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16 March 2026

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

PROPOSAL FOR TANZANIA (3)

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular Size Full Proposal

Country/Region: Tanzania (United Republic of)
Project Title: Climate Change Adaptation in Saltwater stressed and Freshwater Deficient Communities in Zanzibar
Thematic Focal Area: Coastal Management
Implementing Entity: National Environment Management Council (NEMC)
Executing Entities: Zanzibar Environmental Management Authority (ZEMA)
AF Project ID:
IE Project ID: **Requested Financing from Adaptation Fund (US Dollars):** 5,500,000
Reviewer and contact person: Lystra Fletcher-Paul **Co-reviewer(s):**
IE Contact Person:

Technical Summary	The project "Climate Change Adaptation in Saltwater stressed and Freshwater Deficient Communities in Zanzibar" aims to strengthen the capacity of smallholder farmers to address the impacts of climate change through practical, innovative solutions that deliver concrete and measurable results. This will be done through the four components below: Component 1: Support to water supply infrastructures for domestic use and irrigation (USD 495,000) Component 2: Restoration of saltwater affected farmlands and degraded coastline (USD 2,510,000) Component 3: Conservation and Climate Smart Livelihood activities (USD 1,200,000) Component 4: Strengthen the institutional capacity in planning and implementing climate change adaption actions, and in sharing project outcomes and lessons learned (USD 425,000) Requested financing overview: Project/Programme Execution Cost: USD 439,850 Total Project/Programme Cost: USD 5,069,850 Implementing Fee: USD 430,937 Financing Requested: USD 5,500,787

	The initial technical review raises several issues, such as the lack of details for the planning and mitigation of risks, the compliance of the project with national standards, and the need for a more comprehensive, gender-responsive consultative process, and alignment of project costs among the various tables, among others; as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review. The second review finds that most of the issues raised in the first review have been addressed. There are a few remaining CARs and CRs still to be addressed related to: editorial changes, the Theory of Change, Indicators and the ESMP, as is discussed in Clarification Requests (CRs) and Corrective Action Requests (CAR) raised in the review. Please be advised that the findings of the AFB Secretariat's review of the funding proposal(s) do not reflect, indicate, or prejudge the outcome of the reaccreditation process currently underway. The Implementing Entity (IE) shall acknowledge that the funding proposal will not be approved by the Board if the IE's accreditation has expired, and reaccreditation has not been achieved at the time of the Board's decision. Notwithstanding this potential risk, the IE has elected to proceed with the development of the funding proposal.
Date:	February 19 , 2026

Review Criteria	**Questions**	**First Technical Review Comments October 31, 2025**	**Second Technical Review Comments February 19, 2026**
Country Eligibility	1. Is the country party to the Kyoto Protocol and/or the Paris Agreement?	**Yes.** The country has ratified both the Kyoto Protocol (August 26, 2002) and the Paris Agreement (May 18, 2018).	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	**Yes**. Climate variability and change have the greatest impact on freshwater availability in the islands. Limited and	-

		unreliable rainfall causes poor groundwater recharge, which in turn causes scarcity of freshwater. Coastal areas are also vulnerable to flooding owing to sea level rise and coastal ecosystems are impacted by changes in temperature and salinity.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	**Yes**. As per the Endorsement letter dated August 8, 2025.	-
	2. Does the length of the proposal amount to no more than One hundred (100) pages for the fully-developed project document, and one hundred (100) pages for its annexes?	**Yes.** The concept note is 95 pages in total, including its annexes. **CAR1:** Please remove the activities column from the Project Components and Financing table.	**CAR1: Cleared** Activities column removed from Project Components and Financing Table **Editorial notes: To improve the quality and clarity of the proposal document, please consider the following:** 1. Please move the Table of Contents, List of tables, List of Figures, Abbreviations and Annexes to the front of the document after the title page. 2. Ensure that all tables are numbered and with proper

			headings and reflect in related lists. 3. Please add page numbers at the bottom of each page. 4. Conduct a thorough round of editing/ proofreading to the document.
	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?	**Yes, but further information is needed.** The project activities include: (i) the installation of climate adaptation infrastructure to improve water supply, and restore salt water affected farmlands and degraded coast lines; (ii) capability building in climate smart livelihood activities; and (iii) knowledge management related to water and agriculture in Zanzibar (See Table 1, pp 10 – 13). The outputs and outcomes for each component are clear and well explained (Part II.A pp 13 – 31), and the expected beneficiaries are provided in each case. However, no theory of change is presented, and it is not clear how these actions would lead to a substantial tangible outcome nor what AF strategic objectives are supported. **CAR2:** Kindly include more quantitative details in some of the activities to demonstrate the amount of work involved and substantiate the budget allocated.	**CAR2: Cleared** Quantitative details provided in the relevant activities to demonstrate the amount of work involved and

			substantiate budget allocated (See Project Components pp 20 – 34)
		CAR3: Kindly include, under Part II.A, the Theory of Change (and its diagram) to clearly illustrate how the proposed interventions will lead to the intended long-term change, the assumptions being made, the potential constraints, the required inputs and how they link to the project components. In the Theory of Change use "'IF' 'THEN'" statements. This would clearly state how the project activities would lead to substantial tangible outcomes. **CR1:** Kindly indicate explicitly how the project supports one or more of the Adaptation Fund Strategic Objectives.	CAR3: Not cleared The Theory of Change has been added to Part II A iin Box 1 (page 19) which presents the ToC through a series of "IF, THEN" statements and Figure 3 (page 20) which shows how the inputs and activities are logically connected with the Outcomes, outputs and Impacts. However, the risks and assumptions are not included in either of the two graphics. **Please include the Risks and Assumptions to Figure 3** CR1: Cleared p19 provides details on how the outcomes of the project are linked with the AF Strategic objectives
	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	**Yes, however, some additional information is required.** Part II Section B (pp 36) of the proposal presents a broad overview of the project's economic, social, and environmental benefits, including the identification of vulnerable groups and communities. It is stated that: "*Hence, the activities proposed in this proposal*	

	Environmental and Social Policy and Gender Policy of the Fund?	*have been designed to transform the economic status of communities from resource-poor and vulnerable to resource-rich and resilient to climate shocks. All groups (men, women, youth and disadvantaged) will be included in all activities and will be provided with equal opportunities by the project.".* However, it does not include quantitative estimates to substantiate benefits nor demonstrate how benefits will be equitably distributed. **CAR4**: Please quantify the economic, social and environmental benefits whenever possible. When exact figures are not available, kindly include estimates or proxies to support the identified project's impact alongside a brief explanation of the method used for these calculations. **CAR5:** Kindly provide estimates of the number of direct and indirect beneficiaries (gender-disaggregated) for each outcome and output whenever possible. Also, please specify if indigenous people will benefit from the project, including a description on how benefits will be equitably distributed. **CR2:** Please clearly indicate whether the project increases vulnerability or reduces the adaptive capacity of either beneficiaries or non-beneficiaries.	**CAR4: Cleared** Part II B (pp 51 – 54) has been revised to incorporate quantitative estimates of environmental, social and economic benefits. **CAR5: Cleared** Estimated number of direct and indirect beneficiaries incorporated under 'Social benefits' (see page 54) **CR2: Cleared** Information incorporated under Social benefits (pp 53 – 54)

		CAR6: Although reference is made to a gender analysis in the Socio-economic Context of the proposal (Page 3) and Annex 2, the details of the benefits are lacking. Kindly add more details on the benefits of the gender sensitive approach to the project and a costed gender action plan.	**CAR6: Cleared** The benefits of the gender inclusive approach have been included in the section on the Socio-economic Context (page 4) as well as the section on Socio-economic benefits (pp 53 – 54).
	5. Is the project / programme cost effective?	**Yes, but further information is required.** Part II.C (pp 33 - 36) explains the benefits of the proposed components as compared to business-as-usual scenario and includes alternatives for the selected scope and approach; as a means of demonstrating the cost effectiveness of the program. Table 4 summarizes the concrete adaptation benefits, avoided losses and trade-offs of the respective components of the project. However, it does not include quantitative estimates, nor does it provide information on cost-effectiveness from the perspective of the sustainability of the interventions. **CAR7:** Kindly include, where possible, quantitative estimates of the selected measures, taking into consideration the sustainability aspects of the project.	**CAR7: Cleared** Part II C (pp 56 to 60) has been revised to include quantitative estimates of time saved by improving water storage, as well as improved livelihoods and avoided losses by land reclamation.
	6. Is the project / programme consistent with national or	**Yes, but further information is required.**	

	sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Part II.D (pp 36 – 38) of the proposal outlines 12 national plans/ instruments/strategies related to the project, including the NAPA, NEAP and NDC. However, the information provided does not in all cases show the consistency with the current proposal. **CAR8:** Kindly include the identified plans/instruments/strategies in a table. The table should include at least the following columns: (i) specific name of the plan/strategy, (ii) years of implementation, (iii) goals/objectives, and (iv) relevance to the proposed project **CAR9:** Please include any other sectoral plan/strategy related to the proposed project, for example, related to water, agriculture, food security or infrastructure.	**CAR8: Cleared** **T**able 8 revised to incorporate suggested changes **CAR9: Cleared** Additional plans and strategies have been included in Table 8 (page 60 - 64)
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	**Yes.** However additional information is required. Part II.E (pp 38 – 39) of the proposal identifies national technical standards relevant to the proposed project. However, a more comprehensive list of the specific regulations and standards is	

		required as evidence of compliance at both the national and local levels. This should include the standards related to rural water supply, agriculture, forestry, aquaculture, fisheries, environment, tree planting, coastal management, food security and land use planning. **CAR10**: Kindly provide a comprehensive table listing of all specific national/local technical standards applicable to the proposed project. These include agricultural codes/regulations, water quality standards, among others. The columns in the table should include: (i) specific name/number of the standard/regulation, (ii) goals/objectives, and (iii) how it is related to the proposed project and the project's compliance status. In the case that compliance is required, please include the steps taken to comply with it and authorization/clearance granted for the implementation of the project.	**CAR10: Cleared** Table 9 (pp 66 – 68) revised to incorporate additional technical standards and the steps required for compliance
	8. Is there duplication of project / programme with other funding sources?	**Yes, but further information is required.** Part II.F (pp 39 – 40) of the proposal states that there is no duplication of the proposed project with other funding sources. It further states that:	

		"*Stakeholder consultations were made with North A, North B, Central, Wete and Mkoani district councils, relevant sector ministries and beneficiary communities. It was evident from these discussions that no similar interventions exist in such districts and Shehias*.". However, more comprehensive information is required as well as a sound justification for non-duplication. Also, all the projects listed are national projects. There is need to include any relevant regional projects for which Tanzania and specifically Zanzibar is a beneficiary which may be of relevance to the project. **CAR11:** Kindly include a comprehensive table listing all national and regional projects that are or have been implemented in Zanzibar and are related to the proposed project. For each, please include the following details: (i) Project title, (ii) Main project interventions, (iii) Timeline and specific location within the country, (iv) Target population, (v) Implementing entity, (vi) Lessons learned (if applicable) (vii) Overlaps and synergies with the proposed project. The lack of overlap should be clearly justified (e.g. by indicating the distinct	**CAR11: Cleared** Table 10 (pp 69 – 73) revised to include national and regional projects (ongoing and previous), and additional information provided as suggested

		geographic locations and/or types of interventions) for each related project identified.	
	9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	**Yes, but further information is required.** Part II.G (pp 40 – 41) of the proposal indicates that the project design incorporates lessons learned from similar initiatives, as well as insights gathered through stakeholder consultations. It highlights that knowledge-sharing activities are integrated across all four components, with Component 4 being primarily dedicated to this purpose. However, the proposal would benefit from additional details regarding the specific actions planned, the mechanisms for monitoring experiences, and the roles of the involved institutions. **CR3:** Kindly clarify and include details to respond to the following: • More details of the specific activities for Learning and Knowledge Management of the proposed project. This should include the institutions involved, activities quantification, and main goals. • who will be responsible for tracking the experiences gained,	**CR3: Cleared** Part II.G (pp 73 – 77) revised and Table 11 included to show the type of capacities needed, beneficiaries and institutions responsible for building such capacities and tracking results

		how this will be done, and when the tracking will take place. • what type of information will be collected throughout this process and what and how will be disseminated. • how the knowledge generated will be sustained after the project concludes. **CAR12:** Kindly include in Part II.G, page 40, the outputs/activities corresponding to Component 3. Currently it appears as: "*The project integrates a strong learning and knowledge-sharing component captured under Components 1 (1.1.4, 1.2.4), 2 (2.1.4), 3 and 4 (all activities).*".	**CAR12: Cleared** The capacity building aspects are identified under each Component in Part II Section G.
	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?	**Yes, but further information is required.** See Part II H (pp41 – 46) The proposal states that initial consultations were conducted with stakeholders during project design, specifically with DOE, village leaders (Shehas), and community members, including women, youth, and vulnerable groups. The activities for the consultations were interviews with Shehas, focus groups, and field visits. Annex 2 also provides details of the assessment of gender issues observed during the initial stakeholder consultations in two	

		selected sited (Unguja and Pemba Islands)**.** However, the proposal could benefit from including more details about how the results of the consultative process are included and the inclusion of vulnerable groups. **CAR13:** Kindly provide detailed information on the consultative process described in the proposal, covering at least the following elements: (i) the participants of each meeting, including the total number of attendees disaggregated by sex; (ii) date and location for each meeting; (iii) brief summary of the subjects discussed, and any agreements reached, where applicable; (iv) explanation of the gender considerations (and those related to other vulnerable groups) addressed during the process, including how their interests were reflected in the proposed project. (v) how safeguard processes and outcomes were addressed in the consultations. **CAR14:** Kindly include a comprehensive, gender-responsive	**CAR13: Cleared** The section has been revised to include the information requested. In addition the following Annexes have been included: Annex 5: Field report Annex 6: Timeline for consultation processes and village meetings Annex 7: List of stakeholders consulted (includes Shehas, Community members, women, participants from different Sectors, CBOs and NGOs) **CAR14: Cleared**

		consultative process as part of the stakeholder consultations, including vulnerable groups if applicable. Please revise the implementation arrangements to ensure all stakeholders' views are taken into consideration. **CAR15:** Please include in the proposal a report documenting the consultative process, including at least: (i) The list of stakeholders has already been consulted (principles of choice, role description, date of consultation); (ii) A sound description of the consultation techniques (tailored specifically per target group); (iii) Key consultation findings (focusing on suggestions and concerns).	The report was revised and additional information included. Annex 4: Gender Assessment report (revised) **CAR15: Cleared** Table 12 summarizes the issues that were raised during village meetings and consultations, followed by issues raised by the District Implementation teams (p54)
	11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	**Yes, but further information is required.** Part II Section I (pp 46 – 48) of the proposal outlines the rationale for the benefits and costs associated with each component's activities, considering both Business-as-Usual (BAU) and Adaptation funding scenarios. However, it does not provide clear information regarding additional funding sources. More details are needed.	

		CR4: Please clarify whether the project's expected outcomes and outputs can be achieved exclusively through the financial support provided by the Adaptation Fund.	**CR4: Cleared** Part II Section I (pages 85 – 86) has been revised to substantiate eligibility as full cost adaptation project in line with the AF guidance. All proposed interventions directly respond to climate change impacts and vulnerabilities identified through the National plans and Strategies and priorities. The Government will provide in-kind contribution in the form of salaries and office space, demonstrating commitment,
	12. Is the project / program aligned with AF's results framework?	**Yes, to some extent.** See Table 14 in Part III.E (pp 69 – 71). The alignment of the project with the Adaptation Fund Results Framework is presented considering outcome and outputs for each component. However, some amendments are required. **CAR16:** Please ensure that both project's Components, outcomes and output indicators are presented and correspond to the ones presented in the Table 1: Project Components and Financing (pages 10 -13). All indicators should be reviewed and amended, where necessary, to ensure that they are SMART.	**CAR 16: Not cleared** The expected outcomes and outputs in the Components Table are consistent with those in the proposed budget and Results Framework. **However,** the indicators are not consistent throughout the document. For example Indicators 2 and 6 in the upper section of the AF alignment Table are different from those in the Results Framework

		CAR17: Kindly revise and adjust the Adaptation Fund outcome and output indicators so that they correspond to those established in the Adaptation Fund Results Framework. In Table 14 please address the following: • Project Objectives are identical to the Components titles. • Re-number the project outcomes so that they align with the expected results for each Component in the Results Framework table. • AF Outcomes at the Objective level should be consistent with those associated with the Output Level and vice versa. Please check and revise accordingly. • For Project Objective 1 the corresponding AF indicator should be at the outcome level not output level. For example, 4.1 not 4.1.2. • Ensure that the sum of the grant amounts for the project outcomes for each component, aligns with the corresponding	**Please ensure that the indicators are consistent in the Results Framework and the Alignment Table** **CAR17: Cleared** Objectives are consistent with Components titles, project outcomes are renumbered to align with the expected results for each component. AF Outcomes at the Objective level are consistent with those associated with the Output level and vice versa. The sum of the grant amounts for each component align with the corresponding amounts for the components in the upper part of the Alignment Table.

		amounts for each component in the upper part of the table.	
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	**Yes, but further information is needed.** Part II.J (page 49) describes the relevant Monitoring and Evaluation activities to be performed during the project implementation. It provides the roles and responsibilities for the main institutions, relevant KPIs to be tracked, and specific activities. It further describes the institutional and financial arrangements to be put in place to maintain. infrastructure However, the section could be strengthened to include issues related to environmental sustainability, comprehensive economic resilience, governance transparency, and detailed social equity elements. **CAR18:** Please revise the layout of this section into three sections to discuss sustainability in the three main areas of sustainability - economic, social and environmental sustainability. **CR5:** Kindly provide a clear explanation on how replication and scaling up of the proposed project activities and benefits will be achieved and sustained after the project ends. Elaborate on the areas of environmental sustainability and governance with respect to the regulatory framework and social equity	**CAR18: Cleared** Layout revised into the three proposed sections. **CR5: Cleared** Information provided under the section titled: “Sustainability through enhanced knowledge, learning and adaptive capacity”.

		including human rights and cultural considerations.	
	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?	**Yes, but further information is needed.** See Part II.K (pp 49 – 54). The proposal provides a list of the potential environmental and social risks. In addition, Table 7 provides details of the projected risks and proposed measures to address the risks in accordance with the E&S checklist. The project is classified as Category B. **CAR19:** Please review table in Part II.K and state and expand, where relevant, all potential impacts (direct, indirect, transboundary and cumulative), including how it is planned to mitigate and manage each risk. Such risks should be described in the third column along with the corresponding mitigation measures. In addition, please consider the following guidance: i) If no risk is identified for a given principle, a clear justification must be provided. ii) Whether the second or third column is marked depends on whether further assessment for compliance is required. Only one	**CAR19: Not cleared** The information in Table 13 seems to be repetitive of the information in the narrative in Part II K. Also according to CAR19, Column 2 should indicate whether further assessment is required for compliance (i.e. Yes or No) not the Compliance requirement. Please revise the Table in accordance with the requested information.

		of the two columns should be marked. • iii) Please amend the table to comply with the template available in the fully-developed proposal template at Template for Fully Developed Project Proposals (181 kB, DOC) Please note that Adaptation Fund Principles 1, 4 and 6 always apply. For more information, please visit: AF's ESP guidance. **CAR20:** Please ensure consistency of the listed risks and measures with those mentioned in Part III.C. Specifically, the risk related to marginalized and vulnerable groups. **CAR21:** Please refer to the gender assessment in the respective principle or in the introduction in Part II.K.	**CAR20: Cleared** The listed risks and measures mentioned in Part IIIC are the same as in Part II K **CAR21: Cleared** Issues raised in the Gender assessment report have been incorporated under Principle no. 5: Gender Equity and Women's empowerment
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	**Yes.**	-
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total	**Yes, but amendments are required.** The Implementing Entity Management Fee is below 8.5% of the total Project	

	project/programme budget before the fee?	Cost. However, there are inconsistencies in the total amount requested across the components table, the budget, and the disbursement table. **CAR22:** Kindly revise the total amount, as the proposal uses two numbers throughout: USD5,500,000, and USD5,500,450 in the Project Components and Financing table. Additionally, in the latter table, please amend the costs according to the costs and fees definitions provided by the Adaptation Fund. Please note that the Total Project Cost = Total Cost of the Project Activities + Project Execution Cost.	**CAR22: Cleared** The figures have been revised to conform with the AF guidelines on Costs and Fees
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	**Yes, but amendments are required.** The Project Execution Costs are correctly sized (below 9.5% of the total Project Cost). However, there are inconsistencies in the total amount requested across the components table, the budget, and the disbursement table. **CAR23:** Kindly revise the total amount, as the proposal uses two numbers throughout: USD5,500,000, and USD5,500,450 in the Project Components and Financing table. Additionally, in the latter table, please amend the costs according to the costs	**CAR23: Cleared** Total requested envelope: US$ 5,500,787

		and fees definitions provided by the Adaptation Fund. Please note that the Total Project Cost = Total Cost of the Project Activities + Project Execution Cost. Total project cost is currently indicated as $4,783,000 but should be $5,165, 640.	Project activities cost (A): US$ 4,630,000 Project execution cost (B) 9.5%: US$ 439,850 Total program cost (A+B): US$ 5,069,850 Project Management Fee 8.5% of (A+B): US$ 430,937
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	**No.** The National Environment Management Council is a NIE **in process of re-accreditation.** Last expiration date: October 13, 2022. Please be advised that the findings of the AFB Secretariat's review of the funding proposal(s) do not reflect, indicate, or prejudge the outcome of the reaccreditation process currently underway. The Implementing Entity (IE) shall acknowledge that the funding proposal will not be approved by the Board if the IE's accreditation has expired, and reaccreditation has not been achieved at the time of the Board's decision. Notwithstanding this potential risk, the IE has elected to proceed with the development of the funding proposal.	-

Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	**Yes.** Part III.A (pp 55 – 57) provides a description of the implementation arrangements including the roles and responsibilities of the implementing entity as well as the executing entity and other stakeholders (Table 8) that are involved in the project. An organization chart showing how they report to each other is also provided in Figure 10. **CAR24:** Please incorporate gender-responsive elements in the Implementation arrangements as appropriated.	**CAR24: Not cleared** While the section has been revised, it does not adequately show all the gender-responsive elements. For example, no mention is made of consultations involving stakeholders with a gender remit. *Note: "Stakeholders with a gender remit are individuals or organizations, such as government agencies, NGOs, community-based groups, academic institutions, and international organizations, that focus/work on promoting gender equality and addressing gender-specific issues".* ***CAR38 (NEW):** Please update the project governance structure please include lines to demonstrate flow of funds and flow of communication.*

	2. Are there measures for financial and project/programme risk management?	**Yes.** As per revised Part III.B Table 9 (pp 57 and 58), It identifies the major financial and project related risks and how they will be managed. Social risks and associated management are listed in Table 10.	-
	3. Are there measures in place for the management of environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	**Yes.** See Part III.C and Table 10 (pp 58 – 60) which identifies the environmental and social risks and the corresponding impacts that have been assessed as well as the measures to manage the impacts. The proposal includes an accessible and meaningful grievance mechanism in place. **CAR25:** Please ensure consistency with the risks identified in Part II.K, the ESMP and Table 10.	**CAR25: Cleared** Table 16 (revised) to conform with Table 13.
	4. Is a budget on the Implementing Entity Management Fee use included?	**Yes.** Part III G, Table 18 page 82 presents the budget for the Implementing Entity Project Management Fee.	-
	5. Is an explanation and a breakdown of the execution costs included?	**Yes, but further information is required.**	

		See Part III.G, Table 17, page 82. The table indicates that the Project Execution Costs are broken down in 8 major activities for each of the five years of the project. However, no explanation is provided to expand on the description of the activities. **CR6:** Kindly provide a note which provides a precise description of each activity included in Table 17.	**CR6: Cleared** Table 17 is now Table 24 in the revised project proposal
	6. Is a detailed budget including budget notes included?	**Yes, but further information is required.** Part III.G presents several budgets - Summary Budget, Output Budget (which provides costs at the activity level), Project Execution Costs and Project Management Costs. However, amendments are needed. **CAR26:** Please consider revising the budget tables as follows: 1. Combine tables in one consolidated table titled "Detailed Project Budget and Notes". 2. Detailed budget should be presented at activity level along with related budget notes. 3. The amount of USD 4,783,000 is not the Total Project Budget, it is	**CAR26: Not Cleared** Table 22 should be further updated to present the components with activities as well as notes. In addition, it should have the IE and EE fees portion also as part of the table as the latter rows.In essence Tables 22a, 23, 24 and 25 should be 1 table. presents the detailed budget and notes at the level of Activities

		the Total Programme cost. The Total Project cost = Total Programme cost + Execution costs.	Total program cost has been revised. CAR37 (new): Please re-work the budget so that: 1. Costs associated with travel, venue and transportation costs are moved from the components and situated under the IE or EE costs as per https://www.adaptation-fund.org/generic/costs-and-fees/ guidance. {1.1.;1.2; 1.3;2.1; 2.2; 2.2.2.;3.2.1;3.2.1;4.2.1 2. On budget note 4.3. if the smartphones are only “loaned” to the beneficiaries” how will that impact the sustainability of the proposed activity post project implementation? 3. In the detailed budget please identify the GAP costs by associating the items to the relevant GAP item numbers. For example G2.3 where is that currently situated in the detailed budget? 4. The budget for the GAP should be presented within the GAP document. P

	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?	**Yes, but further details are required.** Part III.D Table 11 (page 62) presents an M&E Framework plan and budget. The reviews and meetings are well explained and include both a Mid-term review (after 2.5 years from the start of the project) and a Terminal evaluation (at the end of the project). However, the implementation arrangements needed are not clearly provided and the M&E plan specifications and details are not yet developed. Table 2 (page 13) presents the Project Calendar in which the Terminal Evaluation is planned for December 2032 which is 1 year after the project closing date. Please note that AF recommends that the Terminal Evaluation should take place within 9 months of project closure. **CAR27:** Please change the date of the Terminal Evaluation to within 9 months of the Project Closure date **CAR28:** Kindly prepare the M&E plan prior to the start of the project. All required arrangements should be identified, agreed and explained before the project starts.	**CAR27: Cleared** Date changed See Table 4 (page 18) **CAR28: Not Cleared** 1. Table 17 presents the monitoring plan for project activities. However, Table 17 indicates that only some of the M&E costs fall within the prescribed cost localities for M&E costs i.e either under the IE fees and EE costs. Please address as

		CAR29: Please include how the M&E Plan will manage the identified environmental and social risks. In addition, provide information on the key M&E milestones of the project.	all M&E costs should fall under IE and EE costs. Please see https://www.adaptation-fund.org/generic/costs-and-fees/. 2.Table 25 which presents costs for evaluation present total evaluation costs which is 2.52% of the total project costs. Based on Decision B.41/30 this should be between 1-2% based on the project size. 3.Please review the evaluation costs downwards. For the ESMP only $25,000 is budgeted under Project execution costs to cover ESMP monitoring. Where are the other ESMP monitoring costs to be covered? 4. Under what item in Table 17 will total ($5000) of table 18 be situated? **CAR29: Not Cleared** The M& E Plan in Table 17 includes an allocation for the Monitoring of Environmental and Social parameters and Table 18 presents the monitoring plan for Environmental parameters but not for social risks. The ESMP has not been elaborated. Please ensure that the ESMP is fully elaborated and costed for inclusion in the proposal.

