; EMA; Zimbabwe National Water Authority; ARDA; RIDA; local authorities; academia/private sector/CSOs	118	Drought/heat stress as dominant hazards; irrigation failures; soil degradation; prioritised solar pumping/irrigation, water harvesting/storage, soil & water conservation, protected agriculture, and improved finance/insurance access	<b>Confirmed the 3-component</b> structure (water/irrigation resilience; climate-smart horticulture & livelihoods/market linkages; CIS/EWS & institutional capacity) and sharpened intervention choices (SPIS, water storage, CA/ISWC, protected horticulture, finance linkages, last-mile CIS/EWS channels)
10 Dec 2025	Women & Youth civic organisations consultation (AF Gender Policy)	Hybrid meeting / HEEP offices: Harare – consultative meeting	Ministry of Youth; MLAFWRD (Gender Mainstreaming/Inclusivity); CTDO; UNDP-SACP; HEEP PMU; other women/youth civic org actors	18 (signed attendance register)	Identified gaps in gender/youth climate-smart tech awareness; weak coordination/partnerships; need for participatory approaches (GALS-type methods); need for capacity building + research/trials; need for tailored financing pathways for women/youth	Directly informed the <b>Gender &amp; Youth Action Plan</b> (needs assessment, targeted capacity building/FFS coaching, inclusive design and monitoring, stronger stakeholder mapping/coordination, and gender/age-disaggregated results tracking) and strengthened safeguards focus on GBV/SEA risk management

\*Note: Screenshots of Participants (photos) are not attached in this version.

## Annex 3: Consultation register

Province	District	Organization	Position	Email/Phone
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Masvingo	Masvingo	Agritex	Student	0777757114
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## Annex 4: Gender Analysis

This Gender Analysis is prepared in line with the Adaptation Fund Gender Policy and Gender Guidance and demonstrates how Z-ADAPT integrates gender equality and women's empowerment across all components. It identifies gender-differentiated climate vulnerabilities, key barriers to equitable participation, and concrete gender-responsive design measures, indicators, and safeguards (Adaptation Fund, 2016; 2022).

### 2. Gender Context in the Project Area

Z-ADAPT targets Chiredzi, Masvingo, Mwenezi and Matobo districts in Natural Regions IV and V, characterised by recurrent droughts, erratic rainfall, high poverty, and reliance on climate-sensitive livelihoods (World Bank, 2024).

Women comprise about 52% of Zimbabwe's population, with 80% living in rural areas. Women provide an estimated 60–70% of subsistence agricultural labour, especially in food crops and horticulture, yet face persistent constraints in access to land, water, finance, extension services, and climate information (ZIMSTAT, 2022; FAO, 2022). Approximately 35% of rural households are female headed, with higher poverty and food insecurity, particularly during drought years (ZIMSTAT, 2022). Youth represent 68% of the population but face very high unemployment and limited access to land and capital, constraining engagement in climate-resilient livelihoods (UNICEF, 2023).

Climate change intensifies these inequalities by increasing water scarcity, heat stress, and crop failure, disproportionately affecting women and youth with lower adaptive capacity (IPCC, 2022; World Bank, 2024).

### 3. Gender-Differentiated Climate Vulnerability

Women face heightened vulnerability due to:

- Water scarcity and time poverty: Only about 5.5% of rural households have piped (safe) water, increasing time burdens for women and girls during droughts (UNDP, 2023; ZIMSTAT, 2022).
- Dependence on climate-sensitive livelihoods, including rain-fed crops, nutrition gardens, and small livestock (FAO, 2022).
- Limited control over productive assets: Only ~20% of women hold land rights, constraining investment in climate-resilient technologies (FAO, 2022).
- Lower access to finance, inputs, insurance and climate information, reducing adaptive capacity (World Bank, 2024).
- Increased care burdens during climate shocks (UN Women, 2023).

Youth vulnerability is driven by limited land access, weak decision-making power, high unemployment, and low access to skills and capital for climate-resilient enterprises (UNICEF, 2023).

### 4. Intersectional Vulnerability

The project recognizes intersecting vulnerabilities related to disability, old age, chronic illness, and child-headed households, which further constrain access to water, climate information, and participation. Inclusive targeting and accessible design standards will ensure these groups benefit (UN Women, 2023).

### 5. Gender Gaps Relevant to Z-ADAPT

Key gaps affecting adaptation outcomes include unequal access to reliable water and women's time burden; insecure land tenure for women and youth; lower access to finance and extension; under-representation in water and land governance; and social risks, including gender-based violence (GBV) that may intensify during climate stress (FAO, 2022; UNDP, 2023; World Bank, 2024).

### 6. Gender Integration in Project Design

**Component 1 – Climate-Resilient Water & Horticulture Infrastructure:**

Solar-powered irrigation, sand dams, managed aquifer recharge and climate-proofed conveyance will reduce women's time burden and improve reliable access to water for domestic use and horticulture. Water Point and Water User Committees will ensure 50% women and 30% youth representation, with women holding decision-making roles in 40% of committees. Women and youth will be trained as local technicians for operation and maintenance.

**Component 2 – Climate-Smart Agriculture, Diversified Livelihoods & Climate-Resilient Finance:**

Women- and youth-headed households will be prioritised for micro-irrigation, protected agriculture, drought-tolerant crops and soil fertility management. Access to revolving funds and input-credit schemes will not depend on individual land titles, but on group-based and community mechanisms, ensuring inclusion of women without formal land documentation. Livelihood diversification (e.g. apiculture, small livestock, solar drying) will prioritise enterprises with strong female and youth participation. Farmer Field Schools will ensure 50% women and 30% youth participation.

**Component 3 – Climate Information, Early Warning & Institutional Capacity:**

Climate Information Services will be delivered via SMS/USDD, community radio and extension, using accessible formats and local languages. Gender Action Learning System (GALS) methodologies will strengthen women's agency and leadership in climate decision-making. Youth will be trained as climate information intermediaries and adaptation service providers.

### 7. Gender-Responsive Targets and Indicators

- 50% of direct beneficiaries are women.
- 30% of beneficiaries are youth.
- 50% women and 30% youth representation in all project-supported committees and Farmer Field Schools.
- 40% of trained local technicians are women and 30% youth.
- 30% reduction in average time spent by women and girls collecting water by project end.

All indicators will be sex- and age-disaggregated (Adaptation Fund, 2022).

### 8. Monitoring, Budgeting and Accountability

Gender-disaggregated baselines (water access, time use, governance participation, technology adoption) will be established within the first six months. Monitoring will use household and time-use surveys, training records, committee registers and CIS subscription data. Dedicated budget allocations are embedded across components for gender-responsive actions, including GALS facilitation, women's leadership training and gender-sensitive M&E (Adaptation Fund, 2022). A Gender Focal Point within the PMU will oversee implementation and compliance.

### 9. Safeguards and "Do No Harm"

While the project is not expected to exacerbate GBV risks, increased activity around water points may elevate tensions during droughts. Mitigation measures include codes of conduct, safe participation spaces, confidential grievance mechanisms, and referral pathways to local support services, integrated into the ESMP (Adaptation Fund, 2016; World Bank, 2024).

**References**

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