	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?	**Yes.** **As per revised Part III.D Table 11 (page 62).** The proposal includes a M&E Framework and budget, detailing the allocation for the M&E Plan and a breakdown of IE fees for supervision of M&E function. The total budget allocated for both Mid-term review and Terminal evaluation amounts to 60,000, which is approximately 1 % of the total project budget. **CAR30:** Please kindly include in the M&E section references to the mandatory Project Completion Summary, annual Project Performance Reports, and final audited financial statements prepared by an independent auditor or evaluation body (see https://www.adaptation-fund.org/projects-programmes/project-performance/), ensuring that they are adequately budgeted in the proposal. **CAR31:** Please ensure that, in compliance with Decision B.41/20, costs related to the baseline data report, MTR and the Final Evaluation are budgeted under the IE fee. This must be reflected in table 18. **CR7:** While the project includes an ESMP describing environmental and social risk management measures and provisions USD 100,000 for its	**CAR30: Cleared** Project Completion Summary, Project Performance Reports, and Final Audited Financial statements have been included in the revised Table !7 (pp 120 – 121) **CAR31: Cleared** Baseline data report, MTR and Final Evaluation costs have been budgeted under the IE Fee (See Table 25, page 121) **CR7: Not Cleared** The budget for the ESMP has been revised (See Tables 17 and 18). The monitoring of the Grievance Redress

		monitoring, Part III.D of the proposal should elaborate on what these activities entail. The proposal should also clarify in Part III.D. whether monitoring the Grievance Redress Mechanism would be included in these ESMP-related activities.	mechanism is included in the GAP budget (Outcome 1, Output 1.3). However, the ESMP budget presented is not sufficiently elaborated as only the budget for the Environmental parameters is presented in the proposal. Please include a detailed budget for the ESMP including the budget for monitoring the social parameters.
	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?	**Yes, but further information is required.** Part IIIE Table 13 of the proposal presents a Results Framework detailing the expected results, indicators, targets, means of verification, and milestones, for each of the four components. All milestones are presented as percentage throughout the five years of the program, and targets are disaggregated by sex where appropriate. In addition, Table 14 shows the alignment of the program's components with the Adaptation Fund Results Framework (AF RF), including one Fund outcome indicator for each program's component. However, some additional details are needed such as the review of the quantification of the results and the working of the Fund outcome indicators.	**CAR32: Not cleared** The indicators in the Results Framework (Table 19) are not all consistent with those in the AF RF Alignment table (Table 20). (Specifically, Indicators 2 and 6 are different)

		CAR32: Kindly review the Adaptation Funds Results Framework and revise the wording of the Fund outcome/output indicators accordingly. For example, in Part III.E, page 69, Fund output indicator 3.1.1 is written as "*Number and type of risk reduction actions or strategies introduced at local level*" while in the AF RF is "*No. of news outlets in the local press and media that have covered the topic*". **CR8:** Please review the expected indicator targets to ensure they are realistic and achievable. For example, please include a brief but sound justification to support the proposed 10% increase in women's income by the end of the project. It may include relevant baseline data and an ex-ante economic evaluation impact of the program activities. **CR9:** Please include estimates for the number of indirect beneficiaries as part of the core impact indicator "*Percentage of community members resilient to climate shocks".* **CAR33:** The project results framework should be revised as follows: i) Please rename "Project Goal" to "Project Objective" to align with the	**CR8: Cleared** Outcome and output indicators have been revised. The justification for the increase is provided in the section on Economic Benefits which predicts increases in women's incomes by up to 25% based on increased income generating activities such as sea weed and sea cucumber farming. **Please insert a footnote to the table which refers to that section of the proposal to justify the magnitude of the increase.** **CR9: Closed as no longer valid.** **CAR33: Not cleared** Table 20 has been revised to incorporate most of the suggested corrections, **however,** the correlation between the units used for each indicator and the associated targets throughout the entire framework still needs to be addressed.

		terminology used by the Adpatation Fund, in line with the OECD definitions. The Project Objective describes the overall purpose of the project interventions, which includes the intended physical, financial, institutional, social, environmental, or other results that the project interventions is expected to achieve or to which it is expected to contribute. ii) Although one Project Objective Indicator is included in the framework (Percentage of community members resilient to climate chocks), multiple targets are defined for that same indicator. Please consider shitfing some targets to other relevant indicators included in the framework, or creating new Project Objective indicators relevant to these targets. iii) As raised in the separate CAR on core indicators table, all relevant indicators should disaggregate the direct and indirect beneficiaries by gender and youth (age 15-24). iv) Kindly check the correlation between the units used for each indicator and the associated targets throughout the entire framework. For instance, although the indicator 1.1 "Number of households with access to water for farming " refers to a number, its corresponding target "At least 40% women and 30% men have	**CAR 34: Cleared** (See CAR 16 and 17 under Question 12)

		access to freshwater" is expressed in a different unit (percentage). Similarly, although indicator 1.3 "Reservoir for water supply available" refers to the provision of a physical infrastructure, its corresponding target "700 boys and 700 girls have access to water supply in school" refers to a number of beneficiaries. Each target should correspond to an indicator (e.g., at the moment, no indicator corresponds to the target "500 meters of the drainage canal constructed"). v) Ensure that the project results framework captures the indicators and associated targets included in the Gender Action Plan, once developed. vi) Revise the inputs made in the "means of verification" column, as most information included represent targets rather than means of verification (e.g., "X ha of farms under irrigation" for indicator 1.2). **CAR34:** The alignment table provided in part III.F must be revised in accordance with the guidance provided in Annex 5 of the OPG (refer to the example on p.16). More specifically: - <u>Upper section of the table</u>: i) enter the Project Objective in the "Project Objective(s)" column; ii) add the corresponding Project Objective	

		Indicator(s) in the ”Project Objective Indicator(s)” column; iii) for each Project Objective indicator, select only the most appropriate SRF Fund Outcome and enter it in the "Fund Outcome" column; iv) select only the most relevant SRF Fund Outcome Indicator for each Fund Outcome and enter it in the "Fund Outcome Indicator" column; and v) input the grant amount for each SRF Fund Outcome in the column “Grant Amount (USD)”, ensuring that the total equals the project activity cost, i.e. USD 4,783,000; - Lower section of the table: i) list the four project outcomes listed in the project results framework in the “Project Outcome(s)” column, along with their respective outcome-level indicators in the “Project Outcome Indicator(s)" column; ii) for each indicator, select only the most relevant corresponding SRF Fund Output and enter it in the "Fund Output" column; iii) choose only the most relevant SRF Fund Output Indicator for each Fund Output selected and enter it in the "Fund Output Indicator" column; and iv) input the grant amount for each SRF Fund Output selected in the “Grant Amount (USD)” column, again ensuring that the total equals the project activity cost of USD 4,783,000.	**CAR35: Cleared** Disaggregated indicators provided in the Core indicators tables

		Lastly, for consistency, please ensure that the all Fund Outcomes associated with the listed Fund outputs in the lower section of the table are reflected in the upper section of the table. **CAR35:** For each AF Core Indicators relevant to the project interventions (i.e., "Number of beneficiaries", "Assets Produced, Developed, Improved, or Strengthened" and "Natural Assets Protected or Rehabilitated"), please add in Part III.E the corresponding Core Indicators table(s) available on pp.10-14 of the document "Methodologies for reporting Adaptation Fund core impact indicators". Kindly ensure that "Baseline" and "Target at project approval" columns are duly completed in each table, and ensure that the figures provided in the tables align with those included in the project results framework. While filling out the "Number of beneficiaries" core indicator table, efforts should be made to disaggregate the direct and indirect beneficiaries by gender and youth (age 15-24).	
	10. Is a disbursement schedule with time-bound milestones included?	**Yes, but further information is required.** The proposal includes a disbursement schedule with time-bound milestones (Table 19, page 83). However, the format of the disbursement table does not fully align with the Adaptation Fund	

		format. Moreover, the totals do not align with other tables in the proposal **CAR36:** Kindly revise the format of the disbursement schedule with milestones using the format provided in this link. In addition, please amend the numbers to ensure consistency throughout the proposal. For example, in the cover page the Amount of Financing Requested is "*5,500,000*", but in Table 1 it is ""*5,500,450"*. The consistency must include the following tables as well: Table 4, Table 14, Table 15, Table 16.	**CAR36: Cleared** Table 26 (page 149) revised

ADAPTATION FUND

PROJECT PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

PART I: PROJECT/PROGRAMMEINFORMATION

Title of Project/Programme:	Climate Change Adaptation in Saltwater Stress and Freshwater Deficient Communities in Zanzibar
Country:	Tanzania (United Republic of)
Thematic Focus Area:	Coastal Management
Type of Implementing Entity:	National Implementing Entity (NIE)
Implementing Entity:	National Environment Management Council (NEMC)
Executing Entity/ies:	Climate Action Network Tanzania (CANTZ) and Zanzibar Environmental Management Authority (ZEMA)
Amount of Financing Requested:	USD 5,500,787

Project Formulation Grant Request (<u>available to NIEs only</u>): Yes ☐ No ☒

Amount of Requested financing for PFG: (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.

1.0 Project Background and Context

Population trend. Zanzibar is a semi-autonomous part of the United Republic of Tanzania, comprising of two major islands – Unguja and Pemba, and a number of smaller islands. The archipelago has a total land area of approximately 1651 km^2. Administratively, Zanzibar is divided into five regions, three in Unguja (North, Central West and South) and two in Pemba (North and South). The total population is estimated at 1.89 million, of which 51.6% are female (Population and Housing Census, 2022)[1].With an annual population growth rate of approximately 3.7%, continued population increase within a limited land area has intensified development pressures in Zanzibar. The sharp rise in population density, from 400 persons per km² in 2002 to 530 persons per km² in 2012 and is currently estimated at 768 persons per km², poses significant challenges, including unplanned settlement expansion, increasing pressure on freshwater resources, loss of agricultural land, and growing constraints on sustainable livelihoods. At the same time, rapid population growth exacerbates vulnerability to climate change and other environmental stresses by increasing demand for already limited natural resources and exposing more people to

[1] United Republic of Tanzania (URT). 2022. Population and Housing Census.

climate-related risks. This pattern is also observed across many Small Island Developing States, where high population density and limited land and water resources compound climate vulnerability (SIDS)[2].

Climate and its variability. The islands have a tropical, warm, and humid climate with small seasonal temperature variation of 3-40 °C, with the lowest temperatures in July and the highest in February. On average, maximum temperatures range from 30-32°C in Unguja and 30-33°C in Pemba, while minimum temperatures range from 21-23°C in Unguja and 23-24°C in Pemba. This climate seasonality is associated with the Intertropical Convergence Zone, which shifts north and south over the islands, resulting in a bimodal rainfall pattern with long rains from March to May and short rains from October to December. The annual and seasonal total rainfall varies considerably between the two islands and across seasons. In Unguja, annual rainfall ranges from 704-2459 mm, with long rainfall totals between 423 and 1259 mm, and short rainfall totals between 104.9 and 977.3 mm. In Pemba, however, the rainfall is generally higher and more variable, with annual totals ranging from 377.5–4034 mm, long rainfall totals between 622 and 2453.4 mm, and short rainfall totals between 99.2 and 1296 mm. Spatially, rainfall is unevenly distributed: northern Unguja receives higher rainfall (around 1,800 mm) compared to the south (approximately 1,500 mm), while in Pemba, the central and western corridors receive the highest rainfall. Across both islands, central and western zones may receive up to 2,000 mm annually, whereas eastern coastal areas are drier, averaging about 1,400 mm. These patterns underscore the high spatial and temporal variability of rainfall across the Zanzibar archipelago. Annexe 1 depicts a five-year trend of rainfall and temperature for Unguja and Pemba.

Between 1980 and 2010, both Unguja and Pemba experienced a clear increase in average and maximum temperatures, with the most pronounced warming occurring between December and May. These temperature increases have been accompanied by greater climate variability, including more erratic rainfall patterns, higher rainfall intensity, and increasing wind speeds (Watkiss et al, 2012)[3]. Recent analyses further reveal spatially differentiated rainfall trends across the islands. According to the State of the Coast for Zanzibar Report (2023)[4], Unguja has experienced a consistent decline in rainfall, with decreases of approximately −1.5 cm per year in annual rainfall, −2.8 cm per year during the March–April–May (MAM) long-rain season, and −1.8 cm per year during the October–November–December (OND) short-rain season. In contrast, Pemba has shown modest increases in rainfall, with positive trends of about 3.39 cm per year annually, 4.43 cm per year during MAM, and 0.62 cm per year during OND. These patterns indicate that during the recent period of 2008–2017, Unguja experienced a marked decline in both annual and seasonal rainfall, while Pemba recorded slight increases. However, analysis of long-term interannual rainfall variability (1965–2016) indicates a persistent overall decline in rainfall across both islands, estimated at −0.01 mm per year for Unguja and −0.012 mm per year for Pemba. The last two decades (1997–2018) have been dominated by negative standardized rainfall anomalies, signalling a shift toward increasingly dry conditions. Whereas the period from 1965 to 1998 was characterised by a higher frequency of wet years ($\sigma \geq 1$), the period from 1999 to 2018 experienced more dry years ($\sigma \leq -1$) than wet years, where σ represents the standard deviation.

Taken together, these trends indicate increasing climate variability and a rising risk of water stress across the Zanzibar archipelago, with particularly acute implications for freshwater availability and climate resilience in Unguja.

Saltwater intrusion. Zanzibar is increasingly affected by saltwater intrusion, driven by climate-related and human-induced factors. Rising sea levels, storm surges, changing wind patterns, particularly increased frequency and intensity of winds from the southeast to south, and the degradation of natural coastal protection systems such as dunes, beaches, and mangroves have all intensified seawater intrusion along the coastline (RoGZ, 2018[5]). Prolonged exposure to seawater intrusion has led to

[2] Nordic Development Fund (NDF). 2014. Coastal Profile for Zanzibar. Thematic Volume 1. Investment Prioritisation for Resilient Livelihoods and Ecosystems in Coastal Zones of Tanzania.
[3]Watkiss, P. Pye, S., Hendriksen, G, Maclean, A., Bonjean, M. Shaghude, Y, Jiddawi, N, Sheikh, M. A. and Khamis, Z. 2012. The Economics of Climate Change in Zanzibar. Study Report for the Revolutionary Government of Zanzibar, Climate Change Committee.
[4] Revolutionary Government of Zanzibar (RoGZ). 2023. State of the Coast report for Zanzibar, WIOMSA

[5] RoGZ. 2018. Zanzibar Climate Change Atlas for Impacts of Saltwater Intrusion Database Series 1. 2nd Vice President's Office, Department of Environment, Climate Change Unit.

widespread groundwater salinisation, resulting in the deterioration of freshwater quality. In urban areas, the problem is particularly acute due to intensive groundwater abstraction from shallow coastal aquifers.

Although Zanzibar receives relatively high annual rainfall, groundwater availability is increasingly constrained by low recharge efficiency, rising abstraction, and land-use change. The sustainable annual abstraction limit for Zanzibar is estimated at 339 million m³, of which 293 million m³ is allocated to Unguja and 46 million m³ to Pemba. However, only about 7% of total annual rainfall effectively recharges the groundwater aquifers, reflecting the islands' limited storage capacity and high runoff losses. Urbanisation has further undermined groundwater recharge, particularly in the catchment supplying Zanzibar City. Studies show that the loss of forested land has reduced aquifer recharge by approximately 28% between 1992 and 2022 (Ali and Rwiza, 2020[6]), with annual recharge volumes declining from about 15.5 million m³ in 1992 to 11.1 million m³ in 2022. Recent assessments also estimate an integrated water balance deficit of around 39 per cent in monitored coastal aquifers, where abstraction rates of approximately 2.49×10^6 m³ per year now exceed natural recharge (Bakari et al., 2025[7]).

These hydrological imbalances have contributed to increasing groundwater salinization, particularly in urban and coastal areas. In Zanzibar Municipality, approximately 97 percent of monitored boreholes show rising trends in electrical conductivity (EC) and total dissolved solids (TDS), indicating progressive salinity intrusion. Chloride concentrations in some locations have increased by nearly 60 per cent, from about 110 mg/L in 1993 to approximately 284 mg/L in recent years (Mato, R., 2014[8]). Spatial analyses further highlight severe impacts in key recharge zones such as the Jozani Groundwater Forest area, where severe seawater intrusion (TDS > 10,000 mg/L) now affects more than 15 per cent of the area, while only 58 per cent remains unaffected by significant salinity (Masoud et al., 2017[9]). Collectively, these trends underscore the growing risks to groundwater

1.1 Socio-economic context

Zanzibar's economy is dominated by agriculture, tourism, and marine resources, making it highly climate-dependent and particularly vulnerable to climate variability and extreme weather events. Agriculture is the second-largest contributor to GDP after tourism and remains the primary source of livelihoods for the majority of the population, especially in Pemba. The sector supports over 70% of livelihoods and accounted for 27.1% of GDP in 2021, declining to 24.3% in 2024. Agricultural production is largely smallholder and subsistence-based, with women comprising a significant proportion of the labour force. Farming systems are predominantly rain-fed and low-input, with limited access to improved technologies, quality inputs, extension services, and climate-smart practices, which constrain productivity and adaptive capacity.

Food insecurity remains a major socio-economic challenge in the selected project Districts. An estimated 26% of Zanzibaris are food insecure, with the proportion of the population living below food poverty lines ranging from 5.1 and 6% in Unguja and between 17.1 and 19.4% in Pemba. Female-headed households are disproportionately affected, reflecting persistent gender inequalities in access to land, water, productive assets, and climate information. Furthermore, Pemba records substantially higher poverty levels (42.5-44.4%) than Unguja (21.5-27.2%). Although only 27% of the population resides in Pemba, more than half of the poor (57%) live there. In Pemba, the poorest households are almost entirely dependent on agriculture and exhibit high age-dependency ratios (104.8 in North Pemba and 100 in South Pemba), when compared with

[6] Ali, Z. P. and Rwiza, M. 2020. Assessment of the impact of groundwater pumpage on water supply sustainability in Zanzibar, Tanzania. Environmental Earth Sciences 79(21). Available on the web.

[7] Bakari, S. S., Kyonda, S. M., Kai, k. H., Giaccio, F., Sappa, G. and Maria de Filippi, F. 2025. The Effect of Urbanization on the Groundwater Availability in the Masingini–Mwanyanya Catchment Forest, Unguja Island, Zanzibar (Tanzania). Hydrology 12(11): 295. https://doi.org/10.3390/hydrology12110295.

[8] Mato, R. A. M. 2014. Groundwater quality degradation due to salt water intrusion in Zanzibar Municipality African Journal of Environmental Science and Technology Vol 9(9): 734-740.

[9] Masoud S. Said, Salim M.S. Maliondo, Johnson M.R. Semoka, Balthazar M. Msanya. 2017. Groundwater quality degradation due to saltwater intrusion in Zanzibar Municipality. International Journal of Scientific Engineering Research. Vol. 8 (5): 1145-1149.

North Unguja (76.0), South Unguja (67.6), and Urban West Regions (67.9). High dependency ratios further reduce household adaptive capacity to climate and economic shocks (WBG 2022[10], RoGZ 2025[11]).

In Zanzibar, economic expansion has not translated into sufficient job creation. Labour market inactivity increased from 21% to 24% between 2014 and 2020/21, with particularly high rates among women and youth. Women's unemployment rose from 26% to 30%, while unemployment among young women increased from 41% to 48% (WBG, 2022). This trend persists despite higher female educational attainment, with significantly more women than men enrolled at degree level and above (4,788 females compared to 1,354 males), suggesting structural barriers to labour market participation. Although the tourism sector has expanded, it has generated limited employment opportunities for young women, likely due to restrictive social norms, skills mismatches, and barriers to entry into the private sector. In contrast, women are better represented in the public sector, where, out of 38,284 government employees, 58.8% (22,498) are women, particularly in education, health and social work, professional, scientific, and technical activities, and information and communication. This pattern underscores the private sector's limited capacity to absorb women into employment and the need for targeted, gender-responsive measures to expand inclusive job opportunities (RoGZ, 2025).

Zanzibar has a youthful population: people aged 15–35 account for approximately 37%, and children under 18 make up nearly half (48%). Limited economic diversification and high climate exposure constrain youth employment opportunities, increasing vulnerability and out-migration pressures. Expanding women's and youth's access to productive resources, finance, skills development, and leadership opportunities is therefore essential to strengthening adaptive capacity and sustaining climate-resilient development. However, achieving gender-responsive adaptation requires addressing persistent barriers, including exclusion from value chains, limited land and resource rights, skills gaps, and weak institutional mechanisms to ensure their participation in leadership and equitable benefit-sharing. The proposed project targets vulnerable Shehias to address gender-differentiated climate vulnerabilities, restore productive landscapes, improve water and food security, and support inclusive, climate-resilient livelihood pathways.

1.2 Development Context.

Realizing the challenges brought about by these extreme events, the Revolutionary Government of Zanzibar (RoGZ) has formulated strategies and policy frameworks to strengthen climate resilience and environmental sustainability, in alignment with Sustainable Development Goal (SDG) 13. Key national and sectoral instruments include the Zanzibar Development Vision 2050 (ZDV2050)[12], the Zanzibar Vision 2020[13], the Zanzibar Climate Change Strategy (2014)[14] and the Zanzibar Strategy for Growth and Reduction of Poverty (2016-2020)[15]. The ZDV2050 highlights the importance of sustainable development and strengthened climate resilience to drive economic growth and reduce vulnerability among climate-exposed populations. The Vision recognises the need for inclusive development pathways that address social and gender inequalities, particularly in climate-sensitive sectors such as agriculture, fisheries, water and coastal resource management. The Zanzibar Climate Change Action Plan (2016–2021)[16] translates national climate priorities into phased short- and long-term adaptation actions that strengthen economic opportunities, institutional capacity, and climate knowledge, while integrating gender-responsive approaches that address the differentiated vulnerabilities of women, men, and youth. Despite these frameworks, Zanzibar remains inadequately adapted to current and future climate risks, with persistent rural poverty disproportionately affecting women and other vulnerable groups, underscoring the urgent need for targeted, gender-responsive adaptation investments that deliver tangible resilience outcomes at the community and ecosystem levels.

Climate-resilient infrastructure development is therefore a priority for addressing water stress and climate risks. Investments in climate-smart water supply systems, rainwater harvesting, groundwater recharge enhancement, and protection of critical

[10] World Bank Group (WBG). 2022. Towards a more inclusive Zanzibar Economy: Zanzibar Poverty Assessment
[11] RoGZ. 2025. Zanzibar Statistical Abstracts - 2024. Office of the Chief Government Statistician, Zanzibar
[12] RoGZ. 2020. Zanzibar Development Vision 2050. Zanzibar Planning Commission.
[13] RoGZ. 2000. Zanzibar Vision 2020
[14] RoGZ-1stVPO. 2014. Zanzibar Climate Change Strategy 2014.
[15] RoGZ. 2017. Zanzibar Strategy for Growth and Reduction of Poverty (2016-2020)
16 RoGZ-1stVPO. 2016. Zanzibar Climate Change Action Plan (2016-2021). Strategic Level Action Plan

ecosystems are essential to improve the reliability and quality of water services, reduce exposure to climate hazards, and support productive water use. Strengthening infrastructure resilience also reduces the economic costs of climate shocks and improves service delivery for vulnerable populations.

Institutional strengthening is equally critical to ensure the sustainability and effectiveness of adaptation investments. Enhanced capacity at sectoral, district, and Shehia levels is needed for integrated water resource management, climate-responsive planning and budgeting, and gender-inclusive governance. Improved coordination across water, agriculture, environment, and livelihood sectors, supported by climate information and monitoring systems, will enable evidence-based decision-making and scalable adaptation.

At the community level, expanding climate-resilient livelihood opportunities is central to reducing vulnerability and enhancing adaptive capacity. Supporting climate-smart agriculture, sustainable fisheries, ecosystem-based enterprises, and diversified income-generating activities for women and youth will strengthen food security, stabilize incomes, and reduce dependence on climate-sensitive resources. Together, investments in climate-resilient infrastructure, institutional capacity, and inclusive livelihood diversification provide a coherent pathway for transformational adaptation aligned with the Adaptation Fund's mandate.

1.3 Environmental Context

Zanzibar has a population density of 768 persons/square kilometer (sq. km), ranging from 229.1 persons/sq. km in South Unguja to as high as 3903 persons/sq. km. in the Urban West Region. This concentration of people within a limited land area has contributed to widespread environmental degradation through pollution and unsustainable exploitation of coastal and terrestrial resources. Rapid population growth, combined with heavy reliance on natural resources for livelihoods, has intensified pressure on ecosystems as new and expanding economic activities compete for land, water, forests, and coastal resources. These dynamics generate cumulative and complex environmental impacts, including resource depletion and heightened conflicts among competing user groups (NDF, 2014). Key manifestations include unsustainable use of biomass for household energy, conversion of agricultural land for urban expansion, increased fuel consumption for transport, over-extraction of water resources, and inadequate solid and liquid waste management. These pressures have gender-differentiated effects, as women often depend more directly on natural resources for household energy, water collection, and subsistence livelihoods.

Climate variability and climate change further exacerbate these environmental and socio-economic stresses. For example, rising temperatures and declining rainfall intensities have reduced groundwater recharge and led to overabstraction, intensifying freshwater scarcity in a context where groundwater is the primary source of water for domestic, agricultural, and economic use. Rapid urbanisation and the expansion of the tourism sector have accelerated the degradation of vegetation and wetlands critical to natural recharge, further constraining freshwater availability. In addition, unregulated groundwater abstraction by hotels and other independent institutions, has accelerated saltwater intrusion into already fragile freshwater aquifers. Groundwater in Zanzibar is naturally prone to salinization due to its coastal geology and can be easily contaminated by seawater intrusion even under modest pressure.

As a result, many households in Zanzibar already experience chronic water shortages for domestic use, as illustrated in Table 1, which presents current water demand and supply deficits across the islands. If current trends continue under a business-as-usual scenario, reliance on costly desalination technologies is likely to increase, placing additional financial and institutional burdens on water service providers such as the Zanzibar Water Authority-ZAWA (Yu and Packard, 2021)[17]. These trends underscore the urgent need for integrated, gender-responsive interventions that address population pressures, climate risks, and sustainable management of freshwater and natural resources.

[17] Yu, R. and Packard, D. 2021. Assessing the Viability of Desalination for Rural Water Supply in Chwaka, Zanzibar. Independent Study Project (ISP) Collection 1471. https://digitalcollections.sit.edu/isp_collection

Table 1. Current water demand and supply deficit in Zanzibar. Source: Zanzibar Water Investment Program

Regions	Population as of 2019	Demand per capita per day	Regional Demand per day (litre/day)	Regional Production per day (litre/day)	Deficit per day (litre/day)
Urban West	746,902	140	104,566,280	84,895,998	19,670,282
North Unguja	232,085	140	32,491,900	21,665,333	10,826,567
South Unguja	146,049	140	20,446,860	19,712,000	734,860
North Pemba	258,802	140	36,232,280	21,775,588.1	14,456,691.9
South Pemba	241,767	140	33,847,800	32,816,942.4	1,030,857.6
TOTAL			227,585, 120	180,865,861.5	46,719,258.5

1.4 Scope of the Project and Location of Project Areas

This project will be implemented in the following locations: Kiongwe Kidogo (North B district), Mto wa Pwani (North A district), and Pete (Central district) on Unguja Island; and Gando (Wete district) and Kangani and Makombeni (Mkoani district) on Pemba Island (Figure 1). The sites were selected following consultations with stakeholders on Unguja and Pemba islands, including officers from the 1st Vice President's Office (Environment), Shehia (village) leaders, and community members living in the affected areas. These sites have also been identified in the Atlas as among the saltwater intrusion-affected areas in the islands[18].

a) North A District.

North A District, located in the North Unguja Region, covers 211 km². According to the 2022 Population and Housing Census, the district has a population of 157,369, comprising 77,164 males and 80,205 females. The economy is diverse and dynamic, with key sectors including agriculture, forestry, fishing, hunting, and livestock. Additionally, manufacturing and services play a significant role, including hotels, construction, and trade, all of which contribute to the district's economic growth.

Agriculture is particularly noteworthy, with major crops such as paddy, sweet potato, cassava, yams, millet, bananas, and a variety of fruits and vegetables being cultivated. These agricultural activities not only support the local economy but also enhance food security and livelihoods within the community. There are also livestock, including cattle, goats, chickens, and ducks. Fishing and seaweed farming are among the major economic activities in the area, with seaweed farming predominantly carried out by women, who account for 97.5% of farmers[19].

[18] SMZ-1stVPO. 2018. Zanzibar Climate Change Atlas for Impacts of Saltwater Intrusion Database Series 1. Department of Environment. Climate Change Unit.

[19]The Revolutionary Government of Zanzibar (RoGZ). 2017. Kaskazini A District profile.

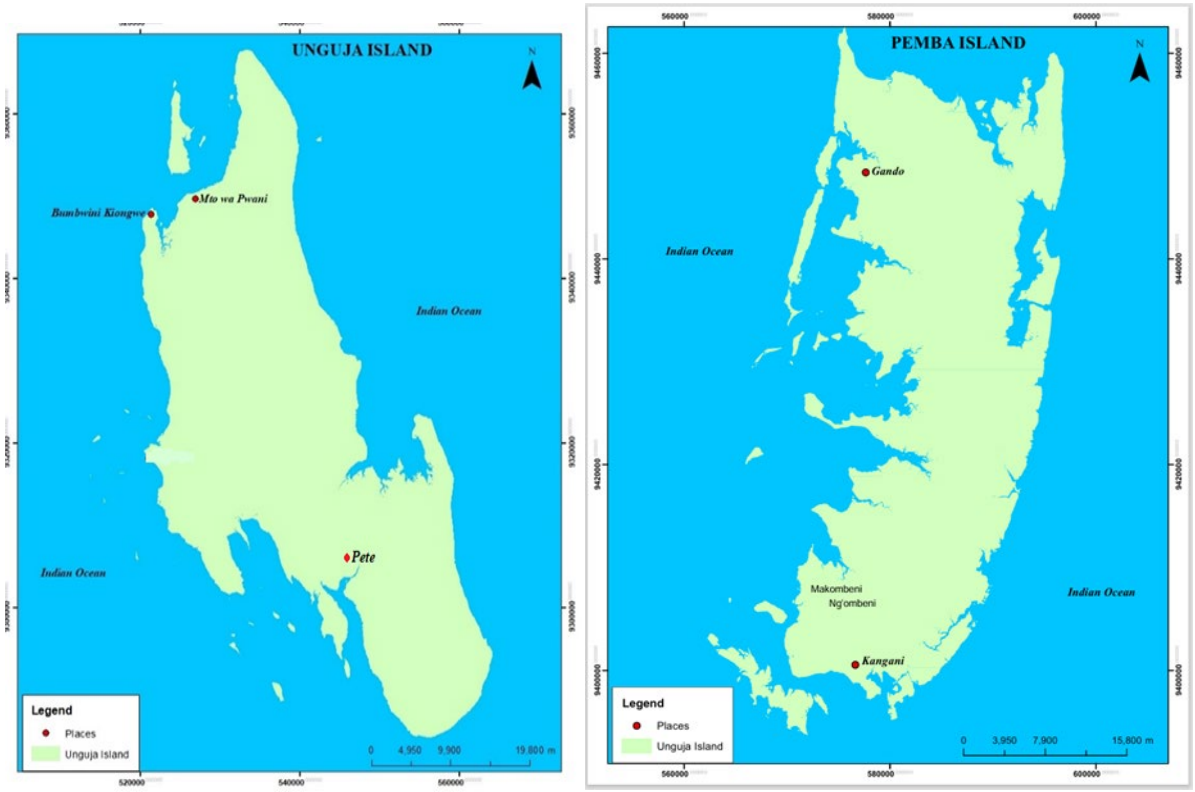


Figure 1. Maps of Unguja and Pemba showing the locations of proposed project sites. Source: Department of Forestry, Zanzibar

The area of land allocated to crop production is currently experiencing a notable decline, driven by multiple factors. The relentless demand for housing, spurred by an ever-increasing population, coupled with the profound impacts of climate change and environmental variability, has significantly affected agricultural land use. The NDF (2014) report highlights several critical threats to this ecosystem, including the debilitating effects of beach erosion, the alarming decline in fish populations linked to mangrove deforestation, illegal fishing, and the encroachment of seawater into coastal areas.

Projections suggest that a sea-level rise of 4 meters could submerge approximately 5.3% of Unguja Island, rising to about 7% with a 5-meter rise. The areas most vulnerable to such inundation are concentrated around Mkokotoni, including areas earmarked for prospective development projects. Furthermore, during periods of spring high tides, these coastal surges pose an even greater risk, potentially extending their reach inland along the intricate network of creeks. This could lead to the unsettling infiltration of seawater into fertile agricultural lands and shallow wells, threatening food security and local livelihoods.

Addressing these multifaceted challenges requires a comprehensive and constructive approach. By implementing sustainable agricultural practices, reinforcing coastal defences, and fostering community engagement and awareness, we can enhance resilience against these environmental threats while safeguarding our vital agricultural resources for future generations.

Project location: Mto wa Pwani is the proposed project area in North A District and covers Mto wa Pwani and Fungurefu villages. The total surface area of the Shehia of Mto wa Pwani is 4.96 km^2 with a population of 3,503 (2,041 M and 1,462 F). The land cover is predominantly sandy terrain with a mangrove ecosystem. The major livelihood activities are predominantly agricultural, livestock, and fisheries. Current impacts of climate change include seawater intrusion in settlements and agricultural land and beach erosion (Plate 1).

b) North B district

North B district is located south of North A district, about 11 miles (17.6 km) from Urban West, and also shares boundaries with the Central district on the south-east, West district on the south-west and the Indian Ocean on the west and east. The population is 99,921 (49,177 M and 50,744 F), and 39.8% is below 15 years of age. The landscape of North B is divided into a lowland area, which is about 95% and the coral land, which is mostly found along the coast[20] . The main economic activities include agriculture, forestry, fishing, poultry, livestock, mining and quarrying, manufacturing and services such as hotels and lodges and trading. Similar to North A, area under crop has been declining, although an increasing number of households keep livestock, especially cattle. However, there is no evidence that farmers have improved soil fertility or increased yields by using farmyard manure.

Project location: Adaptation measures will include two Shehias: Kiongwe Kidogo and Donge Muwanda. Kiongwe Kidogo has a population of 1288 (675 M and 613 F) and 262 households, covering Kiongwe Kidogo, Bumbwini Kiongwe, and Kendwa villages, and Muwanda Shehia, with a population of 984 (517 M and 467 F). Most of the paddy fields are affected by sea water intrusion, and the area keeps on decreasing if proper measures are not taken (especially in Kendwa village). Proposed interventions include constructing a dike to control seawater intrusion, planting mangrove seedlings, and implementing other environmental management measures, including climate-smart agricultural practices.

c) Central district

Administratively the Central District is within the Unguja South Region, bordered by the North B and South Districts on the northern and southern sides, respectively[21]. It is located close to Jozani Chwaka Bay National Park and Biosphere Reserve. The Central District has a population of 132,717 (66,569 M and 66,148 F). The main activities include agriculture, livestock keeping, fisheries and a number of small businesses to cater for tourists along the main road to Southern area of Unguja island. The major environmental threats include saltwater intrusion.

Project location: the project will cover the Shehia of Pete and includes two villages of Jozani and Kitogani, with an estimated population of 2,108 (1047 M and 1,061 F). This area is highly vulnerable to climate change impacts, particularly saltwater intrusion. Approximately 30 acres (12.14 ha) of land have been completely affected by saltwater intrusion, and some households have been forced to relocate due to recurrent flooding during high tides[22]. The Shehia is also strategically important, as it lies along a key road corridor connecting Zanzibar Town to the southern part of the island. In addition, it is located in close proximity to the Jozani–Chwaka Bay National Park and Biosphere Reserve, a critical ecosystem that supports the endemic Zanzibar red colobus monkey and other biodiversity of national and global significance. These factors underscore the area's high climate risk as well as the importance of integrated interventions that protect livelihoods, infrastructure, and sensitive ecosystems.

d) Wete district

Wete district is located in North Pemba and is one of the poorest districts in the islands[23], with a population size of 148,712 (71,929 M and 76,783 F). The major economic activities are agriculture, fishing and to some extent tourism, wholesale and retail trading and government employment. Available opportunities for economic development include offshore fisheries,

[20]The Revolutionary Government of Zanzibar (RoGZ). 2017. Kaskazini B District profile

[21] RoGZ. 2019. Kati District Council Strategic Plan 2019/2020-2023-2024. President's Office – Regional Administration, Local Governments and Special Departments.

[22] RoGZ. 2018. Zanzibar Climate Change Atlas for Impacts of Saltwater Intrusion Database Series 1. Department of Environment – Climate Change Unit.

[23] District and regional profiles sourced from: (i) 2022 Census report and (ii) Nordic Development Fund (NDF). 2014. Coastal Profile for Zanzibar Region Volume II: Investment Prioritization for Resilient Livelihoods and Ecosystems in Coastal Zones of Tanzania. Includes threats identified in each region as prioritized by using Coastal Rapid Impact Assessment Matrix (CRIAM) approach.

beekeeping, aquaculture, high-tech horticulture to cater for tourist hotels and ecological and cultural tourism. The incidence of poverty in the district has declined marginally from 50.8 in 2009/10 to 47.7 in 2014/15. This means that poverty declined by a magnitude of only 3 percentage points. Meanwhile, the level of food poverty in respect to head count rate was 15.7 in 2014/15, compared to 21.1 reported in 2009/10. This means that food poverty has declined by only 5 per cent from the previous level.

Project location: Gando is one of the twelve Shehias affected by the sea water intrusion. The total area of the Shehia of Gando is 11.3 km^2 with a population of 4,265 (Male: 2,102 M and 2,163 F) and 756 households and covers Nduuni and Mpanja villages. The region's mean annual rainfall exceeds 2000 mm, and soil is predominantly silt (known as Mtifutifu). The major livelihood activities include agriculture (coconuts, rice and other food crops), livestock, fisheries and mariculture (seaweed farming). About 80% of the population is engaged in farming. The area has been affected by seawater intrusion into its fields, resulting in a significant decline in per-household rice yields, reduced grazing land, and heightened insecurity. Although a 200-meter dike has been constructed with clay and sand, this temporary measure has not been successful. Most affected areas are Nduuni and Mpanja villages.

e) Mkoani district

The district is located in South Pemba, bordered by Chake district to the north and the Indian Ocean to the south, west and east[24]. It covers 207 km2 and has a population of 135,052 (65,987 M and 69,065 F). Economic activities include agriculture and fisheries as the most important. South Pemba Region has more than 70% of the agricultural land in the island, cultivating cassava, paddy, maize, sweet potatoes, millet, sorghum, bananas and vegetables. The main cash crops are cloves, coconuts, and seaweed. Tourism-related activities are few and underdeveloped, although the marine ecology of the area harbours the best coral reef diving sites in East Africa. Major environmental threats include beach erosion due to mangrove cutting and beach sand mining, hence leaving the beaches prone to erosion due to uncontrolled currents and waves.

Project locations: The project will cover three Shehias in the District: Kangani, Makombeni and Ng'ombeni, with a total population of 10,879: Kangani 5,014 (2,497 M and 2,517 F); Makombeni 2,154 (1,021 M and 1,133 F); and Ng'ombeni 3,711 (1,739 M and 1,972 F). The major livelihood activities include agriculture, livestock keeping, fisheries and seaweed farming. The majority of salt-affected areas in Kangani are Maotwe, Kikuu, Maweni and Kwa Sharifu villages, while the affected Tondooni valley is used by farmers from both Makombeni and Ng'ombeni villages. The key climate change challenges include biodiversity loss, saltwater intrusion, reduced area under cultivation, and drought. Proposed measures include dike construction, mangrove restoration and rainwater harvesting, while proposed livelihood improvement activities include vegetable production, livestock keeping, poultry and spice farming.

1.4 Project objective

The project's main objective is ***to Enhance climate resilience in water-stressed areas of Zanzibar through gender-responsive institutional strengthening, sustainable water management, inclusive livelihood diversification, and strengthened adaptive capacity***

Specifically, the project aims to achieve the following outcomes:

Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilience measures.
Outcome 2: Enhanced water security and gender-responsive climate smart infrastructure.
Outcome 3: Improved access to climate-resilient livelihoods, and productive resources.
Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions.

Table 2a provides direct beneficiaries across different stages of implementation. Direct beneficiaries are individuals residing in the target Shehias who will benefit directly from project interventions such as improved water availability for irrigation,

[24] The Revolutionary Government of Zanzibar (RoGZ). 2017. Mkoani District profile

climate-resilient livelihood support, and the restoration of ecosystem services. They comprisse 11,639 Males, 11,388 Females, 15,144 Youth (Total 23,027). Additionally 61 beneficiaries from relevant implementing institutions will directly benefit from capacity building activities, particularly training on mainstreaming gender in the national planning and budgeting processes.

Indirect beneficiaries (Table 2b) include residents within the wider districts who may benefit from knowledge transfer, learning and the adoption of climate smart practices and alternative livelihood options promoted by the project. Indirect benefits are also expected to arise through new economic opportunities, such as engagements in value chains and business linkages with direct beneficiaries, including value added products like packaged sardines from Mto wa Pwani and spices from Gando.

Table 2a. Direct beneficiaries of adaptation interventions (disaggregated)

Shehia	M	F	Youth	TOTAL
Mto wa Pwani	1,633	1,170	700	**3,503**
Kiongwe kidogo/ Muwanda	954	864	454	**2,272**
Pete/Kitogani	838	849	421	**2,108**
Gando	1,682	1,730	853	**4,265**
Kangani	1,998	2,014	1,002	**5,014**
Makombeni/ Ng'ombeni	2,208	2,484	1,173	**5,865**
GRAND TOTAL	**9,313**	**9,111**	**4,603**	**23,027**

Table 2b. Indirect beneficiaries of adaptation interventions (disaggregated)

DISTRICT	Adult Male	Adult Female	Youth Male	Total District
North A	61,731	64,164	31,474	157,369
North B	39,342	40,595	19,984	99,921
Central	53,255	52,918	26,544	132,717
Wete	57,543	61,426	27,743	148,712
Mkoani	52,790	55,252	27,010	135,052
GRAND TOTAL	**264,661**	**274,355**	**134,755**	**673,771**

Note: Youth population was estimated based on the Census reported proportion of youth aged 15-24 years, which makes approximately 20% of the total population

1.5 Project Components and Financing

Table 3 shows the expected results (outcomes and outputs) that will be derived from the implementation of component activities, with the indicated budget for each component.

Table 3: Project components, expected outcomes, outputs and proposed budget

Component	Project Outcome	Expected Outputs	Amount US$
1: Institutional capacity and governance	Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilient measures	1.1 Gender responsive planning and budgeting instruments adopted and operationalized across Districts and Shehias	165,000
		1.2 Gender coordination unit established and operational at targeted institutions	80,000
		1.3 Reduced protection risks and strengthened social resistance (GAP implementation)	250,000
	Outcome 1 total		**495,000**

2: Water security and climate resilient infrastructure	Outcome 2: Enhanced water security and gender responsive climate smart infrastructure	2.1 Climate smart water infrastructure constructed	1,910,000
		2.2 Inclusive planning and gender-responsive O&M and management established	280,000
		2.3 Risk reduction and ecosystem integration promoted	320,000
	Outcome 2 total		**2,510,000**
3. Climate resilient livelihoods and productive resources	Outcome 3: Improved access to climate-resilient livelihoods and productive resources	3.1 Livelihood diversification programs co-designed with communities	670,000
		3.2 Business development skills enhanced	180,000
		3.3 Households supported with diversified livelihood packages	350,000
	Outcome 3 total		**1,200,000**
4. Knowledge, learning and scaling up innovations	Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions	4.1 Target specific knowledge products developed and disseminated	120,000
		4.2 Community and stakeholder learning events conducted	85,000
		4.3 Digital platforms for knowledge sharing are established and operational	220,000
	Outcome 4 total		**425,000**
	Total project activity cost (A)		**4,630,000**
	Project execution cost (B) 9.5%		**439,850**
	Total program cost (A+B)		**5,069,000**
	Implementing entity fee (8.5% of A+B)		**430,937**
	Amount of financing required		**5,500,787**

Table 4. Projected calendar and milestones

Milestones	Expected Dates
Start of Project Implementation	January 2027
Mid-term Review	June, 2029
Project Closing (6 months after completion)	December, 2031
Terminal Evaluation	June 2032

PART II: PROJECT JUSTIFICATION

A: Describe the project components, particularly focusing on the concrete adaptation activities, how these activities would contribute to climate resilience.

Theory of change. Under the Business As Usual (BAU) scenario, where no additional funding or interventions are provided, the combined pressures of population growth and increasing climate variability across the islands will continue to degrade the fragile ecosystems and water resources. This ongoing environmental degradation is expected to intensify saltwater intrusion and groundwater salinization, resulting in the progressive loss of productive agricultural land and increased food insecurity. Communities living in water-stressed and coastal low lying areas will experience rising vulnerability as irregular rainfall patterns, prolonged droughts, and declining freshwater availability further undermine agricultural productivity, household income and overall resilience. Additionally, the existing sociocultural dynamics determine that the impacts are not experienced uniformly. Existing gender disparities in access to water, land, finance, technology, and decision-making will be exacerbated under BAU conditions, thus deepening inequality and constraining adaptive capacity. Women's roles in water collection, household care, and subsistence livelihoods will face increased poverty and exposure to health and protection risks as water sources become more distant, unreliable or saline. In water-stressed Shehias, declining water availability and salinity disproportionately affect women's productive activities, particularly small scale agriculture and home based livelihoods, which are often excluded from formal support systems.

At the same time, limited institutional capacity, low availability of climate information, and inadequate technical and financial support will continue to constrain community-level adaptation efforts. Without targeted investments in gender-responsive planning, climate-smart water infrastructure, and resilient livelihoods, households will remain trapped in reactive coping strategies that erode assets and increase long-term vulnerability. Intersectional factors such as age, disability, marital status, and income level further shape differentiated risks, leaving female-headed households, youth, persons with disabilities, and poorer households particularly exposed to climate-induced shocks.

While the Government of Zanzibar has initiated important climate and development measures, these efforts remain insufficient to address the scale, complexity, and gendered nature of climate risks in water-stressed areas. Targeted support is therefore justified and necessary to close gender gaps, strengthen institutional capacity, and enable vulnerable communities, especially women and youth, to access climate information, climate-smart infrastructure, and resilient livelihood opportunities. Without such action, climate impacts will continue to reinforce existing inequalities, undermine food and water security, and weaken the long-term resilience of communities most at risk.

These existing challenges underline the need for gender-responsive interventions aligned with the Adaptation Fund Gender Policy and Environmental and Social Policy. The proposed measures emphasize inclusive and participatory community engagement, with the objective of addressing immediate climate risks, but also enabling gender-responsive transformational changes at community and institutional levels. The actions outlined below support the overarching goal of the Adaptation Fund (AF), which is to "*assist developing country Parties to the Kyoto Protocol and the Paris Agreement that are particularly vulnerable to the adverse effects of climate change in meeting the costs of concrete adaptation projects and programmes to implement climate-resilient measures*". Zanzibar as a small island context, is highly exposed to climate induced risks such as water stress, saltwater intrusion, and climate variability. These risks are compounded by high level of poverty, particularly in the rural coastal communities, making targeted adaptation support both urgent and necessary.

Box 1. The Theory of Change statement

- **IF:** institutional capacity and governance systems are strengthened to plan, implement, and monitor gender-responsive climate adaptation, and communities are supported with climate-resilient water infrastructure**,** inclusive water governance, and diversified, climate-resilient livelihood opportunities,
- **THEN:** women, men, youth, and vulnerable groups in water-stressed areas will be better able to anticipate, absorb, and adapt to climate shocks. leading to improved water security, more stable livelihoods, and reduced exposure to climate risks.
- **BECAUSE:** strengthening institutions and governance improves coordination, accountability, and sustainability of adaptation investments, while addressing structural gender inequalities in access to water, productive resources, climate information, and decision-making enhances adaptive capacity at household, community and institutional level.
- **RESULT**: these integrated and gender-responsive interventions will enable transformational adaptation that reduces vulnerability to water stress, improves food and income security, and over time, contributes to the Adaptation Fund's intended impact of **increased resilience to climate variability and change at both local and national scales.**

The outcomes of the project are linked with the AF objectives in the following key areas:

a) **Reduce vulnerability**: the project directly targets reduction of climate risks (water stress, saltwater intrusion), ecosystem degradation and climate sensitive livelihoods.

b) **Increased adaptive capacity**: adaptive capacity is strengthened at system, institutional and community levels through the development of climate-resilient infrastructure (reservoirs, dikes), enhanced governance and coordination mechanisms, and climate resilient livelihood diversification (climate-smart practices): **Components 1, 2 and 3**.

c) **Support for concrete and tangible results**: the project emphasizes on-the-ground adaptation investments, focusing on gender-responsive physical infrastructure, ecosystem restoration (mangrove planting) and livelihood assets that deliver measurable resilience benefits: **Components 2 and 3**.

d) **Promote country ownership:** the project is integrated into the national system through the National Implementing Entity (NEMC), which is a government institution, and the National Designated Authority (VPO): **Component 1**.

e) **Supporting innovation:** the project will identify and scale up new practices, tools and technologies for climate resilience: **Component 4.**

f) **Generating knowledge:** Lessons learned will be captured and disseminated to improve future adaptation strategies: **Component 4**.

Cross-cutting (**all 4 Components**):

g) **Ensure gender-responsive adaptation:** the projecct addresses gender-differentiated vulnerabilities by explicitly targeting women, youth and vulnerable households and ensuring equitable access to project benefits.

h) **Ensure environmental and social sustainability:** the project applies nature-based and socially inclusive approaches to avoid adverse impacts and enhance environmental and social co-benefits.

Figure 3 illustrates the interlinkages within the project's results chain, demonstrating how inputs and activities are logically connected to outputs, outcomes, and the intended impact.

Towards Achieving the AF Goal

IMPACT: Reduced vulnerability and enhanced resilience of water-stressed communities through institutional, behavioral and gender-equitable changes that increase capacity to adapt to climate change

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES
1. Human resource Technical experts, Focal persons, Trainers and Facilitators, Community Development Officers, MEL Specialists **2. Financing** For implementation of project activities 3. **Knowledge and Capacity building:** Learning materials, Documentation tools and guidelines, Knowledge products (manuals, materials) **4. Gender-responsive tools** Guidelines and other planning tools **5. Digital and Communication tools** Mobile based communication tools, Media and outreach inputs 6. **Equipment for infrastructure development** Vehicles, Compactors **7. Office facilities** Computers, printers and other office accessories	Conduct targeted training on gender-responsive data collection at District and Shehia levels; Prepare/review guidelines on gender-responsive climate resilience in the district and Shehia; Integrate gender-responsive climate risk screening and budgeting tools into Shehia and District Plans	1.1 Gender responsive planning and budgeting instruments adopted and opertaionalized across Districts and Shehias	**Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilience measures**
	Appoint and build capacity of Gender Focal Points in the Districts and Shehias; Strengthen capacity to collect, analyze and disaggregate climate data for planning, reporting, ME&L	1.2 Gender coordination unit established/ strengthened and operational at targeted institutions	
	Implement Gender Action Plan	1.3 Reduced protection risks and strengthened social resistance	
	Selection of site for construction of reservoirs, dikes, boreholes, engaging different groups of beneficiaries; Design infrastructure incorporates universal access and GBV safety features; Construct climate-resilient water systems	2.1 Climate smart water infrastructure constructed	**Outcome 2: Enhanced water security and gender responsive climate smart infrastructure**
	Establish Water User Associations (WUA), Train women and youth in infrastructure O&M; Establish community based O&M financing mechanism that is affordable and equitable	2.2 Inclusive and gender responsive O&M and management arrangements established	
	Integrate nature-based solutions (mangrove restoration) to enhance water security and climate resilience; Conduct situation analysis of water resources in project sites; Support participatory research on best practices for soil and water conservation; Conduct participatory mapping of degraded areas	2.3 Risk reduction and ecosystem integration promoted	
	Support the formation/ strengthening of women, youth-led producer groups, with safeguards, inclusion and sustainability criteria; Design and deliver tailored climate-smart livelihood training based on community-identified priorities (e.g. agriculture, agroforestry, fisheries, mariculture, poultry); Promote value addition and quality enhancement and market linkage	3.1 Livelihood diversification programs co-designed with communities	**Outcome 3: Improved access to climate resilient livelihoods and productive resources**
	Develop tailored business development and entrepreneurship skills	3.2 Business development skills enhanced	
	Establish credit support facility, with guidelines that ensure equitable access of financial and other resources within the community	3.3 Households supported with diversified livelihood packages	
	Prepare gender-responsive Communication Plan that defines approaches to gender-differentiated target groups; Document gender-differentiated knowledge products, and disseminate to target groups	4.1 Target-specific knowledge products developed and disseminated	**Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions**
	Organize learning and exchange events to disseminate good practices and promote their replication; Conduct targeted media campaigns to raise awareness on climate risks	4.2 Community and stakeholder learning events conducted	
	Provide accessibility of smartphones through low interest loans to low income beneficiaries Disseminate early warning and seasonal climate information through accessible channels (radio, television, mobile phone); Document successful adaptation solutions replicated or scaled up beyond the original project site	4.3 Digital platforms for knowledge sharing established and operational	

Figure 3. Interlinkages in the result chain

Project components

To be able to effectively implement gender-responsive concrete adaptation actions that will benefit affected communities and contribute to climate resilience, the project interventions will be implemented under four key components, with defined outcomes, outputs, and target interventions.

Component 1: Institutional capacity and governance

Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilience measures (USS 495,000).

This component reflects the AF's empahasis on creating enabling environments, governance structures, and institutional systems that support effective and inclusive adaptation. Institutions play a central role in determining how climate adaptation investments are planned, financed, implemented, and who benefits from such interventions. However, gender considerations are often inadequately integrated into climate planning, budgeting, and implementation processes due to limited technical capacity, limitedt availability and use of sex-disaggregated data, and weak accountability mechanisms. As a result, adaptation interventions risk reinforcing existing inequalities or failing to respond to specific needs, priorities and capacities of women and vulnerable groups. In Zanzibar, strengthening institutional capacity directly addresses these constraints by equipping individuals, organizations, and governance systems with the knowledge, skills, and resources required to anticipate and respond effectively to climate risks. Enhanced capacity improves institutional performance by strengthening access to climate information, financial and technical resources, and functional governance structures. This is achieved through targeted training, institutional strengthening, improved knowledge generation and sharing, and inclusive stakeholder engagement across governance levels.

The project will therefore focus on building the capacity of key stakeholders, especially local government institutions, farmers' associations, and community-based organizations, who play a central role in translating climate policies into action at the grassroots level. Strengthened capacities will support more inclusive planning processes, improved service delivery, and sustained implementation of gender-responsive adaptation measures. In parallel, the component will strengthens governance frameworks by enhancing institutional ability to develop, implement, and enforce climate-responsive and gender-inclusive policies. Training government officials in climate risk assessment, gender-responsive planning, and results-based monitoring will enable informed decision-making and facilitate the integration of climate and gender considerations into development plans, budgets, and accountability systems.

By strengthening governance and institutional capacities at national, district, and community levels, this component ensures that adaptation planning and implementation are aligned with the Adaptation Fund Gender Policy, Environmental and Social Policy, and relevant national climate and gender frameworks. Systematic integration of gender and inclusion into policies, plans, budgets, and monitoring systems ensures that adaptation measures address differentiated risks, roles, and priorities. By integrating gender-responsive approaches within institutional systems, the project supports transformative, scalable, and sustainable adaptation outcomes, while enabling institutions to systematically mainstream gender-responsive climate adaptation beyond the project lifecycle.

Output 1.1: Gender responsive planning and budgeting instruments adopted and operationalized across Districts and Shehias

This aims to strengthen local governance by enhancing transparency, accountability and inclusiveness in climate decision-making across the target Shehias and districts. It also builds the capacity of local officials and planning committees to apply gender analysis, use sex-disaggregated data, and track gender-responsive climate expenditures and results. As a result, districts and Shehias are better equipped to deliver climate-resilient services and infrastructure that are socially equitable and locally appropriate.

Direct beneficiaries: 61 District Environmental and Sector Officers (Agriculture, Forestry, Fisheries, Livestock, Irrigation, Community Development), Gender Focal Points, Shehia appointed persons, of which at least 40% are women and 20% youth. Indirect beneficiaries: Planners and policy makers at large.

Activities:

1.1.1 Conduct targeted training on gender responsive data collection at District and Shehia levels.
1.1.2 Prepare/review guidelines on gender-responsive climate resilience in the district and Shehia.
1.1.3 Integrate gender-responsive climate risk screening and budgeting tools into Shehia and District Plans

1.2 Gender Coordination Units established/strengthened and operational at targeted institutions.

In Zanzibar, gender equality and social inclusion initiatives are overseen by the Ministry of Community Development, Gender, Elderly and Children (MoCDGEC), which is mandated to coordinate policies and programmes that promote women's empowerment, advance gender equality, and protect vulnerable groups. At the district and local government levels, Gender, Women and Children Officers are responsible for coordinating gender and social welfare matters within district administrations. At the Shehia level, local leaders work in close collaboration with these officers to implement gender-related actions at the community level. However, at the sector ministry level, designated Gender Focal Points (GFPs) are not yet systematically established. This gap limits the effective mainstreaming of gender into sector planning, budgeting, and implementation processes, particularly in climate-sensitive sectors. As a result, gender considerations are often addressed in a fragmented manner and are not consistently integrated into technical adaptation interventions.

Establishing and strengthening gender coordination units within key sectors and districts will provide an institutional mechanism for the systematic integration of gender into climate planning, budgeting, and implementation processes. The proposed Gender Coordination Unit will serve as an institutionalized platform to mainstream gender-responsive climate adaptation across sector policies, plans, and programmes. Appointed Gender Focal Points will strengthen coordination among sector departments, districts, and Shehia-level institutions; support the use of sex- and age-disaggregated data and gender analysis in decision-making; and ensure alignment between technical adaptation interventions and social inclusion objectives.

By anchoring gender expertise within sector institutions, the Gender Coordination Unit will enhance institutional capacity and ensure continuity beyond the project lifecycle. This approach will institutionalize gender-responsive planning, budgeting, monitoring, and reporting, thereby strengthening the effectiveness, inclusiveness, and sustainability of climate adaptation efforts in Zanzibar.

Direct beneficiaries: Sector and Shehia level Officers (61), of which at least 40% are women and 20% youth.
Indirect beneficiaries: 5 Districts that will be implementing the AF interventions: North A, North B, Central, Wete and Mkoani districts. Total population for 5 Districts: M 264,661, F 274,355, Youth 134,755.

Activities:
1.2.1 Appoint and build capacity of Gender Focal Points in the Districts and Shehias
1.2.2 Strengthen capacity to collect, analyse and disaggregate climate data for planning, reporting, ME&L

1.3 Reduced protection risks and strengthened social resistance (GAP implemented).

In Zanzibar, incidents of violence and social harm disproportionately affect youth. In 2024, youth accounted for 269 of the 284 reported cases, underscoring their heightened vulnerability. In water-stressed and climate-affected contexts, increased competition over natural resources, food insecurity, and disrupted social systems further elevate the risks of gender-based violence, social exclusion, exploitation, and unequal access to project benefits. Given the high proportion of youth in rural areas (34.2% boys and 35.3% girls), deliberate safeguard measures are required to ensure that adaptation investments do not inadvertently reinforce existing inequalities or exacerbate social tensions.

Implementation of the Gender Action Plan (GAP) is therefore essential to systematically identify, mitigate, and monitor protection risks throughout the project lifecycle (Annex 2). The GAP incorporates context-specific risk assessments, gender-responsive and youth-inclusive design measures, capacity building and leadership skills training for women and youth, inclusive participation mechanisms, and accessible grievance redress systems to ensure safe and equitable access to climate adaptation interventions. Collectively, these measures strengthen community-level social cohesion, accountability, and trust, which are foundational to effective, inclusive, and sustainable climate resilience.
From an Adaptation Fund perspective, reducing protection risks and strengthening social resilience directly supports the Fund's Environmental and Social Policy by minimizing adverse social impacts and ensuring that adaptation actions "do no harm." It integrates the Adaptation Fund Gender Policy (2021) by addressing gender-differentiated risks, promoting safe participation, and protecting the rights and dignity of vulnerable groups.

Direct beneficiaries: Target communities in all Shehias (Total 23,017: M-9,313 F- 9,111, Youth 4,603), of which at least 50% women, 20% youth and other vulnerable groups).

Indirect beneficiaries: 5 Districts that will be implementing the AF interventions: North A, North B, Central, Wete and Mkoani districts. Total population for 5 Districts: M 264,661, F 274,355, Youth 134,755.

Activities
1.3.1 Implement Gender Action Plan (leadership and gender responsive planning, establish/strengthen GBV grievance redress and referral mechanism, and raise awareness on women's access to land rights)

Component 2: Water security and climate smart infrastructure

Outcome 2: Enhanced water security and gender-responsive climate smart infrastructure (US$ 2,510,000).
Water scarcity, saltwater intrusion, flooding, and increasing climate variability continue to undermine livelihoods, food security, and ecosystem sustainability in climate-vulnerable and water-stressed areas. These impacts are disproportionately borne by women, youth, and vulnerable households who depend on climate-sensitive livelihoods and bear primary responsibility for household water management. Infrastructures such as reservoirs, drip irrigation, flood protection, and salinity control, are therefore critical to improving the reliability, efficiency, and equitable distribution of water resources under changing climatic conditions.

Saltwater intrusion has emerged as a growing climate-related challenge affecting the islands of Unguja and Pemba. Many coastal communities such as Nungwi, Matemwe, Bumbwini, Gando and Mkoani are experiencing salinization of wells, boreholes and agricultural soils. This has reduced the availability of freshwater for domestic use, undermined agricultural productivity, degraded coastal ecosystems, and increased vulnerability of key livelihood sectors, particularly agriculture and tourism. It is further estimated that about 20% of Unguja and 30% of Pemba islands lie in the low-elevation, high vulnerable zones (Watkiss et al, 2012). For example, recent studies indicate that approximately 15% of the Jozani Groundwater Forest area is severely affected by salinity (Masoud et al., 2017). If left unaddressed, saltwater intrusion will continue to erode Zanzibar's adaptive capacity by intensifying water scarcity, damaging natural protective ecosystems, and increasing community vulnerability to climate-related shocks.

Strengthening water security and promoting nature-based and technological solutions are essential for building long-term climate resilience in the islands. However, resilient infrastructure alone is insufficient without addressing governance, access, and inclusion. This component directly addresses these structural challenges by integrating climate-smart water infrastructure with gender-responsive and inclusive water governance, in line with the Adaptation Fund Gender Policy and the Fund's emphasis on concrete and sustainable adaptation measures. The result will enhance availability, reliability, and quality of water, while reducing gender differentiated burdens and risks, strengthening inclusive participation in water management, and ensuring sustainable O&M through enhanced community participation, ownership and accountability. By integrating gender-responsive design and participatory management, this outcome transforms water infrastructure from a short-term coping mechanism into a long-term resilience asset that supports households, communities, and local economies under climate stress.

Output 2.1 Climate smart water infrastructure constructed
This output responds directly to the increasing impacts of water scarcity, flooding and saltwater intrusion by delivering integrated, climate-smart water infrastructure. The construction of: reservoirs, dikes, drainage canal and water efficient drip irrigation systems addresses both water availability and water management challenges under increasing climate variability, while ensuring that adaptation benefits are sustainable, inclusive and locally owned. Reservoirs will enhance rainwater storage and reduce seasonal water shortages, improving access to water for domestic use and small-scale irrigation during dry periods. Dikes and drainage canals will reduce flood risks, control saltwater intrusion, and protect agricultural land and settlements from inundation and soil salinization. Water-efficient drip irrigation systems will improve water-use efficiency, reduce pressure on limited freshwater resources, and increase agricultural productivity under drought and erratic rainfall conditions. Together, these infrastructure investments address multiple climate risks while strengthening ecosystem protection and livelihood resilience.

The construction of all water infrastructure will be implemented through structured community mobilization, ensuring participation in site validation, construction oversight, and long-term O&M. This inclusive approach will actively engage women, youth and vulnerable groups, while incorporating measures to prevent and mitigate risks of GBV. Reservoir siting, buffer zones, and access points will be designed using do-no-harm and safety principles, including clearly defined pathways, community monitoring arrangements, and agreed usage schedules to minimize conflict and exclusion. Community sensitization activities will address GBV prevention, safe and equitable access to water infrastructure, and inclusive use, with referral pathways to local support services established where available. By combining engineering solutions with inclusive governance structures, social safeguards, and community capacity building, this output ensures that water infrastructure

functions as a technical intervention and a transformative adaptation measure that reduces climate vulnerability, strengthens social resilience, and delivers equitable and sustainable benefits in line with the Adaptation Fund's mandate.

a) **Reservoirs**
The project will support the construction of climate-resilient rainwater harvesting reservoirs at Gando and Kangani, Pemba, designed to enhance water storage for irrigation and other productive uses. The reservoirs will be constructed in full compliance with the Tanzania Dam Safety Guidelines (2020), the country's environmental and safety regulations, and the AF Environmental and Social Policy and Gender Policy. Design considerations will include erosion control measures on embankments, flood management features, and gender-responsive safety measures such as clearly defined and secure access paths, improved visibility at water points, and community agreed management rules. The reservoirs will be constructed as geo-membrane lined earth dams, using high density polyethylene (HDPE) liners to minimize seepage and increase water storage capacity. Each reservoir will be equipped with a spillway and flood control gates, a low-level outlet for maintenance and sediment management, and a controlled irrigation outlet to regulate water abstraction. These measures will ensure structural safety, operational efficiency, and long-term sustainability.

Prior to their construction, a participatory site selection process will be undertaken, followed by basic hydrological and geotechnical investigations, screening of environmental and social issues, and the preparation of detailed engineering drawings and gender-inclusive construction plans. It is also essential to obtain all required statutory approvals and permits, finalize the ESMP, GAP and O&M framework, and ensure that effective grievance redress and community engagement mechanisms are in place.

The Gando and Kangani reservoirs will have minimum storage capacities of 60,000 and 50,000 cubic meters of water, respectively. The harvested rain water will enable communities to cope with rainfall variability, enhance agricultural production through irrigation, and improve water reliability during prolonged dry seasons, when water scarcity severely constrains both productive and domestic uses despite relatively adequate access during the rainy period. To strengthen environmental sustainability and user safety, a 30-metre protected buffer zone will be established around each reservoir and planted with grasses and water-friendly tree species to reduce erosion, safeguard water quality, and prevent environmental degradation. This combined green-gray approach[25] provides a cost-effective and resilient alternative to fully hard-engineered structures, offering lower maintenance requirements while delivering reliable levels of protection.

Plate 2 shows the proposed area for the construction of reservoir in Gando.

Two field vehicles (double-cabin pickups), one for Unguja and one for Pemba, will be procured to facilitate close supervision and follow up of activities.

Direct beneficiaries: Kangani and Gando communities. Total: 9,279: M-3,680, F-3,744, Youth M 1,855, of which at least 40% women, 20% youth and other vulnerable groups.
Indirect beneficiaries: Mkoani and Wete Districts: Total: 283,764, M 110,333, F 116,678, Youth 56,753.

b) **Dikes**
The project will support the construction of 3,850 meters of earth dikes and flood control gates to prevent saltwater intrusion, reduce flood risks, and reclaim marginal land for crop production (Plates 3a to 3d). The dikes will be constructed using sand, rock and rubble, and fitted with gates to allow controlled flood water outflow while preventing saltwater inflow during high tides and storm surges. These structural measures will be complemented by mangrove restoration along vulnerable coastal sections to enhance natural flood protection, stabilize shorelines, and strengthen ecosystem-based adaptation by planting grass or mangroves.

Construction of dikes will follow a structured process that includes participatory site selection, topographic, hydrological, and geotechnical surveys; assessment of climate risks such as sea-level rise and storm surges; preparation of gender-responsive engineering designs; environmental and social screening and preparation of ESMP, and the acquisition of all required statutory approvals and permits. Gender-responsive O&M procedures will be established to ensure routine

[25] A green-gray approach refers to an integrated climate adaptation and infrastructure strategy that combines 'gray' infrastructure (engineered, built structures) with 'green' solutions (nature-based or ecosystem-based solutions) to manage climate risks more effectively, sustainably, and cost-efficiently.

inspection for erosion, effective compaction and seepage control, and periodic reinforcement and upgrading to respond to changing climate conditions. These arrangements will also promote equitable representation of women and men within maintenance teams.

Dikes will be constructed in some of the most climate-vulnerable areas of Zanzibar, namely Mto wa Pwani, Kiongwe kidogo, Gando, Kangani and Makombeni. The length of the dikes at each location are: Kiongwe Kidogo (1000m), Mto wa Pwani (600m), Kangani (Maweni 850m and Maotwe 250m), Gando (Mwanamakuku 150m, Majomani 150m and Mpanja - 350m), Makombeni 500m. Given the Zanzibar's shallow coastal aquifers that are highly vulnerable to salinization, multiple natural drainage pathways, high annual rainfall (approximately 1,600 mm), tidal influences, and increasing sea-level rise and storm surge risks, flood gates are required to allow controlled inland freshwater drainage while preventing tidal seawater intrusion and backflow. At the planning stage, it is estimated that at least one flood gate will be installed per 300 meters of dike to ensure adequate drainage, reduce pressure on embankments during heavy rainfall events, and enhance the overall resilience and safety of the dike structures.

Two small hand compactors will be procured to support proper soil compaction during dike and reservoir base preparation, reducing permeability and enhancing structural stability. These measures will collectively strengthen protection against saltwater intrusion and flooding while supporting sustainable agricultural production and climate resilience.

Direct beneficiaries: Communities of Mto wa Pwani, Kiongwe kidogo, Kangani, Makombeni and Gando.
Total: 20,919 (M 8,475, F 8,262, Youth 4,182), of which at least 40% women, 20% youth and other vulnerable groups.
Indirect beneficiaries: North A, North B, Wete and Mkoani Districts: Total: 541,054: M 211,406, F 219,103, Youth 108,211.

c) **Drainage canal**.
Pete and Kitogani villages are ecologically and economically significant landscapes in Zanzibar, characterized by high environmental sensitivity and strategic socio-economic importance. Pete Village is located adjacent to Jozani Forest, which is within the 50 sq. km. of Jozani Chwaka Bay National Park (JCBNP) and Biosphere Reserve. The 2,500 ha. of the forest reserve forms a critical ecosystem that provides a vital habitat for endemic species, including the endangered red colobus monkey. The forest also delivers essential ecosystem services such as carbon sequestration, water regulation, and natural water purification. Local communities in both Pete and Kitogani are actively engaged in the conservation of Jozani Forest, playing an important role in safeguarding this nationally and globally significant protected area. The low-lying area of Pete constitutes a high vulnerability hotspot due to increasing exposure to sea-level rise and saltwater intrusion, and coastal flooding. The area is also of strategic importance as it connects the key north–south transport corridor that connects central Zanzibar to southern districts. The absence of adequately constructed drainage canal poses a serious risk or potential disconnection during periods of flooding. Climate change impacts, particularly high tides and coastal flooding, have led to repeated inundation of farms and residential areas, resulting in the loss of approximately 30 acres of productive agricultural land. To date, 13 of the 30 affected households have been forced to relocate, underscoring the severity of the impacts on livelihoods and settlement security.

The project will rehabilitate and upgrade an existing, deteriorated, and temporarily constructed drainage canal to provide effective protection against waterlogging and saline intrusion, while strengthening climate resilience in the area (Plate 4). The proposed 500-metre drainage canal will collect and safely convey excess water, reducing flood risk, protecting remaining households, and mitigating coastal erosion. This intervention will also enable the rehabilitation of degraded land and prevent further environmental deterioration in areas that support the ecological integrity of Jozani Forest. Complementary mangrove replanting will further enhance coastal protection, reduce submergence risks, and strengthen the long-term resilience of both the ecosystem and adjacent communities.

Direct beneficiaries: Community members of Pete. Total 2,108. M 838, F 849, Youth M 421.
Indirect beneficiaries: Total 132,717: M 53,255, F 52,918, Youth 26,544. This group also includes all commuters travelling to and from the southern part of the island.

d) **Drip irrigation facilities**
The project will promote the adoption of water-efficient drip irrigation systems as a climate-smart solution to reduce water losses and enhance crop productivity in water-stressed areas. Drip irrigation is particularly suitable for high-value horticultural crops such as tomatoes, bell peppers, and watermelon, which are widely cultivated by women and youth and can be readily integrated into household and community gardens. With water-use efficiency levels of 85–95% and minimal losses from evaporation or runoff, drip irrigation represents a highly effective technology for addressing increasing water scarcity. Evidence from field application demonstrates the clear productivity and efficiency advantages of LCDI over

conventional surface irrigation (manual application)**.** Using tomatoes as a test crop, LCDI achieved yields of 13.214 tons/ha compared to 8.214 tons/ha under conventional surface irrigation. In addition, LCDI significantly reduced water consumption and labor requirements while improving irrigation water productivity (Table 5). These results highlight the potential of LCDI to increase farm incomes, reduce labor burdens, particularly for women, and improve overall water management efficiency.

Table 5. Comparison of LCDI with conventional surface irrigation.

Indicator	**LCDI**	**Conventional surface irrigation**
Crop yield tons/ha	13.214	8.214
Water use m3/ha	4,035.7	6,000
Irrigation water productivity kg/m3	3.27	1.37
Man-hours used	149	224

Source: Kahimba et al (2025[26]).

To ensure inclusive and equitable access, LCDI systems will be allocated proportionally to farming groups comprising women, men and youth. The intervention will be supported by the drilling of boreholes or construction of simple water-harvesting structures, with water distribution powered by solar-powered pumps. This approach will reduce dependence on fossil fuels, while strengthening climate resilience and sustainability of irrigation services.

The project will support the establishment of drip irrigation systems in four priority sites: Kiongwe Kidogo/ Muwanda, Mto wa Pwani, Pete (Kitogani village), and Gando. The intervention will complement rainfed agriculture by enabling dry-season and off-season production of high-value crops using LCDI systems. Expanded access to these systems will improve agricultural productivity, increase cropping intensity, and maximize returns per unit of water, with particular benefits to women farmers and vulnerable households through improved food security, incomes, and resilience to climate variability.

Direct beneficiaries: Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete and Gando Shehias.
Total: 100 (25 per site): 40 Youth, at least 30 women, and 30 men.
Indirect beneficiaries: North A, North B, Central and Wete districts. Total: 538,719: M 211871, F 219,103, Youth 107,745.

Activities:
2.1.1 Selection of site for construction of reservoirs, dikes, boreholes, engaging different groups of beneficiaries.
2.1.2 Design infrastructure that incorporates universal access and GBV safety features.
2.1.3 Construct climate-resilient water systems.

Output 2.2 Inclusive and gender-responsive O&M and management arrangements established
To ensure that climate-resilient water reservoirs are sustainably managed, the project will establish inclusive, community-based governance systems anchored at the Shehia level. The process will begin with the structured community mobilization to validate reservoir sites identified through stakeholder consultations, thereby strengthening local ownership, transparency, and alignment with community priorities. Selected community members will be trained on reservoir operation and maintenance (O&M), and maintenance of dikes, to ensure long-term functionality under increasing climate variability. Training will cover routine inspections, sediment management, minor repairs, water-use regulation, and record keeping, and will constitute at least 40% women in the O&M team.

Shehia Water Users Associations (WUAs) will be established for each reservoir, with balanced representation of women, men, and youth to reflect diverse water needs and promote equitable participation in decision-making. WUA members will receive capacity-building support on leadership, financial management, conflict resolution, and gender-sensitive governance. Each WUA will operate under an approved operations manual and enforceable bylaws that clearly define roles and

[26] Kahimba, F., Ishengoma, E.K., and Tarimo, A. K. P. R. 2025. Low Cost Drip Irrigation Systems for Smallhoder Farmers in Tanzania. Downloaded in 2025: https://cgspace.cgiar.org/server/api/core/bitstreams/b8fe082d-fae0-41b0-b863-a2552ae84db8/content#:~:text=Low%2Dcost%20drip%20irrigation%20systems%20not%20only%20open,also%20growing%20crops%20during%20the%20dry%20season.

responsibilities, ensure equitable and safe access to water, protect vulnerable users, and integrate gender-based violence (GBV) risk mitigation measures, in line with the Adaptation Fund Gender Policy and Environmental and Social Policy.

To enhance sustainability beyond the project lifecycle, beneficiary farmers will contribute agreed user fees or in-kind support toward routine O&M costs. This cost-sharing mechanism will strengthen accountability, ensure continuity of services, and reinforce long-term community ownership of the the infrastructure.

Direct beneficiaries: Target communities in all Shehias (Total 23,017: M-9,313, F-9,111, Youth 4,603), of which membership will constitute at least 40% women, 20% youth and other vulnerable groups.

Indirect beneficiaries: North A, North B, Central, Wete and Mkoani Districts. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
2.2.1 Establish Water User Associations (WUA)
2.2.2 Train women, youth and men in infrastructure O&M
2.2.3 Establish community based O&M financing mechanism that is affordable and equitable

Output 2.3 Risk reduction and ecosystem integration promoted
This output focuses on rehabilitating selected agricultural lands degraded by saltwater intrusion resulting from rising sea levels. Salt-affected farmlands are particularly prevalent in Pemba, where the highly indented coastal inlets enable seawater to penetrate low-lying agricultural areas. Extensive shoreline exposure, combined with inadequate natural protective barriers, has increased the vulnerability of these farmlands to tidal surges and wave action. The degradation has been further intensified by the loss of mangrove forests, which serve as critical natural buffers against coastal erosion and saline inundation. As a result, many farmers are currently unable to cultivate their land, placing livelihoods and local food security at increasing risk, especially women who represent a large percentage of small scale rice farmers.

Mangrove ecosystem restoration will be implemented in accordance with the technical norms and procedures of the Zanzibar Department of Forestry/WIOMSA Guidelines on Mangrove Ecosystem Restoration (Mangora and Kairo, 2020)[27]. Site selection and restoration planning will be guided by an initial assessment of hydrology, tidal dynamics, soil characteristics, salinity levels, and micro-topography at each target location to ensure ecological suitability and long-term success. Planting materials will be sourced from nearby, healthy mangrove stands and directly transplanted at restoration sites, avoiding the use of nurseries. This approach reduces establishment and transport costs while enhancing survival rates by using locally adapted species. Creating conditions conducive to natural mangrove recolonization is recognized as a more cost-effective and sustainable restoration strategy.

Once established, the restored mangroves will deliver multiple critical ecosystem services, including buffering wave energy, shoreline stabilization, reduced coastal erosion, and the provision of a natural barrier against inland seawater intrusion. In total, at least 34 hectares of degraded coastal land will be restored across the following sites: Kiongwe Kidogo (8.1 ha), Mto wa Pwani (8.1 ha), Pete (4.05 ha), Gando (6.1 ha), Kangani (4.05 ha), and Makombeni (4.05ha).

The project will also assess and respond to risks of subsurface saltwater intrusion, particularly in areas where freshwater aquifers used for domestic supply and agricultural production are under increasing pressure from over-extraction. Hydrogeological and salinity studies will be conducted across all project sites to generate critical evidence for adaptive management, inform sustainable water abstraction, and support the long-term protection of freshwater resources. These assessments will be complemented by mapping of degraded areas and adaptive research on best soil and water conservation practices to enhance resilience, reduce land and water degradation, and inform context-specific adaptation interventions.

Target communities in all Shehias (Total 23,017: M-9,313, F-9,111, Youth 4,603), of which membership will constitute at least 40% women, 20% youth and other vulnerable groups.

Indirect beneficiaries: North A, North B, Central, Wete and Mkoani Districts. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
2.3.1 Integrate nature-based solutions (mangrove restoration) to enhance water security and climate resilience

[27] Mangora, M. M. and Kairo, J. G. 2020. Guidelines on Mangrove Ecosystem Restoration for the Western Indian Ocean Region. UNEP Nairobi.

2.3.2 Conduct situation analysis of water resources in project site
2.3.3 Support participatory research on best practices for soil and water conservation
2.3.4 Conduct participatory mapping of degraded areas

Component 3: Climate-resilient livelihoods and ecosystem services

Outcome 3: Improved access to climate resilient livelihoods, and productive resources (US$ 1,200,000)
Climate change is progressively undermining traditional livelihood systems, particularly agriculture, fisheries, and other natural resource-based activities. These extreme climate events disproportionately affect women, small-scale producers, and vulnerable households who depend on climate-sensitive livelihoods and have limited access to productive assets, finance, and appropriate technology. Furthermore, ecosystems such as wetlands, coastal vegetation, and catchment areas are under increasing pressure from climate impacts and unsustainable resource use. Inadequate integration of gender considerations within livelihood and ecosystem-based interventions often limits benefits for those most at risk. Structural barriers, including insecure land tenure, limited access to finance, technology, climate information, and markets, as well as restrictive social norms, continue to undermine the capacity of women and vulnerable groups to adopt climate-resilient livelihood options and to benefit equitably from adaptation investments.

This component directly strengthens livelihood resilience by ensuring that climate adaptation measures enhance income security by diversifying and climate-proofing livelihoods. By reducing reliance on climate-sensitive activities, communities, particularly women and vulnerable groups, will increase their adaptive capacity and resilience to climate shocks. The component prioritizes gender-responsive access to productive resources, skills development, and climate-smart technologies, while promoting inclusive and sustainable natural resource management. This approach ensures that women and marginalized groups actively participate and benefit from ecosystem-based adaptation initiatives. By enabling equitable access to land, water, climate-smart technologies, inputs, skills development, and financial services, the project supports a transition away from high-risk and low-return climate-sensitive activities toward more resilient and sustainable income sources. This transition will enhance household income stability, food security, and coping capacity, while reducing negative coping strategies that can exacerbate poverty and protection risks.

From a gender-responsive perspective, livelihood diversification addresses structural inequalities that constrain women, youth, and vulnerable groups' access to land, finance, technology, and markets. By promoting diversified, climate-resilient livelihood options that are aligned with local capacities and market demand, the interventions expand economic opportunities to women, and reduces negative coping strategies that may ultimately lead to their exposure to gender-based violence. Institutionally, livelihood diversification complements investments in water security and climate-smart infrastructure by ensuring that adaptation benefits are translated into sustained socio-economic resilience rather than short-term coping. When combined with skills development, improved access to climate information and financial services, and inclusive governance structures, diversified livelihoods support transformational adaptation by shifting households from reactive coping to proactive resilience-building.

Output 3.1 Livelihood diversification programs co-designed with communities

Co-designing livelihood diversification programs with communities is essential to achieving effective, inclusive, and sustainable adaptation outcomes. Community co-design strengthens adaptive capacity by integrating local knowledge, technical expertise, and climate information to identify livelihood options that are both climate-resilient and economically viable. It also enhances accountability and long-term commitment, which are essential for sustained adoption and maintenance of diversified livelihoods. Across all target Shehias, several community groups (men-only, women-only, and mixed) were previously supported by the Tanzania Social Action Fund (TASAF). While many of these groups are currently only partially active, they represent an existing institutional and social foundation that can be revitalized. With targeted capacity-building and technical support, these groups can be reactivated and effectively engaged in the co-design and implementation of locally appropriate livelihood diversification activities.

Stakeholder consultations involving women, men, youth, and persons with disabilities identified priority livelihood options based on local needs, capacities, and socio-ecological conditions. The prioritized activities include agribusiness (rice and vegetable production), fisheries, agroforestry, beekeeping, value addition, and small-scale enterprises, as summarized in Table 6. These livelihood priorities provide a strategic entry point for the design and implementation of tailored climate-smart practices at Shehia level, ensuring alignment with differentiated capacities and preferences of disaggregated beneficiary groups. To support effective uptake, the project will deliver tailored capacity building and training on climate-smart practices aligned with the identified priority livelihood activities, equipping beneficiaries with the technical skills and knowledge required for effective, resilient and sustainable implementation. The project will also explore the introduction of simple, low-cost structured greenhouses at Mto wa Pwani to enable year-round vegetable production. Beneficiaries will

include both male and female farmers, with priority given to women-led farmer groups engaged in vegetable production, recognizing their critical role in household food security, income diversification, and community resilience.

Building on the livelihood priorities identified during stakeholder consultations, several groups further emphasized value addition as a critical strategy for enhancing economic returns through improved product quality, processing, storage, and marketability. Strengthening value chains increases resilience by enabling producers, particularly women and vulnerable groups, to generate higher and more stable incomes from diversified, climate-resilient livelihoods, thereby reducing dependence on highly climate-sensitive primary production systems. Accordingly, this output will focus on capacity building on value addition for high-value horticultural crops, spices and bee products, as well as selected fisheries and mariculture products (sardines, seaweeds, and shellfish). These commodities were identified as priority livelihood activities in locations such as Pete, Mto wa Pwani, and Gando, where they offer strong potential for income diversification and climate-resilient growth.

Evidence from Zanzibar demonstrates the income-enhancing potential of value addition. For example, value addition in spices and herbs has been shown to substantially increase farmer incomes, with one producer reporting an increase from TZS 150,000 (US$ 65) per month to TZS 500,000 (US$ 217) following improvements in processing and market access (Makoye, 2022[28]). Spice farming in Zanzibar generally falls into three categories: non-organic, organic, and certified organic, with certified organic systems offering the highest price premiums (Garu, 2017[29]). Targeted support to women's groups to improve quality control, post-harvest handling, and value addition will significantly enhance household incomes and livelihood resilience. In addition, farmer groups will be supported in transitioning to certified organic spice production by linking them with accredited certification bodies that conduct periodic inspections and provide quality assurance. Access to certification will enable farmers to capture premium market prices, strengthen their position within value chains, and reinforce inclusive, climate-resilient rural development outcomes.

Table 6. Selected livelihood options and direct beneficiaries (disaggregated) in target Shehias

Livelihood option	Location	Beneficiaries of individual livelihood activity				Total
		M	F	Youth	PWD	
Drip irrigation	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando	30	30	40		100
Agribusiness (rice, vegetables, spices)	Mto wa Pwani, Kiongwe kidogo/ Muwanda, Pete, Gando, Kangani, Makombeni/ Ng'ombeni	210	530	170	5	915
Agroforestry/Mangrove restoration	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Kangani, Makombeni/ Ng'ombeni	50	350	60	-	460
Fisheries (fish farming, mariculture)	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Kangani, Makombeni/ Ng'ombeni	30	30	70	0	130
Beekeeping	Pete, Kiongwe kidogo/ Muwanda	20	40	20	-	100
Poultry	Kiongwe kidogo/ Muwanda, Mto wa Pwani, Pete, Kangani, Makombeni/Ng'ombeni		25		10	35
Handicraft/small business: soap making	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Makombeni/ Ng'ombeni	-	10	35	20	65
Tourism promotion	Pete	-	20	20	-	40
	Total direct beneficiaries	**340**	**1,035**	**415**	**35**	**1,825**

[28] Makoye, K. 2022. Zanzibar's spice farmers face food insecurity. https://www.aa.com.tr/en/africa/zanzibar-s-spice-farmers-face-food-insecurity/2573946#.

[29] Garu, F. A. 2017. Organic Spices farming in West District, Zanzibar: Its contribution to livelihood outcomes of smallholder farmers. MSc. Dissertation, Sokoine University of Agriculture, Morogoro, Tanzania.

PWD: Persons with Disabilities

Beneficiaries: Total: 1,825: M 340, F 1,035, Youth 415, PWD 35.
Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.
Activities:

3.1.1 Support the formation/ strengthening of women, youth-led producer groups, with safeguards, inclusion and sustainability criteria.
3.1.2 Design and deliver tailored climate-smart livelihood training based on community-identified priorities (e.g: agriculture, agroforestry, fisheries, mariculture).
3.1.3 Promote value addition and quality enhancement and market linkage.

3.2 Business development skills enhanced
Women, youth, and vulnerable groups often engage in informal and low-return economic activities due to limited access to education, business networks, finance, and market information. In response, the project intends to develop business skills among targeted women and youth to enable them effectively manage their productive assets, improve their enterprise performance, and transition into higher-value segments of value chains. The intervention will focus on practical skills such as basic financial literacy, record keeping, product development, quality control, packaging, pricing, and market linkage development. These skills will enhance participants' ability to engage competitively in climate-resilient livelihood opportunities and increase returns from existing activities. A clear example is seaweed farming, a climate-sensitive livelihood predominantly undertaken by women. While seaweed farmers currently earn less than USD 0.17 per kilogram of dried seaweed, processed derivatives such as carrageenan can sell for approximately USD 40 per kilogram, highlighting the significant income gap between raw material production and value-added processing (RoGZ, 2022)[30]. To address this disparity, the project will support women and youth to move beyond primary production into value addition and product diversification. Plate 8 shows an example of value-added seaweed product that is available in the shops in Zanzibar.

Building on existing local initiatives, organized women's groups in Kidoti, Chukwani, Bweleo, Paje, Fuoni, and Bumbwini in Unguja, as well as Makangale in Pemba, have successfully organized themselves to produce and market a range of seaweed-based products, including soaps, oils, sweets, and beverages derived from seaweed powder (RoGZ, 2022). The project will scale up such models by combining business development skills, access to finance, and market-oriented support, thereby enabling women, youth, and vulnerable groups to capture greater value, increase incomes, and strengthen their economic resilience in the face of climate change. Women who will be selected to participate in this exercise must be registered in one of the community groups and must be involved in one of the livelihood activities to ensure continuity and effectiveness of the investment.

Direct beneficiaries: Total: 1,825: M 340, F 1,035, Youth 415, PWD 35.
Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
3.2.1 Develop tailored business development and entrepreneurship skills.

Output 3.3: Households supported with diversified livelihood packages

Providing access to appropriate and inclusive credit facilities is a gender-responsive and cost-effective adaptation measure that enables uptake, scaling, and long-term sustainability of livelihood diversification. Climate-resilient livelihoods often require upfront investments such as improved inputs, small equipment, water-efficient technologies, value addition tools, and working capital, most of which are beyond the reach of most vulnerable households. Limited access to affordable finance therefore constrains women, youth, and marginalized groups from adopting and sustaining adaptation measures, thereby perpetuating dependence on climate-sensitive and low-return activities. In contrast, access to credit strengthens adaptive capacity by enabling households to invest in diversified, climate-resilient livelihoods, manage cash flow and smooth consumption during climate shocks. It also reduces on reliance of negative coping strategies such as distress sales of assets or reliance on exploitative informal lending.

Institutionally, access to credit complements investments in business skills development, water security, and climate-smart infrastructure by ensuring that beneficiaries can effectively apply acquired skills and utilize improved technologies. Credit

[30] RoGZ. 2022. Zanzibar Fisheries Masterplan 2023-2038. Ministry of Blue Economy and Fisheries, Zanzibar.

facilities also enhance the sustainability and scalability of adaptation investments by strengthening linkages with formal and semi-formal financial institutions, and supporting continuity beyond the project lifecycle. In line with the AF Results Framework, access to credit contributes to improved adaptive capacity of vulnerable households and communities, increased resilience and sustainability of diversified livelihoods, and enhanced socio-economic benefits of adaptation investments, particularly for women, youth, and vulnerable groups.

The project will collaborate with established microfinance institutions such as FINCA Microfinance Bank and NMB Microfinance, to expand access to affordable financial services for climate-resilient livelihoods. FINCA Microfinance Bank has previously partnered with the SUCCESS programme in Bagamoyo, where it successfully provided micro-loans to support environmentally sustainable livelihood activities such as seaweed farming and community-based tour guiding, demonstrating its capacity to deliver targeted financial products in climate-sensitive sectors. Similarly, NMB Microfinance operates one of the most extensive microfinance frameworks in Tanzania, offering a diversified portfolio that includes digital micro-loans, group-based savings and credit products, and specialized business loans. Of particular relevance is the Pamoja (Kikundi) Account, a group savings scheme designed for both formal and informal community groups, and established for collective saving and internal lending. This product enables community savings groups to integrate into the formal banking system, while benefiting from no monthly maintenance fees and the accrual of annual interest on group savings (NMB, 2025)[31]. These features make the scheme especially attractive to small savings and credit groups operating at Shehia level, and well suited to supporting inclusive, climate-resilient livelihood investments under the project.

This activity will be implemented across all target Shehias, with credit support facilities established under clear operational guidelines to ensure equitable, transparent and inclusive access to financial and related resources within the participating community.

Direct beneficiaries: Total: 1,825: M 340, F 1,035, Youth 415, PWD 35.
Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:

3.3.1 Establish credit support facility, with guidelines that ensure equitable access of financial and other resources within the community.

Component 4: Knowledge, learning and scaling up innovations

Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions
Climate adaptation effectiveness depends on the implementation capacity as well as the availability, accessibility, and practical use of knowledge. In many contexts, climate information, lessons learned, and good practices are poorly documented, inadequately shared, and insufficiently translated into planning and decision-making processes. These gaps limit learning, replication of successful approaches, and weaken evidence-based policy development.

In Zanzibar, limited access to timely, localized, and gender-responsive climate information further constrains the ability of communities and institutions to make informed and forward looking decisions. Strengthening knowledge systems directly addresses these challenges by improving awareness of climate risks, viable adaptation options, and context-specific good practices that reflect local ecological, social and cultural conditions. Moreover, systematic learning and knowledge exchange enable communities, practitioners, and institutions to shift from reactive responses toward evidence-based adaptation options. Through appropriate communication and learning tools, lessons learned can be effectively documented, local and indigenous knowledge integrated, and peer-to-peer learning promoted across Shehias and districts. This supports continuous improvement and scaling up of adaptation solutions, reduces climate risk trade-offs, enhances cost-effectiveness, and ensures that successful approaches, particularly those benefiting women, youth, and vulnerable groups, are replicated and sustained.

Furthermore, when data, tools, and lessons are widely shared, planners and decision-makers are better equipped to systematically mainstream climate and gender considerations into policies, plans, and budgets. This strengthens coherence between local actions and national strategies, improves accountability, and supports institutional learning beyond individual projects. Enhanced knowledge dissemination also underpins transformative adaptation by influencing behaviors, norms and decision-making processes, empowers communities to actively participate in climate governance, improves the uptake of climate-resilient technologies and practices, and builds long-term adaptive capacity. As a result, adaptation outcomes become more resilient, equitable, and scalable beyond the project lifecycle.

[31] NMB. 2025. https://www.nmbbank.co.tz/careers/job-search/opening/243.

Output 4.1: Target specific knowledge products developed and disseminated
The project will develop and disseminate targeted knowledge products tailored to the needs of diverse stakeholders. Climate risks, adaptive capacities, and adaptation priorities vary significantly among women, men, youth, and vulnerable groups, as well as across sectors and geographic locations. To ensure equitable access and effective use of project knowledge, a Communication Plan CP) will be prepared to ensure timely, transparent, inclusive and effective information sharing throughout the project cycle. The CP will support meaningful stakeholder participation, promote local ownership, and enhance visibility of the AF support, and facilitates learning and knowledge dissemination for scaling up climate adaptation actions. Specifically, the CP will identify and map target audiences (beneficiary communities and Institutions), secondary audiences (local government authorities, sector ministries, Civil Society Organisations and NGOs), define tailored messages for each group, specify appropriate communication channels and tools (such as local radio programs, brochures, knowledge products, social media, and policy briefs), and clearly outline institutional roles and responsibilities, implementation timelines, budget requirements and M&EL mechanisms.

Direct beneficiaries: Target communities (all Shehias), Policy makers and the population at large, with at least 30% of targeted policy makers being women. Total Shehaias: 23,017 (M 9,313, F 9,111, Youth M 4,603.
Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
4.1.1 Prepare gender-responsive Communication Plan.
4.1.2 Document gender-differentiated knowledge products and disseminate to target groups

Output 4.2: Community and stakeholder learning events conducted
Knowledge exchange events will provide structured platforms for peer-to-peer learning across Shehias, districts, and institutions, enabling practitioners and community members to share practical experiences, innovations, and implementation challenges. These exchanges will promote horizontal learning and networking, reduce duplication of efforts, and accelerate the replication and scaling of proven adaptation solutions, and strengthen leadership and networks of women, youth, and vulnerable groups within climate adaptation processes. To facilitate effective knowledge transfer, the project will organize study visits to sites that share similar experiences, allowing participants to observe successful practices firsthand and engage in direct knowledge sharing. In addition, the project will utilize other knowledge sharing platforms such as exhibitions and learning forums to broaden outreach, showcase adaptation innovations, and disseminate lessons learned to wider range of stakeholders.

Additionally, targeted media campaigns will complement direct knowledge exchange by extending the reach of adaptation messages to wider audiences, including households, community leaders, and policymakers. The use of appropriate media channels such as community radio, visual and print materials, and digital platforms will ensure that information is accessible across different literacy levels and social groups. Together, these approaches will enhance awareness, influence attitudes and behaviors, and support evidence-based and inclusive decision-making. Overall, this output strengthens the enabling environment for effective, inclusive, and scalable adaptation by translating knowledge into practice, reinforcing learning across community, district, and institutional levels, and institutionalizing gender-responsive climate adaptation within local and institutional systems beyond the project lifecycle.

Direct beneficiaries: Target communities in all Shehias, Total 23,027: (M 9,313, F 9,111, Youth M 4,603), of which at least 40% women, 20% youth and other vulnerable groups, District planners, Gender Focal Points and Communication Officers.

Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
4.2.1 Organize learning and exchange events to disseminate good practices and promote their replication
4.2.2 Conduct targeted media campaigns to raise awareness on climate risks.

Output 4.3: Digital platforms for knowledge sharing established and operational
The use of digital platforms for knowledge sharing has become increasingly popular due to their capacity to deliver climate adaptation information in a timely, wide-reaching, and cost-effective manner. Digital tools enable the rapid dissemination of climate data, early warning information, and adaptation practices across multiple locations, helping to overcome geographic and institutional barriers that often limit access to information, particularly in rural areas. By facilitating real-time communication and feedback, digital platforms support informed decision-making at household, community, and institutional levels.

In Zanzibar, mobile phones are widely used by more than 95% of the population across age groups, for internet access, voice communication, short message services (SMS), online business transactions, and mobile money services. This high level of mobile phone penetration provides a strong foundation for disseminating climate advisories, early warning alerts, and market

information for value-added products. Digital platforms also allow users to provide feedback, report local conditions, and contribute to the continuous improvement of climate advisories and adaptation practices. When designed to be gender-responsive, accessible, and user-friendly, these platforms will enable women, youth, and vulnerable groups to access information, participate in learning processes, and share experiences on an ongoing basis, while reducing mobility and time constraints.

However, access to smartphones remains uneven. It is estimated that only about 49.1% of women, predominantly youth, have access to smartphones, limiting the effective use of digital platforms among certain community segments. To address this digital access gap, the project will facilitate improved access to smartphones to registered low-income group members through low-interest loan mechanisms, particularly targeting women, youth, and vulnerable households. This approach will reduce upfront cost barriers and promote more equitable access to digital knowledge platforms and climate early warning information. Implementation will be supported through partnerships with registered mobile network operators with rural coverage, enabling bundled services and tailored digital solutions for target communities.

Direct beneficiaries: Target communities in all Shehias, Total 23,027: (M 9,313, F 9,111, Youth M 4,603), of which at least 40% women, 20% youth and other vulnerable groups, District planners, Gender Focal Points and Communication Officers. Indirect beneficiaries: North A, North B, Central, Wete and Mkoani. Total: 673,771: M 264,661, F 274,355, Youth 134,755.

Activities:
4.3.1 Provide accessibility of smartphones through low interest loans to low income beneficiaries
4.3.2 Disseminate early warning and seasonal climate information through accessible channels (radio, television, mobile phone

B. Describe how the project 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 will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

Environmental benefits

The proposed project will have environmental benefits in four key areas:

i) **Control of saltwater intrusion and land restoration:** The construction of dikes (total length 3,850 meters) will help prevent further saltwater intrusion, thereby reducing land degradation on farmlands that support the livelihoods of communities in the Shehias of Mto wa Pwani, Kiongwe Kidogo, Muwanda, Pete, Gando, Kangani, Makombeni and Ng'ombeni, with the total estimated population of 23,017 (M 7,658, F 7,368, Youth M 3,981, and Youth F 4,020) as direct beneficiaries. In addition a 500 m drainage canal to be built in Pete will help to reclaim the land that is inundated with saltwater and frequently flooded during the rainy season and high tides. This land was previously used for cultivation, and productivity is expected to resume once the land is restored, thus strengthening food security, household incomes and climate resilience, particularly for women farmers and smallholder producers who are disproportionately affected by land degradation and salinity intrusion.

ii) **Restoration of mangrove ecosystem and shoreline protection:** Mangroves are critical coastal ecosystems that protect shorelines from erosion and storm surges, support marine biodiversity and fisheries, sustain coastal livelihoods, and contribute to climate change mitigation through carbon sequestration (IUCN, 2017[32]). In Zanzibar, these ecosystems are under increasing pressure from sea-level rise, coastal erosion, and rapid urbanization. Between 1994 and 2024, the Urban West Region experienced a marked increase in water bodies from 20,736.27 ha to 22,422.51 ha, indicating coastal land loss, while bare soil and built-up areas expanded from 1,981.44 ha to 3,406.14 ha, reflecting accelerated urban development and coastal beach erosion (Miza et al., 2025[33]). Complementing these findings, the World Wide Fund (WWF) for Nature reports a 23% net loss of mangrove cover in Zanzibar between 1990 and 2023, driven by unsustainable

[32] International Union for Conservation of Nature (IUCN). 2017. Blue Carbon – Issues brief.

[33] Ali, M. A., Nakamo, S. J. and Maguta, M. M. 2025. Three Decades of Land Use and Land Cover Changes in Mjini Magharibi, Zanzibar, Tanzania: Implications on the Coastal Mangrove Forest Ecosystems and Urban Development. Rural Planning Journal Special Issue No 1. ISSN (p): 0856-3460; ISSN (e): 2507-7848

harvesting, agricultural expansion, and coastal development, and resulting in increased erosion and saltwater intrusion (WWF, 2023[34]).

Mangroves also support women-dominated livelihoods such as crab harvesting, pearl oyster collection, and seaweed farming, making their degradation a direct threat to income security and climate resilience for vulnerable groups. Building on community restoration experience, the project will implement inclusive, community-based mangrove restoration with the participation of women, men, and youth. With support from the Adaptation Fund, approximately 34 hectares of degraded mangrove areas will be restored, contributing to reduced shoreline erosion, strengthened protection against sea-level rise and storm surges, enhanced ecosystem services, and gender-responsive, climate-resilient livelihoods beyond the project lifecycle.

iii) . **Climate-resilient water supply and aquifer protection:** The construction of two rainwater harvesting structures will enhance the availability and reliability of water for agriculture, support irrigated farming, horticulture, and other climate-sensitive livelihoods in water-stressed areas. Improved water access will strengthen food security and incomes for smallholder farmers, including women farmers, while reducing pressure on ecosystems and supporting groundwater recharge and freshwater-saltwater balance. Additionally, the project will address gender-based violence (GBV) and safety risks associated with reservoirs through appropriate siting, safe access design, and community-based monitoring. Gender-balanced Water User Associations will be trained on inclusive water governance and GBV risk mitigation, reducing women's exposure to protection risks while strengthening their participation in water management.

iv) **Climate-smart practices and environmental conservation:** The adoption of climate-smart agriculture practices such as integrated farming systems, and other environmental conservation measures such as tree planting and soil and water conservation techniques, will improve vegetation cover and strengthen the sustainable management of land and water resources. These practices will support the restoration of degraded landscapes and forests previously cleared for various uses, while increasing agricultural productivity, enhancing resilience to climate variability, and contributing to mitigation co-benefits. Gender-responsive extension services and capacity-building will ensure equitable access to climate-smart technologies and practices for women, men, youth, and vulnerable households, thereby supporting sustainable livelihoods and long-term ecosystem health.

Economic benefits

Investing in climate resilience measures generates substantial economic and financial returns by strengthening the adaptive capacity of coastal ecosystems and the women and men who depend on them for their livelihoods. Sustainable management of coastal resources such as mangrove restoration, land reclamation, and soil and water conservation, buffers climate risks while ensuring that the ecosystems underpinning key economic sectors remain functional and productive. These measures reduce vulnerability to coastal erosion, flooding, and salinity intrusion, thereby protecting valuable assets, including homes in Pete village and coastal tourism infrastructure.

Nature-based adaptation measures also create diversified and inclusive livelihood opportunities. Mangrove restoration enhances eco-tourism potential, as demonstrated by the Jozani mangrove boardwalk, and supports climate-resilient enterprises such as beekeeping, fisheries, and small-scale tourism services, with targeted opportunities for women and youth. The reclamation of approximately 34 ha of degraded land will further strengthen economic resilience by expanding climate-smart agriculture and enabling farmers to sustain production of staple crops such as rice and vegetables despite increasing climate variability. For example, rice yields in reclaimed areas are expected to increase from 0-1 ton/ha (previously abandoned or low-productivity plots) to approximately 4 tons/ha per season. This productivity gain will substantially enhance food security and household incomes in Gando, Kangani, and Makombeni, communities where women constitute more than half of the population, and average household sizes range from 5.3 to 5.6 persons.

[34] Mangora, M. M, Kuechcy, H., Cooper, S., Spengler, S., Mabula, M. J., Kamnde, K. J. and C. C. Trettin. 2025. Mapping 30 years of mangrove change in Tanzania using historical maps and remote sensing. downloaded: https://lps25.esa.int/lps25presentations/poster/MAPPING%20OVER%2030%20YEARS%20OF%20MANGROVE%20CHANGE%20IN%20TANZANIA%20USING%20HISTORICAL%20MAPS%20AND%20REMOTE%20SENSING.pdf

Improved groundwater recharge and increased access to harvested water will reduce household vulnerability to water scarcity by lowering economic losses and the time and labor spent on water collection, primarily by women and girl. These gains translate into increased time for productive activities, education, and participation in community decision-making, while reducing exposure to protection risks associated with water access. Additionally, seedling production provides income opportunities through local sales, particularly for women and youth, while supporting climate-resilient agriculture. Enhancing crop production and alternative income-generating activities such as seaweed and sea cucumber farming, which are predominantly undertaken by women further supports the development of gender-responsive, climate-resilient livelihoods. Sea cucumbers command retail prices of TZS 28,000–36,000 (US$11.2–14.4) per kilogram, through targeted training on climate-smart aquaculture, quality control, and value addition, these activities can substantially increase women's incomes by up to 25% and strengthen their capacity to cope with climate-related shocks.

Building human and institutional capacity is also critical to sustaining these resilience investments and maximizing long-term socioeconomic returns. Skills development, knowledge transfer, and institutional strengthening will enable government institutions to systematically integrate climate- and gender-responsive approaches into planning, budgeting, and service delivery. Impact evaluations and beneficiary assessments conducted throughout implementation will help quantify economic gains and distributional benefits across women, men, youth, and vulnerable groups. Collectively, these interventions aim to transform communities from resource-poor and highly vulnerable to resource-secure, economically empowered, and resilient to climate shocks, while ensuring equitable participation and benefit-sharing for all.

Social benefits

The project is expected to deliver significant positive social benefits by promoting climate-resilient agricultural practices and strengthening integrated water resource management. Improved rainwater harvesting will ensure the long-term availability of freshwater for farming, domestic use, and improved health and sanitation outcomes. Increased water access will reduce the time burden of water collection during the dry season by an estimated 1-1.5 hours per day, a task predominantly undertaken by women and children, thereby freeing time for productive activities, education, and community participation.

Income-generating activities supported by the project will enhance household stability and overall community well-being. By improving water security and strengthening local food systems, the project will contribute directly to social cohesion and stability. Additional income opportunities will be created through climate-resilient rice, vegetable, and spice production, as well as poultry and beekeeping enterprises. These diversified livelihood options will improve food security, expand income sources, and increase household resilience to climate shocks. According to the 2022 Census, five of the nine targeted Shehias have female population shares exceeding those of men, ranging from 50.3% in Jozani to 53.1% in Ng'ombeni. The project will also stimulate complementary small enterprises along the value chain, including processing, marketing, and input supply services, creating additional employment opportunities for women and youth.

As a gender-responsive climate adaptation project, all activities will be designed to ensure meaningful and equitable participation of women, men, and youth throughout the project cycle, from planning and implementation to monitoring and learning. This inclusive approach will strengthen local ownership, reduce rural-urban migration pressures, and contribute to reduced incidences of antisocial behavior previously reported in communities such as Mto wa Pwani, Gando, and Kangani. The livelihood activities supported by the project are expected to generate positive multiplier effects, extending benefits to vulnerable and marginalized groups in surrounding communities. Systematic documentation and dissemination of lessons learned will promote wider uptake of climate-resilient practices, particularly among younger generations who can directly observe economic and social gains achieved. The project is expected to directly benefit an estimated at 23,027 people (11,639 men and 11,388 women) across the target Shehias. By the end of the project cycle (Year 5), at least 10% of the population in the five targeted districts is expected to have adopted these transformative approaches or benefited through the value chains as service providers (Total 67,400: M 21,800, F 22,200, Youth 23,400).

At the institutional level, the project will strengthen capacity across key sectors, with trained officers from Environment, Agriculture, Forestry, Fisheries, and Gender, Elderly, and Children's Affairs, ensuring balanced participation of women and men. This institutional strengthening will ensure integration of gender into planning and budgeting, thus support the sustainability and scaling of gender-responsive climate adaptation actions beyond the project lifecycle.

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

Under the no-action scenario, continued saltwater intrusion and mangrove degradation will further increase vulnerability of coastal communities in both Unguja and Pemba. Women, especially those engaged in small-scale farming, seaweed cultivation and household water management, are disproportionately affected by saltwater intrusion, groundwater depletion, and declining coastal ecosystems. Female headed households usually have small land sizes and limited access to freshwater for irrigation, thus making them more exposed to drought and salinity impacts. During the dry season, women also spend 1-1.5 hours longer fetching freshwater, significantly reducing time available for productive and social activities. These challenges are compounded by limited access to credit, land rights and climate-resilient technologies, which also increase women's sensitivity to climate impacts. Adaptive capacity constraints include lower participation in governance bodies and water committees, reduced access to climate information and extension services, and traditional gender norms that restrict time available for livelihood diversification. Together these factors underscore the need for targeted, gender-responsive interventions.

Integrating gender considerations into coastal adaptation interventions increases project efficiency, equity and long-term sustainability. Women's participation in natural resource governance significantly contributes to improved ecosystem protection and management outcomes, while gender responsive livelihood diversification enhances household adaptive capacity and reduces climate related vulnerability. The project also incorporates gender-responsive planning across all components to address existing inequalities and ensure equitable access to adaptation benefits. Investments in climate-resilient water infrastructure prevents further land degradation, and enable communities to reclaim and utilize such land for crop production. Improved access to water reduces the time women and girls spend searching for water, allowing them to engage in other essential household or productive activities. The following examples illustrate the rationale for investing in water harvesting structures and enhancing women's livelihoods in the target Shehias:

a) Time saved by improving water storage: 1.5 hrs per day per person:
   Number of dry days when women have to fetch water: 200 days
   Valuation using Zanzibar rural wage rate: US$ 0.90/hr
   Annual time saving value: 1.5 hrs x 200 days x US$ 0.90/hr = US $ 270/per person/year
   For 500 women beneficiaries, this is equivalent to US$ 135,000 annually.

b) Investment in livelihood activities such as sea weed farming:
   Use of improved strains + training on value addition = increased productivity by about 25%
   Average income baseline: US$ 400/year/farmer
   With improved productivity that is equivalent to US$ 500/year/farmer
   Annual income uplift for 500 women beneficiaries: US$ 400 x 25% x 500 beneficiaries
   = US$ 50,000/year.

c) Reduced crop losses for female farmers affected by saltwater intrusion:
   Yield of a traditional rice variety = 2500 kg/hectare
   Farmers' loss due to salinity, poor practices, 30% = 750 kg/hectare
   Estimated avoided losses = 750 kg paddy x 75% (milling %) x US$ 1.2/kg of rice
   = US$ 675/hectare/farmer x 500 beneficiaries = US$ 337,500

The gender-based Cost–Benefit Analysis demonstrates that the proposed adaptation interventions generate significant and measurable economic benefits for women, who are disproportionately affected by climate risks, unpaid care responsibilities, and livelihood losses. By valuing reductions in time poverty, increases in climate-resilient incomes, and avoided agricultural losses, the analysis estimates total direct annual benefits of approximately USD 522,500 for 500 women beneficiaries. These results confirm that gender-responsive adaptation investments deliver high economic returns, enhance women's adaptive capacity, and substantially improve the cost-effectiveness and transformational impact of Adaptation Fund–supported interventions.

Table 7 further highlights project investments, beneficiaries, expected gains and associated trade-offs.

Table 7. Project investments, beneficiaries, expected gains and associated trade-offs

Project Component (Outcome)	Project Cost (USD)	Concrete adaption benefits	Avoided losses	Trade-offs	Beneficiaries
1. Strengthened Institutional capacity to plan and implement gender-responsive climate resilience measures	495,000	• Improved quality, effectiveness and sustainability of adaptation investments through better planning and coordination • Institutionalized gender-responsive approaches, ensuring differentiated climate vulnerabilities are addressed • Strong coordination among institutions, thus reducing duplication of efforts	• Reduced risk of maladaptation due to gender blind interventions • Avoided inefficiency and financial losses from poorly maintained infrastructure • Reduced social conflict due to inequitable access to resources	• High initial costs and time requirements for capacity building • Slow initial implementation timelines due to inclusive consultations and institutional alignment	All Shehias, Districts and Implementing Sectors Beneficiaries: Minimum = 60 Each training session will be presented by at least 40% F and 20% youth Indirect beneficiaries: Total: 673,771 M 264,661, F 274,355, Youth 134,755
2. Enhanced water security and gender-responsive climate resilient infrastructure	2,510,000	• Increased food availability • Improved water availability for domestic use, crop and livestock production • Reduced time spent by women and children to fetch water • Strengthened community ownership and sustainability through inclusive governance and O&M • Increased knowledge on water resources management	• Avoided Crop losses due to drought and flooding • Avoided land degradation and infrastructure damage caused by floods and saltwater intrusion • Avoided displacement and loss of livelihoods due to recurrent floods and water stress	• High capital costs for climate-resilient and gender responsive infrastructure compared to conventional designs • Dependence on food aid because households cannot produce sufficient food for families	Reservoirs, dikes and drainage canals Beneficiaries: Reservoirs (Kangani and Gando) Total: 9,279 M 3,680, F 3,744 Youth: 1,855 Dikes: B/kiongwe, Mto wa Pwani, Gando, Kangani, Makombeni/ Ng'ombeni Total 20,919 M 8,475, F 8,262 Youth 1,855 Drainage canal: Pete Total 2,108 M 838, F 849, Youth 421 Indirect beneficiaries: Total: 673,771 M 264,661, F 274,355, Youth 134,755
3.Improved access to climate resilient livelihoods and productive resources	1,200,000	• Use of water efficient technology • Increased household income and food security • Enhanced economic empowerment of women and youth	• Avoided income losses from crop failure due to drought, flood and salinity • Reduced food insecurity	• Initial investment costs for inputs, training and technologies • Behaviour change required to adopt new practices	All target Shehias Beneficiaries: All target Shehias Total 1,811 M 340, F 1,030 Youth 415 PWD 26

Project Component (Outcome)	Project Cost (USD)	Concrete adaption benefits	Avoided losses	Trade-offs	Beneficiaries
		• Improved productivity per unit of land area • Improved nutrition within the household • Reduced reliance on climate-sensitive livelihood activities	• Less vulnerability to climate shocks • Reduced pressure on climate-sensitive livelihoods		Indirect beneficiaries: Total: 673,771 M 264,661, F 274,355, Youth 134,755
4. Enhanced knowledge, learning and dissemination of climate adaptation solutions	425,000	• Improved access to climate information, early warning and adaptation knowledge for communities and institutions • Strengthened evidence-based and gender-responsive decision making • Enhanced replication and scaling of effective adaptation practices across Zanzibar • Increased community awareness and preparedness for climate risks	• Reduced losses from climate shocks due to improved preparedness • Avoided exclusion of women and vulnerable groups from climate information systems	• Costs associated with data collection, knowledge platforms and capacity building • Benefits are not immediate they require behaviour change	All sites Beneficiaries: All target Shehias Total 23,017 M 9,313, F 9,111 Youth 4,603 Indirect beneficiaries: Total: 673,771 M 264,661, F 274,355, Youth 134,755

D: Describe how the project is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub- national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The outputs of the proposed interventions align closely with global and national sustainable development strategies and plans, and they directly contribute to advancing the climate resilience measures prioritized by the Adaptation Fund. Table 8 highlights how the proposed AF funded activities support the relevant policy and strategy instruments.

Table 8. Alignment of AF-supported interventions with relevant policies and strategic frameworks

	National Plans and Strategies and Years of implementation	Goals/objectives	Relevance to the project
	National Plans and Policies		
1.	1. Sustainable Development Goals (SDG), **(2015 to date)**	To achieve a more sustainable, inclusive, and resilient world by ending poverty, protecting the planet, and ensuring prosperity, peace, and well-being for all by 2030.	● Contributes to the achievement of SDGs 1 (no poverty), 2 (zero hunger), 3 (good health and well-being), 5 (gender equality), 6 (clean water and sanitation), 8 (decent work and economic growth), 11 (sustainable cities and communities), 13 (climate action), 14 and 15 (aquatic and terrestrial ecosystems conservation), 16 and 17 (peace, justice and partnerships, addressing good governance, coordinated response to climate risks and resource mobilization for adaptation).

	National Plans and Strategies and Years of implementation	Goals/objectives	Relevance to the project
2.	Zanzibar Development Vision 2050 (ZDV50), **(2019-2050)**	Long term national vision that guides Zanzibar development through economic transformation and diversification, human capital and social services, modern infrastructure development, and governance and resilience	● Pillar 4 emphasizes sustainable management of environment and natural resources, climate resilience, and reduction of pollution and environmental degradation.
3.	Zanzibar Development Plan (ZADEP) **(2021-2026)**	Economic development, social well-being and human capital development, environmental sustainability and climate resilience, governance and institutional capacity building	● Linked to climate resilience through: ● Agriculture, fisheries and blue economy by promoting drought-tolerant crops, climate-smart agriculture, sustainable aquaculture and resilient fisheries, improving irrigation efficiency, rainwater harvesting and groundwater recharge. ● Management of coastal resources and marine protection: mangrove restoration and reducing vulnerability to coastal flooding and erosion. ● Tourism sustainability: ecotourism, beach protection. ● Governance: improved planning, data collection and availability, and institution capacity building.
4.	Zanzibar Strategy for Growth and Reduction of Poverty (ZSGRP) III **2016-2020**	The objectives are: to foster sustainable and inclusive economic growth by enhancing key economic sectors, promote human capital development, deliver quality services, ensure environmental sustainability and climate resilience, and uphold good governance.	● The ZSGRP's emphasizes on sustainable economic growth, improved service delivery, climate-resilient development and environmental sustainability. ● ZSGRP implementation contributes to achieving AF targets by enabling climate-resilient livelihoods, stronger adaptive systems, and more effective responses to climate shocks in Zanzibar.
5.	Zanzibar Environmental Policy **(2013 to date)**	The objective is to ensure sustainable environmental management of natural resources and ecosystems, reducing environmental degradation and strengthening the islands' resilience to climate change impacts.	● Promoting sustainable natural resource management and protecting the ecosystems that buffer communities from climate risks. ● Calls for environmental impact assessments, disaster risk reduction, and mainstreaming climate considerations into sectoral planning. These priorities help Zanzibar to strengthen its capacity to anticipate, withstand and recover from climate shocks.
6.	Zanzibar Blue Economy Policy **(2020 to date)**	To sustainably harness marine and coastal resources, and to strengthen the resilience of ocean-dependent communities	● The Policy's focus on ecosystem restoration and adaptation, sustainable resource use, sustainable fisheries value chain, community livelihood diversification and climate-sensitive marine spatial planning directly complement AF project's outcomes and outputs.
7.	Zanzibar Agricultural Sector Policy **(2003 to date)**	The objective is to increase food security, boost productivity and promote economic growth	● The Policy aims to modernize production throough expanded irrigation, value addition, and sustainable resource management. ● These priorities have been integrated into ZADEP, which prioritizes the use of drought-tolerant crops, improved irrigation and rainwater harvesting, soil fertility improvement, and climate-resilient value

	National Plans and Strategies and Years of implementation	Goals/objectives	Relevance to the project
			chains to reduce vulnerability to drought, erratic rainfall, pests, and saline intrusion, strengthened extension services, and early warning and climate information services. ● Collectively, these interventions support a more climate-resilient agricultural sector that can withstand climate shocks while ensuring food security and sustainable livelihoods in Zanzibar.
8.	The Zanzibar National Water Policy **(2004 to date)**	Aims to provide access to clean, safe water for social and economic needs while protecting water resources through sustainable and environmentally sound practices	● The Policy is implemented through ZADEP which priotizes expansion of climate resilient water infrastructure, improved water resources management and safe water access to protect communities from climate related shocks such as drought and saltwater intrusion. ● The Integrated Water Resources Management (IWRM) approach incorporates climate-risk assessments, early warning information, and evidence-based decision-making to improve long-term resilience. ● Overall, ZADEP positions the water sector as a central pillar for enhancing adaptive capacity, in line with the AF outputs.
9.	The Zanzibar Gender Policy **(2016 to date)**	Aims to promote gender by removing discrimination and integrating gender considerations across all sectors so that women and men can fully participate in social, economic, and political development.	● Ensure equal rights and opportunities for women and men in access to resources, services, employment, education, and decision-making. ● Eliminate gender-based discrimination in laws, policies, institutions, and cultural practices. ● Strengthen women's empowerment, particularly in socio-economic activities and leadership roles. ● Promote gender mainstreaming in all government plans, programmes and budgets at national and local levels. ● Prevent and address gender-based violence and support systems for survivors. ● Improve gender-responsive data, monitoring and reporting to inform planning and policy implementation.
10.	Zanzibar Climate Change Strategy (**2014 to date)**	Provides a national response framework for addressing climate change. Impacts. Core objectives Include enhancing climate-smart livelihoods, providiing guidance on mainstreaming climate change adaptation, strengthening institutional coordination and diffusion of technologies that enhance a low carbon pathway.	● Supports climate resilience measures by focusing on reducing vulnerability and strengthening adaptive capacity across climate-sensitive sectors. They include: ● Promoting climate-smart agriculture, improving water security through rainwater harvesting and sustainable groundwater management, ● Protecting coastal zones via mangrove restoration and shoreline protection, and safeguarding marine and terrestrial ecosystems, ● Strengthening disaster risk reduction and early warning systems. ● The Strategy also promotes community awareness and the integration of climate risk management into development planning.
11.	Zanzibar Blue Economy Implementation Strategy **(2022 to date)**	To operationalize the Zanzibar BE Policy through targeted interventions	● The Strategy prioritizes strengthening sustainable fisheries and aquaculture, restoring mangroves and coral reefs, improving coastal zone management, enhancing early warning systems, and supporting climate-resilient coastal livelihoods.

	National Plans and Strategies and Years of implementation	Goals/objectives	Relevance to the project
			● It emphasizes on marine spatial planning, monitoring of coastal ecosystems and climate-resilient infrastructure ● Promotes value addition in fisheries, empowering coastal communities, and mainstreaming climate risks into blue economy investments. ● The Strategy reinforces AF project outputs aimed at reducing vulnerability, protecting critical ecosystems, strengthening adaptive capacity, and ensuring long-term resilience of Zanzibar's coastal and marine systems.
12.	Zanzibar Climate Change Action Plan **(2016-2021)**	A framework for implementing priority adaptation actions across vulnerable sectors: water, agriculture, fisheries, health and infrastructure	● Priorities highlighted in the Action Plan align with the AF investment areas, particularly in reducing climate risks, enhancing food security, protecting natural resources, ecosystem-based adaptation and gender equity.
13.	Zanzibar Blue Economy Gender Strategy and Action Plan **(2022 to date)**	The Strategy is designed to ensure that women, men and youth benefit equitably from the BE opportunities while enhancing resilience to climate change.	● It prioritizes expanding women's participation in the fisheries sector, marine tourism and coastal resource management; strengthening gender-responsive value chains; improving access to finance, skills, and technologies, and reducing gender-based barriers that limit adaptive capacity ● By mainstreaming gender across all blue economy sectors, the Action Plan reinforces AF project goals of inclusive resilience, ensuring that climate adaptation interventions deliver equitable, effective and sustainable benefits for vulnerable coastal populations.
14.	Zanzibar Agricultural Sector Transformation Framework (ZASTF) **(2025-2035)**	The framework aims to transform the agriculture sector from subsistence based production to a resilient commercially oriented industry that supports tourism, stimulaltes light industry growth and drives broader rural transformation	● Transforming agriculture into a resilient competitive and market oriented sector reduces climate related income volatility. ● Increasing productivity through climate-smart technologies and sustainable resource management reduces exposure to climate hazards affecting agriculture systems. ● Expanding irrigation, water storage and efficient water use systems reduces climate risks and contributes to more stable and reliable yields. ● Strengthened extension services, research, digital advisory tools and early warming systems enhance farmers' decision making and improves their adaptive responses. ● Value chain addition such as improved storage and processing reduce climate induced post harvest losses. ● Improved access to climate information equips extension services with climate risk management skills. ● Enabling policies, good governance and inclusive participation empower women and youth to enhance their adaptive capacity
15.	Tanzania Nationally Determined Contribution (NDC) **(2021 to date)**	The objective is to contribute to the global efforts of reducing greenhouse gases' (GHG) emissions through joined	● Tanzania's NDC priotizes improved water security, climate-smart agriculture, protecting ecosystems, and enhancing early warning and disaster preparedness. ● In water-stressed areas of Zanzibar, these translate into expanding rainwater harvesting, protecting

	National Plans and Strategies and Years of implementation	Goals/objectives	Relevance to the project
		mitigation and adaptation actions.	groundwater from saltwater intrusion and improving community water governance. ● AF-supported interventions therefore contribute directly to achieving NDC targets by reducing climate-related water shortages and enhancing long-term resilience
16.	Second National Communication to the UNFCCC **(2021 to date)**	To assess the country's GHG emissions, identify climate vulnerabilities across key sectos and propose adaptation and mitigation strategies	● The SNC provides an update of quantitative assessment of GHG from major sectors and activities, and developed climate change scenarios on the potential impacts of the projected changes, using 2000 as the base year. ● It provides an evidence-based foundation for national climate action and guides priority areas for resilience building. ● Its call for mainstreaming climate change into development planning aligns with AF priorities on climate-responsive policies and community-level resilience.
17.	National Adaptation Programme of Action (NAPA), 2007 revised in 2013) **(2013 to date)**	The overall objective is to identify climate change adaptation activities that most effectively reduce the risks that a changing climate poses to sustainable development.	● NAPA prioritizes urgent, community-focused adaptation actions such as improving water availability, strengthening early warning systems, and promoting climate-resilient interventions, all of which directly align with AF outcomes on reduced vulnerability and strengthened adaptive capacity.

E. Describe how the project 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***

The proposed project is aligned with relevant national technical standards and meets requirements stipulated by the Environmental Management Act (Cap.191 of 2004) and the Environmental Impact Assessment (EIA) and Environmental Audit (EA) Regulations (GN 474, revised 2018). The project is also in line with the Zanzibar Environmental Management Act No. 3 of 2015 and the Zanzibar National Forest Resources Management Plan (2010 – 2020). Other important and relevant national standards (both for Tanzania and Zanzibar) related to rural water supply, agriculture, forestry, aquaculture, fisheries, environment, tree planting, coastal management, food security and land use planning are summarized in Table 9.

Table 9. Compliance to relevant technical standards related to infrastructure development, conservation, and activities related to improvement of livelihoods and access to credit.

	Compliance item	Technical standard/requirement	Linkage to project activities
A.	**Infrastructure development**		
1.	Environmental requirements	• Environmental report to be submitted to ZEMA (Zanzibar Environmental Management Act no.3 (2015), S45)	Construction of reservoirs, dikes and the school water tank. These do not require a full ESIA due to their capacity
2.	Water extraction	• Licence to extract surface or ground water from Zanzibar Utilities	Requirements for the construction of boreholes, school tank and reservoirs

	Compliance item	Technical standard/requirement	Linkage to project activities
		Regulatory Authority (ZURA) Act no 7 (2013)	
3.	Construction in an environmentally sensitive area	• May require Environmental certificate as the area is close to the Protected Area • Construction permit from the District Council (all other construction works also require permits)	Requirements for the construction of a drainage canal at Pete
4.	Water allocation for agricultural use (irrigation)	• Apply for water abstraction approval; • Technical review of the facility • Apply for irrigation scheme approval as per The National Irrigation Act (2013); • Environmental screening • Obtain permits from Department of Water Resources, Ministry of Agriculture and ZEMA	These will be required during the construction of boreholes, reservoirs and drip irrigation
5.	Rainwater harvesting structures	• Guidelines for Rainwater Harvesting in Tanzania (United Republic of Tanzania, 2020. Ministry of Water) • Dam safety guidelines (United Republic of Tanzania, 2020. Ministry of Water)	Design and construction of rainwater harvesting systems
6.	Borrow pits (sand/ gravel excavation, stone quarries, large clearing works	• Consent from Sheha for community land use permission • Extraction permission from the District Council • Ministry of Lands and Heritage (for land use allocation or temporary occupation permit) • ZEMA for Environmental Screening certificate (smaller plots) or full ESIA for large areas	Construction material for reservoirs and dikes
B.	**Ecosystem restoration**		
7.	Restoration	Community Guidelines for Mangrove restoration in Zanzibar	Provides guidelines on how to assess a site, make plan of action, seed selection, planting and monitoring the progress of restoration
C.	**Improvement of livelihoods**		
8.	Value addition	Zanzibar Bureau of Standards (Issue no 3, 2025): Standards Catalogue. ZBS/DSD/SC Vn 03 of 2024	
	ZNS 49: 2025	Spices and condiments	Determination of moisture content (Compulsory)
	ZNS 41: 2014 TZS459:1990	Code of hygiene for poultry processing specification ICS 67.120.20	Hygienic requirements for processing of poultry intended for human consumption (Compulsory)
	ZNS 43: 2022 EAS 36:2020	Honey specification ICS 67.180.10	Sampling and test methods (Compulsory)
	ZNS 57: 2020 EAS 12: 2018	Potable water ICS 13.060.20	Requirements, sampling and test methods for potable water intended for human consumption (Compulsory)
	ZNS 67: 2023	Herbal soap specification ICS 71.100.40	Requirements, sampling and test methods for herbal soaps (Compulsory)
	ZNS 85: 2015 TZS 358: 2015	Cardamoms specification	Requirements for sampling and test methods (Compulsory)

	Compliance item	Technical standard/requirement	Linkage to project activities
	ZNS 86: 2024 EAS 1076: 2022	Cinnamon specification	Requirements for sampling and test methods (Compulsory)
	ZNS 87: 2023 EAS 917: 2019	Turmeric specification	Requirements for sampling and test methods for whole or ground cinnamon (Compulsory)
	ZNS 88: 2015 TZS 457: 2016	Code of hygienic practices for spices and dried aromatic plants	Applies to spices and dried aromatic plants - whole, broken, ground or blended. It covers the minimum requirements of hygiene for production, harvesting and post-harvest technology (Compulsory)
	ZNS 572: 2023	Code of good aquaculture practices ICS 65.150	Specifies the general guidelines for practices and hygienic requirements of seaweed production and handling (Compulsory)
	ZNS 573:2023	Dried sea cucumber specifications	Requirements for sampling and test methods
D.	**Access to credit**		
9	Community-based groups	Zanzibar Business and Property Registration Agency (ZBPRA)	Offers legal and institutional mechanism to formalize groups, enabling them to access financing, secure contracts and loans, and to participate in formal markets.

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

Approximately 20% of Unguja and 30% of Pemba are considered vulnerable to saltwater intrusion. Because Zanzibar's coastal communities share similar social and cultural characteristics, many climate-resilience interventions appear similar across different locations. Past and ongoing adaptation measures implemented by various projects generally fall under five categories: coastal and ecosystem-based adaptation**,** water security and climate-resilient water management**,** community livelihood resilience**,** gender-responsive and inclusive adaptation**,** and governance, planning, and institutional strengthening**.** Some interventions are implemented directly at the Shehia level, generating localized impacts, while others focus on institutional capacity building at the District level and nationally (Table 10).

Efforts to avoid duplication with ongoing or planned initiatives have focused on selecting beneficiaries from Shehias that have not previously received similar support but continue to demonstrate clear and unmet needs. It was also observed that some locations, such as Pete, are experiencing emerging climate-related challenges that were not adequately addressed by earlier interventions. The inclusion of Kiongwe Kidogo allows for the continuation and strengthening of an earth dike constructed under the ongoing Adaptation Fund project in the neighbouring village of Makoba, which partially extends into Kiongwe kidogo. This approach enhances continuity and provides more effective protection against saltwater intrusion at the landscape level.

While climate resilient activities, particularly livelihood-related interventions, are ongoing in other locations, this project builds on lessons learned from those initiatives to improve design and implementation. Insights from previous projects, including former TASAF-funded community initiatives, have informed the proposed approach in areas such as climate-smart practices, capacity building, access to credit, and community engagement. Field visits to communities that have successfully implemented similar interventions have further strengthened the realism and feasibility of the proposed activities. The project will also leverage existing knowledge and experience from local NGOs and community-based organizations (CBOs), particularly in horticultural production and value addition, construction of rainwater harvesting structures, and the formation and strengthening of income-generating groups within the target Shehias. This coordinated approach ensures complementarity, enhances effectiveness, and maximizes the sustainability of project outcomes.

Table 10 presents an overview of ongoing and previous climate-related projects.

Table 10. Previous and ongoing climate related projects in Zanzibar

Project/Program, source of funding and Implementing Entity	Years	Objective	Interventions
1. Developing core capacity to address adaptation to climate change in productive coastal zones of Tanzania **Funding Agency**: GEF/LDCF **Implementing entity**: Office of the 2nd Vice President (Department of Environment)	2014-2016	Capacity building in climate change adaptation.	• Scope: Urban and North districts in Unguja; Wete and Mkoani districts in Pemba • The project constructed sea walls in Kisiwa Panza ward, Mkoani District in Pemba (75 m) and Kilimani ward, Kaskazini District, Unguja (5 groins), supported the restoration of 231.5 ha of mangroves and 10 ha of coastal vegetation in Ukele, Tovuni, Tumbe and Kisiwa Panza in Pemba; Kilimani and Kisakasaka, in Unguja. *Target locations were different from those proposed in this project*
2. Decentralized Climate Finance Project **Funding Agency:** UNCDF/IIED **Implementing entity**: President's Office – Regional Administration, Local Government and Special Departments (PORALGSD), Zanzibar Office of the 2nd Vice President, (Department of Environment)	2016-2017	To establish a localized, transparent, and performance-based climate finance system that channels resources directly to LGAs	• Scope: The pilot project covered Wete and Micheweni districts • Focus: sought to build local adaptive capacity by introducing a transparent, performance-based climate finance mechanism that enables LGAs and Shehia communities to identify priorities and implement locally driven climate-resilient investments. • It promoted participatory climate-risk assessments, local adaptation planning, and predictable climate grants, strengthening accountability and creating a scalable framework for long-term resilience • Lessons learned were used to scale up activities to cover all Districts. *Target locations were different from those proposed in this project*
3. Tanzania Urban Resilience Programme (TURP) **Funding Agency**: World Bank Group/FCDO **Implementing Entity**: Ministry of Finance and Planning	2016-2022	To improve Tanzania's ability to prepare for, respond to, and adapt to a changing climate, as well as to withstand and rapidly recover from shocks.	• Scope: Zanzibar urban • Focus: risk identification, risk reduction, disaster preparedness and emergency management *Target locations were different from those proposed in this project*
4. Strengthening the contribution of local actors for a climate-resilient society in Zanzibar, phase I and II **Funding agency:** Bread for the World (BfdW) **Implementing entity:** Climate Action Network Tanzania	2023 - 2028	Through targeted adaptation practices and inclusive policy reviews and integration, this project aims to foster a more resilient society capable of withstanding environmental degradation and climate-related problems in Zanzibar.	• Scope: West A district in Chuini shehia and North A district in Tumbatu. • Focus: Advocacy and lobbying, capacity building, livelihood diversification and economic empowerment, protection and restoration of natural resources,

Project/Program, source of funding and Implementing Entity	Years	Objective	Interventions
5. Strengthening Conservation and Climate Resilience on Tumbatu Island, Zanzibar, Tanzania **Funding agency:** Critical Ecosystem Partnership Fund (CEPF) **Implementing entity:** Climate Action Network Tanzania	2025 - 2027	Empowering communities and the key local institutions to effectively implement sustainable practices that enhance climate resilience for both critical marine and coastal ecosystems and the human populations within the Key Biodiversity Area (KBA).	• Scope: Tumbatu Marine Conservation Area (TUMCA). . • Focus: Governance and leadership awareness, conservation and protection of key biodiversity areas, Advocacy and lobbying, capacity building, livelihood diversification and economic empowerment, protection and restoration of natural resources (mangroves and endangered marine species,
6. Action for Strengthening Civil Society Organizations on Climate Change Governance and Accountability in Zanzibar. **Funding Agency**: FORUM CC **Implementing entity**: 7. Zanzibar Climate Change Alliance (ZACCA)	2017-2018	To build capacity using community radio outreach and Training of Trainers	• Scope: Donge, Jozani, and Kitogani in Unguja, and Mgelema in Pemba. • Its activities included mangrove restoration and planting, promotion of cookstoves, beekeeping, and climate-smart agriculture. *This project covered one village (Kitogani), and focused only on raising awareness, which is different from the interventions proposed in the AF project*
8. Enhancing climate change resilience in Zanzibar **Funding Agency**: UNDP **Implementing entity**: Office of the 2nd Vice President (Department of Environment)	2018-2021 (started in 2021)	To strengthen environment and climate change governance in Zanzibar.	• Scope: Unguja and Pemba districts • Focus: to improve institutional coordination for climate action, generate localized climate data to support evidence-based planning, demonstrate scalable climate-resilient practices that communities and institutions can replicate, and strengthen the overall capacity of stakeholders to access and manage climate finance effectively. • Lessons learned have been scaled up *The outcomes of this project are broad and different from the outcomes of this proposal*
9. Viungo: Zanzibar Value Web, Horticulture and Income Growth Project **Funding Agency**: EUROPEAN UNION **Implementing entity**: AGRI-CONNECT	2020-2024	Increasing the value and volume of high quality horticultural products to markets from small-scale farmers in Zanzibar	• Key activities included capacity building on Smart Agriculture (CSA), Good Agricultural Practices, Integrated Pests and Disease Management (IPM) and post-harvest storage and handling. • Providing small scale mechanisation and appropriate technology. • Establishing processing hubs in key locations, which foster public and private ventures in horticulture. • Facilitate marketing, trade and enterprise development. • Support Village Savings and Loan Associations (VSLAs) to forge ties with formal banking institutions and access to finance

Project/Program, source of funding and Implementing Entity	Years	Objective	Interventions
			The viungo project did not cover target Shehias identified in this project
10. Productive Social Safety Net (PSSN II) **Funding Agencies:** World Bank Group, DFID/FCDO, USAID, UNICEF, SIDA SWEDEN, OPEC FUND **Implementation entity:** Ministry of State, President's Office – Labour, Economy and Investment, Districts and Municipal Councils	2020-2025 Preceded by: TASAF III/ PSSN 1: 2012-2019 TASAF II: 2005-2013 TASAF 1: 2000-2005	To reduce poverty and enhance resilience and livelihoods of extremely poor households in Zanzibar	• Scope: extremely poor communities across the islands of Unguja and Pemba. • Focus: a safety net program that focuses on resilience building through cash transfers, climate-smart public works and livelihood support and expanded financial inclusion through savings and lending groups. • Lessons learned include formation of gender- *TASAF focused on improving household welfare through cash transfers and public work programs. This project addresses water related climate risks, with focus on ecosystem sustainability in saltwater intruded areas*
11. Enhancing Climate Change Resilience of Coastal Communities of Zanzibar (Approved 6/01/2020) **Funding Agency**: Adaptation Fund **Implementing entity**: Office of the 1st Vice President (Department of Environment)	2022-2026	To build capacity of smallholder farmers to address climate change impacts through practical and innovative solutions that have tangible outputs.	• Scope: saltwater affected areas of: Unguja - Makoba, Mafufuni and Kiongwe; Pemba - Wete. • Focus: construction of water harvesting infrastructures, promotion of soil and water conservation practices, support to climate resilient livelihood diversification, and institutional capacity building and local government coordination *This project complements the ongoing AF project being implemented at Mafufuni. The target locations are different from the ongoing project*
12. Integrated Adaptation Programme to enhance resilience **Funding Agency**: FAO **Implementing entity:** RoGZ, MAILNR	2023-2027	To increase resilience of vulnerable communities and ecosystems in dryland areas of Zanzibar	• Scope: dryland areas of Zanzibar • Focus on landscape resilience, sustainable land management, integrated adaptation for communities and ecosystems *The primary focus of this project is to have integrated, system-based climate adaptation, focusing on agrifood systems. It is not operating in the project's target Shehias*
13. Strengthening Water Security and Climate Resilience for Urban Areas in Zanzibar (ZanziWaS) **Funding Agency**: GIZ **Implementing entity**: Ministry of Water, Energy and Minerals/ZURA	2024-2025	To improve water security in Zanzibar	• Scope: urban areas of Unguja and Pemba • Key activities: improved water supply, groundwater monitoring, sanitation, wastewater management, institutional strengthening, rainwater harvesting *The project is focusing on improvement of the water sector: infrastructure development, including rainwater harvesting and ground water monitoring. It operates at a much larger scale and does not focus on target communities like the AF funded project*
14. Zanzibar Women's Leadership in Adaptation (ZanzADAPT)	2023-2024 (ongoing)	To strengthen women's leadership, livelihoods and resilience in vulnerable coastal	• Scope: Unguja – Unguja Ukuu, Pete and Jambiani; Pemba – Shumba Viamboni, Kiungoni, and Zingwezingwe • Focus on gender-responsive, nature-based adaptation interventions (mangrove,

Project/Program, source of funding and Implementing Entity	Years	Objective	Interventions
Funding Agency: Canadian Government **Implementing entity:** Community Forests International (CFI), TAMWA, CFP		communities of Zanzibar	agroforestry, awareness raising to expand women's leadership in governance, and livelihood improvements *This project does not cover the AF project's target Shehias*
15. Pamoja Tuhifadhi Bahari Yetu (coastal/ mangrove conservation initiatives) **Funding Agency**: European Union/East African Community **Implementing entities** IUCN/MoBEF, WWF Tanzania, The Nature Conservancy (TNC), Wildlife Conservation Society (WCS) in Tanzania and Forum CC	2024-2025	To contribute to environmental protection and biodiversity conservation of the coastal and marine ecosystems in Tanzania	• Scope: North and South Unguja communities • Focus: creation of blue and green enterprises, restoration of degraded ecosystems, support marine plastic waste management, and strengthening governance mechanisms. *This is research-oriented large scale project, with key focus on blue and green entrepreneurs and innovative plastic ventures. The AF's target locations are not included*
16. Advancing Gender Equality in Tanzania (PAMOJA) **Funding Agency**; World Bank Group **Implementing Entity (Zanzibar)** Ministry of Community Development, Gender, Elders and Children (MoCDGEC), Zanzibar Economic Empowerment Agency (ZEEA)	2024-2028	The Zanzibar component aims to increase access to economic opportunities for women and strengthen the prevention of and responses to GBV	• It aims for a transformative impact by promoting economic opportunities, strengthen GBV prevention and response, and building systems and fostering essential services such as Early Childhood Services. *This project does not cover the AF's target Shehias*
17. The Zanzibar Disaster Risk Finance Strategy and Implementation Plan **Funding Agency**: UNDP **Implementing entity**: Ministry of Finance and Planning, Ministry of Water, Energy and Minerals	2025-2030	To provide Zanzibar with reliable, pre-arranged financing to respond quickly and effectively to disasters while reducing reliance on unpredictable external assistance.	• Scope: Zanzibar population • Provides a roadmap for disaster risk financing in Zanzibar, including pre-arranged funds, risk-transfer mechanisms (like insurance), and a plan to reduce reliance on post-disaster funding. • The strategy links to broader national disaster-risk financing efforts, aligning Zanzibar's plan with national frameworks. *This project focuses on disaster risk financing, prioritizes financial protection (outside the scope of this AF funded proposal)*
18. Scaling-up Locally Led Climate Action program (SCALE)- WORLD BANK **Funding Agency**: World Bank Group	2025-2030	To strengthen local government systems resilience to climate change impacts and contribute to the	Scope: In Zanzibar it will cover the LGAs across all 11 Districts, and aim to achieve three cores results; Focus: • Strengthening national systems so they can effectively budget, transmit and monitor climate finance actions;

Project/Program, source of funding and Implementing Entity	Years	Objective	Interventions
Implementing entity: The President's Office, Regional Administration, Local Government and Special Departments (PO-RALGSD) Office of the 1st Vice President (Department of Environment)		country's sustainable development	• Strengthening local government systems by improving participatory planning, budgeting and implementation processes for climate action; • Financing locally led climate resilience actions supported by communities *The project is at the Institutional level and does not focus on individual Shehias*

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

This project has been designed based on lessons learned from previous adaptation initiatives and priority needs identified through extensive stakeholder consultations. Project sites were selected using vulnerability-based criteria, with particular emphasis on exposure to saltwater intrusion and the urgency of required adaptation interventions. Learning, knowledge generation, and knowledge sharing are embedded across all four components to support evidence-based decision-making, adaptive management, and sustainability. Capacity strengthening focuses on key domains including institutional systems, planning and budgeting, technical skills, climate information use and project management. These interventions are intended to drive changes in knowledge, behaviour, institutional practices and planning processes, enabling the systematic integration of climate resilient measures across sectors and governance levels.

Component 1 focuses on institutional transformation by addressing structural gender gaps in climate governance and decision-making. It aims to strengthen institutional capacity for effective project management, enable the meaningful participation of women, youth, and other vulnerable groups in planning and decision-making, while reducing protection risks by systematically integrating gender equality into the institutional systems and practices. Key interventions include capacity building for District and Shehia planning and budgeting officers; development and operationalization of gender-responsive planning, budgeting, and monitoring tools; the application of sex and age disaggregated data collection and analysis methods; and implementation of the Gender Action Plan (GAP). Collectively, these measures will strengthen monitoring, evaluation, and learning (ME&L) systems, enhance the use of evidence in decision-making, and ensure accountability and equitable adaptation outcomes.

Component 2 focuses on the development of gender-inclusive, climate-resilient, and GBV-sensitive water infrastructure that prioritizes accessibility, safety, and visibility. The component integrates learning on gender-responsive infrastructure design and governance, including the establishment and strengthening of Water User Associations (WUAs) with equitable representation of beneficiaries. Targeted capacity building will strengthen technical skills and enable inclusive participation in infrastructure operation and maintenance (O&M), supported by affordable and equitable financing mechanisms. Nature-based solutions will be integrated to enhance environmental sustainability, reduce long-term risks, and reinforce community ownership and durability of infrastructure investments.

Component 3 focuses on improving equitable access to climate-resilient livelihoods and productive resources. It provides targeted capacity building on climate-smart livelihood practices, value addition and quality improvement, business development skills, and pathways for accessing finance and productive assets, alongside nature based livelihood options that support ecosystem restoration and shoreline stabilization. The objective is to equip target groups (particularly women and youth) with the technical and entrepreneurship skills needed for value addition and economic returns. These interventions will support household-level adoption of climate-resilient practices and enable more sustainable and diversified livelihood strategies.

Component 4 focuses on knowledge generation, dissemination, and learning to support informed decision-making on climate risks at community, district, and national levels. The component will strengthen the use of diverse knowledge channels to share climate adaptation information, document and disseminate lessons learned, and systematically report on beneficiary outcomes.

Knowledge products and learning processes will be integrated into institutional systems and coordination platforms to inform policy, planning and investment decisions. This will facilitate continuous learning, scaling of successful approaches, and sustained adoption of evidence-based, gender-responsive climate adaptation practices.
Table 11 outlines the capacity-building needs of different beneficiary groups and identifies the institutions responsible for delivering the program.

Although stakeholders identified training needs, these reflect immediate gaps based on experience and may not fully capture systemic, institutional, or gender-related capacity needs, such as gaps in coordination, decision-making, data use or long-term sustainability. A structured Capacity Needs Assessment (CNA) will be undertaken to identify the skills, institutional systems, and resources required for effective implementation of adaptation actions. The assessment will include stakeholder mapping, analysis of existing capacities, identification of gaps, prioritization of needs, and recommended actions to guide implementation and monitor progress. Stakeholder mapping will identify key institutions, community groups, and technical actors involved in climate resilience, along with their roles and responsibilities. The assessment will examine current knowledge on climate resilience, technical expertise, institutional capacity (coordination, staffing, governance), and operational capacity (planning, budgeting, and M&E systems). It will also assess community awareness levels and determine whether similar training has previously been provided. Gender-responsive capacity needs will be identified, including risk assessment, early warning and disaster preparedness, climate-resilient planning and budgeting, existing community adaptive practices, and gender-responsive adaptation planning. The information collected will serve as baseline data for tracking progress through indicators integrated into the M&E framework, which will also monitor women's participation and leadership, skills gained, and barriers encountered.

Data will be collected using a combination of quantitative and qualitative methods. The sustainability of project interventions beyond the project's completion will be evaluated by tracking the practical application of acquired skills, such as the adoption rate of climate-smart practices and the extent to which local authorities integrate climate-risk information into their development plans. At the institutional level, progress will be reflected through enhanced gender-responsive, climate-resilient planning processes.

Project results and lessons learned will be shared nationally and internationally through digital platforms, exchange visits, forums, conferences, symposia, meetings and workshops. Successes and challenges will also be examined through case studies that highlight how training has strengthened livelihoods and resilience, as evidenced by changes in practices and in decision-making participation. These findings will be disseminated through multiple channels, including radio, television, newspapers, YouTube, Facebook, and documentary videos, with messages tailored to different stakeholder groups. In addition, learning and knowledge management will form a core part of the M&EL framework, with the M&EL Officer responsible for systematically collecting, documenting, and facilitating the dissemination of project results and lessons learned.

Table 11. Capacity needs based on stakeholders' identification

	Type of capacity needed	**Beneficiaries Locations/ Institutions**	**Responsible Institution**
A.	**Component 1: Institutional capacity and governance**		
	Capacity needs assessment	All Shehias and Implementing Institutions	CANTZ, ZEMA, PIU
	Gender-responsive data collection methodologies	District Officers: Environment, Agriculture, Livestock, Fisheries, Forestry, Community Development; Shehia Gender Focal Point Total 61 (at least 40% women)	CANTZ, ZEMA, PIU
	Analysis and disaggregation of data for planning, ME&L		
	GBV and protection measures (Implementation of GAP)	All Shehias and Implementing Institutions At least 60, with at least 40% women and 20% youth	CANTZ, Gender Focal Point, PIU
	Project Management: delivering outputs and outcomes	PIU, Sectors and District Officers 40, at least 40% women	CANTZ, ZEMA, MoFBE
	M&EL of gender based activities	PIU, Sectors and District Officers: 61 (Agriculture, Forestry, Fisheries, Environment, Gender Department At least 20, with at least 40% women	Gender Specialist

	Type of capacity needed	Beneficiaries Locations/ Institutions	Responsible Institution
	Raise awareness on women's land rights and ownership	Beneficiaries from all Shehias. At least 60% women beneficiaries (5,467) and 20% youth (920)	CANTZ, ZEMA, PIU, GFP, Communities
B.	**Component 2: Water security and climate smart infrastructure**		
	Design of infrastructure with universal access and GBV safety features	Irrigation Engineers, Environmental Specialists (2)	MAILNR (Irrigation), CANTZ, ZEMA and PIU
	Gender-inclusive O&M of infrastructure (reservoirs, dikes)	Gando, Kangani, Mto wa Pwani, Pete, Kiongwe kidogo/ Muwanda, Makombeni/ Ng'ombeni, Persons in charge of O&M of reservoirs and dikes (40% women, 20% youth)	MAILNR (Irrigation), GFP
	Installation and maintenance of drip irrigation facilities	Mto wa Pwani, Kiongwe kidogo, Muwanda, Pete (Total 100: M 30, F 30, Youth 40)	MAILNR (Irrigation), Private Consultant
	Training of WUA leaders on gender-inclusive leadership skills, governance, conflict management and water resources management	Selected WUA members (6) per site, all sites (Total 48), District Irrigation Officers (5), 5 Gender officers WUA members at least 40% women, 20% youth	MAILNR (Irrigation), Gender Focal Point (GFP)
	Participatory soil and water conservation	All sites Total 460; M 50, F 350, Youth 60	MAILNR (Kizimbani ARI), Min of Water and Minerals, GFP
	Effective and participatory implementation of ESMP	M&E Officer (1), District Gender Officers (5) 1 community member from each location (8)	MAILNR, ZEMA
C.	**Component 3. Climate resilient livelihoods and productive resources**		
	• Mangrove establishment/ Agroforesty	All sites	MAILNR (Forestry), CFP
	• Agribusiness (rice, vegetables, spices)	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Kangani, Makombeni/ Ng'ombeni Total beneficiaries: 914 (M 210, F 530, Youth 170, PWD 4)	MAILNR (Agriculture), PPIZ
	• Fisheries (fish farming, mariculture)	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Kangani, Makombeni/ Ng'ombeni Total: 131 (M 30, F 30, Youth 70, PWD 1)	MBEF (Fisheries), CFI, PPIZ
	• Beekeeping	Pete, Kiongwe kidogo/Muwanda Total: 100 (M 20, F 40, Youth 20)	MAILNR (Forestry), CFP
	• Poultry keeping	Kiongwe kidogo/ Muwanda, Mto wa Pwani, Pete, Kangani, Makombeni/Ng'ombeni Total: 35 (F 25, PWD 10)	MAILNR (Livestock)
	• Tourism promotion	Pete Total: 40 (F 20, Youth 20)	CFP
	• Handicraft skills: soap making, sewing/small business	Kiongwe kidogo/Muwanda, Mto wa Pwani, Pete, Gando, Makombeni/ Ng'ombeni Total: 65 (F 10, Youth 35, PWD 20)	CFP, PPIZ
	• Business development and entrepreneurship skills	All Shehias Total: 1,825 (M 340, F 1,035, Youth 415, PWD 35)	CFP, PPIZ, MoCDGEC
	• Accessing credit facilities	All Shehias Total: 1,825 (M 340, F 1,035, Youth 415, PWD 35)	Finance Specialist, PIU
D.	**Component 4: Knowledge, learning and scaling-up innovations**		
	Implementation of the Communication Plan	All Shehias and Implementing Institutions Total: 1,825 (M 340, F 1,035, Youth 415, PWD 35)	CANTZ, ZEMA, PIU, Communications Officer (CO)

	Type of capacity needed	Beneficiaries Locations/ Institutions	Responsible Institution
	Training of Trainers (peer farmers)	Community leaders from all Shehias 3 farmers per location: M 8, F 8 and Youth 8)	CANTZ, PIU, GFP
	Exchange visits to other Shehias to learn about best practices	3 members (M, F and Youth) from each Shehia: M 8, F 8, Y 8	PIU, CO
	Production of videos, publications, radio and television programmes	Communications team (at least 40% women)	Communications Officer, CANTZ and ZEMA

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 of the Adaptation Fund.

Project site selection commenced with initial consultations involving the Department of Environment (DoE), the National Environment Management Council (NEMC), and the Zanzibar Environmental Management Authority (ZEMA), Climate Action Network Tanzania (CANTZ). Priority sites were selected from areas identified in the vulnerability Atlas as highly exposed and in urgent need of climate adaptation interventions. Additional selection criteria included low levels of climate change awareness and limited exposure to previous resilience-building initiatives. Subsequently, a joint team comprising the Consultant, representatives from NEMC, CANTZ, DoE, ZEMA, and the District Environmental Management Officer (DEMO) conducted field visits to the shortlisted sites. Consultative meetings were held with Shehas and selected members of the Village Committee to introduce the project concept, validate site conditions, and assess community interest and willingness to participate in project implementation.

Data collection employed a combination of structured questionnaires, official government data sources, and group discussions. Demographic and socio-economic data were drawn from the Household Budget Survey (HBS, 2020) and the 2022 Population and Housing Census (PHC). Additional primary data were collected through field-based questionnaires and facilitated group discussions to complement secondary data sources.

An initial set of questionnaires was administered to Shehas to gather baseline information on population characteristics, socio-economic conditions, existing community initiatives, key challenges, potential solutions, and levels of community support for the proposed interventions. The survey also collected information on income-generating activities, active community groups and their roles, and community recommendations regarding project implementation. The findings from this phase informed the development of the concept note submitted to the Adaptation Fund (AF).

A second set of structured questionnaires was administered to three women from each Shehia to capture gender-specific perspectives. The questionnaire covered personal profiles (including age, marital status, and number of children), access to land, engagement in unpaid household work and income-generating activities, access to communication services, key social and economic challenges, preferred livelihood options, participation in community groups, access to credit, and views on project implementation, including strategies to enhance women's participation. Follow-up interviews were conducted with the same respondents as needed to clarify and deepen understanding. Further details of this gender analysis are presented in a separate report (Annex 3).

Identification of possible locations for infrastructure development was undertaken following the selection of proposed interventions. Using GPS technology, preliminary measurements were taken to estimate the length, size, and spatial requirements of planned structures such as dikes and reservoirs.

Shehia-level meetings were organized on scheduled dates, with advance notice provided to community members to ensure broad participation. Annex 5 presents the site visitation schedule for Unguja and Pemba. During these consultations, discussions focused on agricultural and income-generating activities, key environmental and social challenges, potential

solutions, experiences with previous climate-related or development interventions, preferred project actions, and desired modes of community participation. To ensure inclusive engagement, separate consultations were held with men, women, youth, and persons with disabilities. Each group identified and prioritized preferred livelihood options and capacity-building needs. For persons with disabilities, at least one representative was interviewed in each location. In addition, selected meetings included representatives from local non-governmental and community-based organizations, such as the Jozani Environmental Conservation Association (JECA), the Zanzibar Beekeeping Association (ZABA), and the Community Forest Pemba (CFP), to incorporate technical insights and lessons from ongoing community-based initiatives.

The project team also conducted field visits to sites where similar interventions had been implemented in order to understand practical challenges and lessons learned. These visits included locations practicing drip irrigation in Kilombero (Unguja), areas where dike construction is currently underway in Tovuni, and sites where reservoirs were previously developed under the Tanzania Social Action Fund (TASAF) programme and are now managed by local communities (Kangagani). The insights gained from these visits informed the project design and ensured that previously identified implementation challenges are addressed in the proposed interventions.

Sector-level stakeholder consultations were conducted separately in Unguja and Pemba to present the proposed project, share key findings from community consultations in the target Shehias, and clarify institutional roles and responsibilities. Participants were divided into four working groups, each assigned to review one project component and provide feedback on proposed activities, implementation arrangements, sectoral roles, and capacity-building needs. The outcomes of the group discussions were subsequently presented and further refined during plenary sessions.

Findings from these consultations were integrated into the project design to ensure that proposed interventions reflect community priorities and the needs of diverse groups. For example, livelihood activities such as poultry keeping, shellfish farming, and small-scale enterprises, including soap making and handicrafts, were identified as particularly suitable and preferred options for persons with disabilities, ensuring inclusive and equitable access to project benefits. Annexe 4 presents the timeline of consultations conducted during project preparation, while Annexe 5 lists the stakeholders consulted.

Annexe 5 presents the field report; Annexe 6 outlines the consultation timeline; and Annexe 7 lists the participants. Plates 5 and 6 show photographs from community meetings in Mto wa Pwani and Kangani, respectively, while Plate 7 documents the meeting with key implementing institutions in Pemba.

Categories of Stakeholders consulted

Sector-level Stakeholders (MDAs): The 1stVPO – DoE (Unguja and Pemba), Zanzibar Environmental Management Authority (ZEMA), Ministry of Agriculture, Natural Resources and Livestock (Departments of Irrigation, Agriculture, Forestry and Non-Renewable Natural Resources), Ministry of Blue Economy and Fisheries, Zanzibar Water Authority (ZAWA), Zanzibar Agricultural Research Institute (ZARI).

LGAs Level Stakeholders (representing Sectors): Agriculture, Forestry, Fiisheries, Environment and Community Development.
Unguja: Central, North A and North B District Councils. Pemba: Wete and Mkoani District Councils

Community, Farmers Associations and NGOs Level Stakeholders: Community Forest Pemba (CFP), Zanzibar Climate Change Alliance (ZACCA), Climate Action Network Tanzania (CANTZ), Pamoja Youth Initiatives (PYI), Thamini Jamii Organisation (TJO), members of Jozani Environmental Conservation Association (JECA), Zanzibar Beekeeping Association (ZABA), Practical Permaculture Institute Zanzibar (PPIZ), individual groups of women and youth from the Shehias.

Table 12 summarizes the key issues raised during stakeholder consultations.

Table 12. Issues identified during stakeholders consultations and proposed solutions

Project location	Identified issues	Proposed measures	Proposed income-generating projects
North A District Shehia: Mto wa Pwani	• Saltwater intrusion • 'Sardine fishers' causing pollution (discharge the waste indiscriminately) • Deforestation (mangroves and other trees) • Poor yields leading to poverty • Crop pests • Poor yields due to lack of inputs • Limited market opportunities to vegetable growers	• Dyke/wall construction (a permanent structure) • Control sand mining • Mangrove planting, plus casuarina • Construction of a reservoir for use during dry season and for irrigation • Establish a village shop for selling inputs • Acquire a drier for drying sardines.	• Tree nurseries • Vegetables production (drip irrigation) • Learn how to make energy-saving stoves • Learn proper water management measures • Handicraft skills (making local handicrafts - makawa, vipepeo, sewing) • Capacity building on entrepreneurship skills Poultry farming
North B District Shehia: Kiongwe Kidogo (Kiongwe Kidogo and Muwanda villages)	• Saltwater intrusion • Farming with hand-hoes a tedious job • Lack of agricultural inputs • Cutting of mangroves • Crop pests and diseases • Poultry diseases leading to death	• Dyke construction • Rainwater harvesting structure • Irrigation • Mangrove conservation • Capacity building required on good agricultural practices, aquaculture	• Vegetable production (drip irrigation) • Aquaculture skills • Beekeeping • Soap making
Central District Shehia: Pete (Pete and Kitogani villages)	• Rise in sea water level • Crop pests and diseases • Illegal fishing • Cannot buy agricultural inputs due to lack of money	• Construction of permanent drainage canal to help reduce the risk of flooding • Planting trees (mangroves)	• Improve seaweed and shellfish farming (oysters, sea cucumbers…) • Small businesses that promote tourism • Vegetable production (drip irrigation)
Wete District Shehia: Gando (Nduuni, Mpanja and Mwanamakuka villages)	• Less rains hence little food • Deforestation • Saltwater intrusion hence less land to cultivate • Water problem during drought • Lack of agricultural inputs • No opportunities for exchange visits	• Tree planting (mangroves, fruit trees, michekechu, acacia) • Restoration of affected areas • Construction of water reservoir for irrigation • Digging wells so that water is easily available to communities	• Vegetable production • Value addition in crops • Promote irrigation • Poultry farming • Beekeeping • Improved spice farming (vanilla, cinnamon) • Livestock keeping • Aquaculture
Mkoani District Shehia: Kangani (Maotwe, Kikuu and Maweni villages) Makombeni and Ng'ombeni villages	• Saltwater intrusion • Not enough water (existing wells do not sufficiently cater for all households) • Little available land for cultivation • Lack of agricultural inputs • Crops affected by drought • Rice diseases	• Prevent farms from saltwater intrusion (construction of dikes and reservoirs) • Dig water-well plus tank to address water shortage	• Soap making • Rice production • Vegetable production • Mangrove planting • Poultry keeping • Spice farming (ginger) • Seaweed farming

Issues raised by the District Implementation teams and Sectors

1. To avoid conflict between the two Shehias, the reservoir under construction at Mafufuni should be managed as a shared facility serving both villages , an issue also raised by farmers from Kiongwe Kidogo.
2. The project should continue to utilize and strengthen the existing District implementation teams that are currently engaged in the AF project activities to ensure continuity and efficiency.
3. The required length of the dike at Kiongwe Kidogo should be verified, and technical guidance be provided on how it will connect to the Mafufuni dike.
4. The proposed reservoir site at Mto wa Pwani requires confirmation, as disagreements among farmers persist regarding land allocation. (This activity has since been dropped due to the unwillingness of farmers to allocate land for the reservoir.)
5. There is a need to strengthen capacity-building activities across multiple aspects of climate change, as additional technical and institutional support remains necessary.
6. Oceanographic studies should be conducted in areas where reservoirs are planned prior to construction, to ensure technical suitability and climate resilience.
7. A Project Liaison Officer in Pemba should be appointed to improve coordination, communication, and supervision of project activities.
8. Buffer zones should be established by planting trees around reservoir construction sites, particularly in Gando, to enhance environmental protection and long-term sustainability.

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

The requested Adaptation Fund financing will support concrete, community-driven adaptation interventions to address increasing water stress, saltwater intrusion, prolonged droughts, and rainfall variability affecting vulnerable island communities in North A and B, Central, Wete, and Mkoani districts. These climate impacts have degraded agricultural land, reduced water availability and food production, and undermined household incomes. Community consultations confirmed that climate change is already compromising livelihoods and that the business-as-usual scenario is no longer viable. The proposed interventions respond directly to locally identified priorities and are aligned with national adaptation strategies.

Rationale: The project qualifies as Full Cost Adaptation (FCA) because all interventions are entirely driven by climate change impacts and would not be required in the absence of increasing climate variability and long-term change. Climate-induced water stress has rendered traditional water sources, rain-fed agriculture, and existing livelihood systems unreliable. The proposed climate-resilient water infrastructure, water-efficient livelihoods, and strengthened governance systems are therefore necessary to reduce exposure, sensitivity, and vulnerability to climate risks, rather than to address baseline development needs.

Cost effectiveness and value for money: The total project budget is USD 5,500,787, of which USD 4,630,000 (84.2%) is allocated directly to adaptation interventions (project activities). Over 70% of resources support on-the-ground adaptation benefits for vulnerable populations, which is consistent with AF guidance. Proposed investments prioritize low-risk, locally appropriate technologies to ensure durability, scalability, and cost efficiency. All major cost lines are directly linked to AF indicators and measurable targets.

Results and outcomes: The project delivers measurable adaptation results that reduce gender-differentiated vulnerabilities to climate induced water stress, while strengthening inclusive and equitable adaptive capacity.

1. Institutional capacity and governance (US$ 495,000) strengthens climate- and gender-responsive planning and decision-making at sector, district, and Shehia levels, while addressing structural gender gaps. Targets include ≥40% women's representation in water and natural resource governance bodies and at least 10 institutions applying gender-responsive planning and budgeting tools, and at least 61 beneficiaries, with 40% women representation.
2. Water security and climate-resilient, gender-responsive infrastructure (US$ 2,510,000) delivers the primary adaptation benefits through construction of two climate-resilient reservoirs, 3,850 m of protective dikes and floodgates, water distribution systems, boreholes for drip irrigation, and a 500 m drainage canal, benefiting 23,017 persons (M 7,658, F 7,368, Youth M 3,981, Youth F 4,020) people with improved access to climate-resilient water services, and equitable participation in governance and O&M of infrastructure.

3. Climate-resilient livelihoods (US$ 1,200,000) support 1,825 community members from target Shehias (M 340 F 1,035, Youth 415 and PWD 35) through water-efficient, climate-smart livelihood diversification, with targets of ≥60% adoption of resilient practices and at least 1,035 women accessing productive assets.
4. Knowledge, learning, and scaling up (US$ 425,000) strengthen evidence-based adaptation through training of ≥5,000 people (≥50% women), production of at least 12 knowledge products, scaling of interventions, and a gender-responsive M&EL system aligned with AF core indicators.

Government contribution: In kind contribution from beneficiary communities will be factored in to strengthen ownership and commitment to project activities. At institution level, contributions will include the provision of office space, and deployment of government staff whose salaries are covered by the government, with the project only providing supplementary support where necessary.

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

Social sustainability: this has been integrated throughout the project by ensuring inclusive engagement of communities, and empowering local communities to manage water resources equitably beyond the project period. The project recognizes different levels of vulnerabilities among men, women, youth and persons with disabilities, and has prioritized their participation in income generating activities by tailoring interventions that directly benefit these groups. Strengthening local governance structures ensures equitable representation in decision making, such as membership of WUAs, fair access to credit and participation in learning exchanges during the implementation period. As for labour based activities such as construction of reservoirs, recruitment will be undertaken in compliance with the Zanzibar Labour Relations Act (2005), guaranteeing safe working conditions, fair treatment and protection against GBV, discrimination and forced labour. Furthermore, construction of the 500m drainage canal will improve stability and safety of the affected households, while dikes will restore the farmland that was previously unproductive due to saltwater intrusion. These measures will boost agricultural productivity and enhance food security, which are key elements for long-term social stability.

Economic sustainability: Enhancing livelihoods and expanding access to credit will strengthen the financial viability and adaptive capacity of target communities, contributing to sustained local economic growth. Investments in climate-resilient water infrastructure will ensure reliable water availability for domestic use, agriculture, and small enterprises, generating economic benefits that extend well beyond the project's lifetime. In parallel, the restoration of salt-affected farmlands will reduce crop losses caused by saltwater intrusion, stabilize agricultural productivity, and safeguard household incomes.

Project additionality under the Adaptation Fund (AF) is demonstrated by the integration of climate risk-informed design, ecosystem-based approaches, and long-term and O&M capacity building, elements that are typically absent from business-as-usual rural infrastructure and livelihood interventions. Targeted inclusive training in the operation and maintenance of water and agricultural infrastructure will improve system efficiency, reduce failure risks, and ensure long-term sustainability, thereby transforming short-term investments into durable adaptation assets. The project will further diversify and expand income opportunities through climate-smart agriculture, resilient off-farm enterprises, and support for value addition in climate-sensitive sectors such as honey and spice production. Women's participation will be actively promoted across all supported value chains, with a target of more than 50% women beneficiaries. AF support enables gender-responsive capacity building, access to finance, and market linkages that would not otherwise be accessible to women under conventional development programs. For example,

Experience from a similar adaptation initiative in Bweleo, Nyamanzi and Fumba areas of Unguja Island demonstrates how targeted training for women in the production and value addition of cultivated half-pearls and mother-of-pearl handicrafts has successfully expanded household income-generating opportunities for women, while simultaneously reinforcing marine conservation objectives and strengthening linkages with the local tourism market[35].. This proposal builds directly on these proven lessons by applying a similar climate-resilient livelihood and value-addition model to sectors such as climate-smart agriculture, honey, and spice production. Drawing on this prior experience, the project integrates gender-responsive capacity building, access to finance, and market linkages to ensure that livelihood diversification reduces climate vulnerability while enhancing environmental sustainability. The Adaptation Fund (AF) adds value by enabling the systematic transfer, adaptation, and scaling of such tested approaches to new contexts and climate-vulnerable communities, thereby transforming isolated success stories into replicable, climate-resilient livelihood pathways aligned with ecosystem-based adaptation objectives.

[35] Saidi, I., Johnston, B. and Southgate, P. C. 2017. Potential profitability of pearl culture in coastal communities in Tanzania. Aquaculture Reports 5:10-17. Open access.

Environmental sustainability: The project prioritizes the protection, restoration, and sustainable management of ecosystems that are critical for water security and the reduction of climate-related risks, while preventing further degradation of coastal zones and salt-affected agricultural land. Through the application of Nature-Based Solutions (NBS), including mangrove restoration, sustainable fisheries management, and integrated water resources management, the project enhances natural coastal defense functions, improves hydrological regulation, and strengthens ecosystem services that underpin long-term climate resilience for vulnerable coastal and farming communities. The project will directly contribute to the rehabilitation of 34 ha of degraded mangroves, adding to the existing mangrove estate of approximately 11,214 ha in Pemba and 5,724 ha in Unguja. Project additionality is demonstrated by the fact that these restoration activities would not occur at the proposed scale, technical quality, or level of community integration in the absence of targeted climate finance. The project introduces climate-informed site selection, ecosystem-based designs, and long-term community stewardship arrangements that go beyond current baseline conservation practices, thereby generating measurable adaptation benefits such as reduced coastal erosion, improved water quality, enhanced fish nursery habitats, and increased resilience to sea-level rise and storm surges.

Sustainability through enhanced knowledge, learning and adaptive capacity: Through targeted capacity building, access to climate-resilient livelihood options, and participation in local decision-making structures, women and other marginalized groups are empowered to adopt diversified, low-risk, and environmentally sustainable income-generating activities. These interventions contribute to improved household income stability, food security, and reduced climate sensitivity of livelihoods. Project additionality is demonstrated by the introduction of structured, climate-informed livelihood support and gender-inclusive approaches that would not be implemented under business-as-usual development or conservation initiatives. AF support enables the integration of climate risk information, ecosystem-based adaptation principles, and inclusive governance mechanisms into livelihood programming, thereby generating sustained adaptive capacity rather than short-term income gains. The result is the establishment of resilient, inclusive coastal landscapes where communities are better equipped to withstand climate shocks, sustainably manage natural resources, and maintain positive, climate-resilient livelihoods over the long term.

Strong government ownership, institutional capacity building, and systematic knowledge sharing create an enabling environment for replicating and scaling up environmentally sustainable interventions across climate-vulnerable Shehias in Zanzibar. Alignment with national and local policy frameworks, including the Zanzibar Climate Change Strategy and district development plans, supports sustainability and integration into public planning and budgeting processes. Evidence generated through monitoring, evaluation, and learning that demonstrate improved water security, reduced saltwater intrusion, and enhanced ecosystem resilience will inform replication, while dissemination of technical designs, guidelines, and best practices for nature-based solutions will promote consistency and environmental integrity. Together, these measures enable the expansion of climate-resilient, low-risk livelihood practices and ecosystem restoration efforts, thus enhancing environmental benefits and strengthening climate resilience.

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

The proposed interventions include the construction of water harvesting infrastructure (reservoirs), dikes, mangrove restoration, improvement of agricultural practices, beekeeping and agroforestry and value addition of products (processing). Based on the scale and nature of the proposed reservoirs, the activities are classified as **Category B,** under the Zanzibar regulatory framework. However, in view of the absence of specific national guidelines for reservoir construction and the potential cumulative environmental and social impacts arising from the combined development of reservoirs and dikes, it is proposed that a full Environmental and Social Impact Assessment (ESIA) be undertaken., and an Environmental and Social Management Plan (ESMP) prepared in accordance with the requirements of Environmental and Social Standards for ZEMA, NEMC and the AF.

1. Compliance with the Law

The project will ensure that it complies with all the environmental, social and governance laws, permits required (construction, land use, water abstraction, equitable participation) and applicable technical standards approved in Zanzibar. For those that are not available in Zanzibar (guidelines for dam construction, and rainwater harvesting structures), the project will use those available on the mainland Tanzania.

2. **Access and Equity**

Participatory methods have been used during the design stage, and will be used to ensure equitable water access among groups, representation in the allocation of water resources, access to credit, and capacity building opportunities. Every person will be free to access the project provided he/she follows the set guidelines during its implementation.

3. **Marginalized and Vulnerable Groups**

All development projects are safeguarded with National and local set rules in which vulnerable groups are protected by law. The project will ensure that women, youth and vulnerable groups are properly integrated and provided with equal opportunities to identify and prioritize their needs and reflected in the planning, and participate fully in the decision-making process through representation in the leadership roles such as those related to the allocation of water or approval of credit for developing income generating activities.

4. **Human rights**

This project is designed to promote the protection of human rights across all components, ensuring the right to safe, clean and affordable water, particularly for communities facing increased salinity and water scarcity. Improved access to water and climate-resilient livelihood opportunities will contribute directly to better health outcomes, improved food security and enhanced living standards. The project will also ensure that vulnerable and marginalized groups are fully included in the planning, implementation, and distribution of project benefits. Additionally, the project guarantees that communities are fully informed and consulted on project activities such as site selection and operational decisions. These processes ensure Free, Prior and Informed Consent (FPIC) for any land access requirements and respect for cultural values and customs. No involuntary displacement is anticipated, and if any temporary restrictions occur, affected individuals will be supported through fair and participatory mitigation measures. The project will therefore ensure that adaptation benefits are socially inclusive, culturally appropriate, and environmentally sustainable, in line with with the Adaptation Fund's safeguard requirements.

5. **Gender Equity and Women's Empowerment**

The project will ensure that gender bias is eliminated in access to resources, participation in decision-making and property ownership. It promotes equal opportunities in education, employment and leadership, contributing to an improved status for women in society. It will also ensure the construction of GBV-safe designed infrastructure in order to minimize protection risks. The project also guarantees proportional representation in governance structures by actively engaging women, youth, persons with disabilities, and other marginalized groups in Water User Associations (WUAs), and O&M of infrastructures, as well as ensuring equitable access to credit and financing mechanisms. The project will also ensure equitable presentation in the planning and budgeting at Institutional level. Through inclusive selection processes and gender-responsive governance training, the project strengthens leadership diversity and supports fair decision-making that reflects the priorities and rights of all community members. The project will also ensure the provision of communication channels and facilitate the reduction of GBV

6. **Core Labor Rights**

The project aims to promote fair labour practices, safe working conditions and positive worker–management relations. The entire workforce will be sourced locally in Zanzibar, ensuring employment benefits remain within the community. To prevent and manage occupational risks such as workplace accidents, the project will enforce compliance with the Zanzibar Labour Relations Act (2005), including the provision and mandatory use of personal protective equipment (PPE), regular safety training, and field-level risk assessments. All contractors and service providers engaged in project implementation will be required to be registered with the Workers Compensation Fund (WCF). These measures ensure that workers are treated fairly, without discrimination and are protected by safe and healthy working conditions throughout the project life cycle.

7. **Indigenous People**

The communities are culturally homogeneous and share a common language (Kiswahili) across the locations. This facilitates clear communication and engagement throughout, and activities are not expected to adversely affect the rights, identity of cultural heritage of the beneficiary communities.

8. Involuntary Resettlement

Implementation of project activities does not require resettlement. The dikes and water reservoirs will be constructed on public land after consultation and in agreement with the beneficiaries. The government will ensure that persons whose land

will be acquired for reservoir construction are provided with alternative land in a nearby location, with due consideration to existing land use, tenure arrangements, and customary ownership, to safeguard livelihoods, access to productive resources, and social equity.

9. **Protection of Natural Habitats**

The project supports the protection and restoration of natural habitats, particularly mangrove ecosystems and river catchments that are essential for soil stability and freshwater protection. Degradation caused by unsustainable practices such as charcoal production and extraction of building poles has increased the exposure of coastal farmland to seawater inundation and habitat destruction. To mitigate these impacts, the project will implement soil and water conservation practices, restore mangrove vegetation by using native species, and strengthen natural buffers against saline intrusion. All activities will be carefully planned to avoid sensitive ecological areas and prevent further environmental harm.

10. Conservation of Biological Diversity

This safeguard measure aims to avoid or minimize adverse impacts on biodiversity and natural habitats, and to support restoration where necessary. In areas where potential risks are identified through the ESIA process, a detailed risk assessment will be conducted to evaluate the scale of impact and determine appropriate mitigation actions. Initial consultations and site assessments have not indicated the presence of any species with significant biodiversity value. However, use of agrochemicals may pose pollution risks that may affect native flora and fauna. To address this the project will integrated Intergrated Pest Management (IPM) practices into climate smart practices, monitor water quality, and implement project activities in a manner that will limit ecological disturbance, especially on areas that do not require modification.

11. **Climate Change**

The project promotes climate-resilient interventions that strengthen community adaptive capacity, reduce greenhouse gas emissions (GHG), and enhance food security and livelihoods. All activities are designed as gender-inclusive concrete adaptation measures and nature-based solutions, consistent with national climate priorities outlined in the ZCCS, ZCCAP, and the Nationally Determined Contributions (NDCs). The project recognizes potential climate risks such as droughts and floods, which may result in crop failure, damage to infrastructure and reduced water availability. To address these risks, the project will incorporate resilient GBV-safe engineering standards, water conservation practices, and sustainable land management practices to ensure long-term resilience to climate change impacts.

12. **Pollution Prevention and Resource Efficiency**

The project recognizes the potential for pollution and waste generation during implementation and commits to minimizing these impacts through best environmental and health practices. Proper preventive maintenance will be applied to all machinery and vehicles to reduce emissions and operational leaks. Solid, liquid, and gaseous wastes will be managed responsibly with a strong emphasis on waste reduction, reuse, and recycling wherever possible. The project will also ensure safe handling of any hazardous materials, including pesticides if applied, to prevent contamination of soil, water, and air. These measures collectively support pollution prevention and promote efficient use of resources throughout the project lifecycle.

13. **Public health and safety**

This safeguard ensures that any risks to community health and safety resulting from project activities are prevented or effectively managed. Infrastructure-related works may generate impacts such as increased traffic, dust emissions, noise, vibration and temporary water pollution, which could affect nearby households. These risks will be mitigated through strict safety controls, including designated traffic routes, dust suppression, noise reduction measures, and the use of personal protective equipment (PPE) for workers. Because the project involves water-related interventions, there is also a potential rise in mosquito breeding sites and associated vector-borne diseases such as malaria and dengue, as well as increased exposure to water-borne diseases. To address these risks, the project will ensure regular mosquito control measures and community health awareness campaigns.

Emergency events such as fires, explosions, or chemical spills are not anticipated; however, if required, an Emergency Response Plan (ERP) will be established and implemented in a gender-responsive manner to address unexpected hazards. The ERP will ensure safety and equitable protection of women, men, youth and vulnerable groups, including clear communication, inclusive evacuation procedures, and considerations of differentiated needs and roles.

The project also acknowledges possible health concerns linked to interactions between workers and community members, including the transmission of communicable diseases such as HIV/AIDS. To mitigate these risks, the project (in collaboration with the Ministry of Health will conduct awareness programs on disease prevention, and health and safety will be conducted for both workers and surrounding communities. Through these measures, the project will ensure robust public health safeguards and contribute to a safer, more resilient community.

Physical and Cultural Heritage

This safeguard aims to ensure that physical and cultural heritage is protected from any adverse impacts of project activities. Based on initial site assessments, the project is considered **low risk**, as no activities are planned within areas of cultural significance or heritage protection. However, if any tangible or intangible cultural heritage is encountered during implementation, work will immediately stop in the affected area, and a chance-find procedure will be applied. This involves: stop working immediately, securing and protecting the site, notifying relevant authorities and documenting the find, including the location, type of material and its condition. Where avoidance is not possible, internationally recognized cultural heritage management practices will be put in place, including the preparation of a Cultural Heritage Management Plan and engagement with local leaders and authorities to agree on appropriate mitigation measures. Through these safeguards, the project will ensure full respect for cultural values and preservation of heritage resources.

14. **Lands and Soil Conservation**

This project intends to promote soil and water conservation innovations that support the restoration of mangrove ecosystem, rehabilitation of degraded land and improve the protection of river catchments. These interventions will be implemented in a gender-responsive manner, recognizing and strengthening the roles of women, men, and youth in natural resource management. The soil and water conservation activities will contribute to climate change adaptation and mitigation by enhancing ecosystem resilience, reducing land degradation, and supporting equitable and sustainable livelihoods."

Table 13. Compliance requirements for Environmental and Social Principles of the AF

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
1. Compliance with the Law	All interventions	Risk: **High** Potential impact: **High**	• Non compliance with the environmental regulations, water permits, land permits	• Work with ZEMA to prepare an Environmental and Social Management Plan (ESMP) • Secure all necessary permits for land use, dikes and reservoir construction and water abstraction prior to commencement of actual works
2. Access and Equity	For reservoirs, water tanks, climate-smart practices that may require water use	Risk: **High** Potential impact: **High**	• Inequitable water access among groups within the village • Low presentation women in O&M procedures • Low protection risks on constructed infrastructure that might lead to GBV • Low access to credit and financing	• Ensure equitable representation within WUA membership, and fair participation in all project benefits, including capacity building and access to credit • Ensure the construction of gender-inclusive infrastructure • Establish transparent procedures for allocating resources and project support • Provide a clear and accessible grievance redress mechanism for addressing community concerns
3. Marginalized and	All interventions	Risk: **High** Potential impact: **High**	• Risk of excluding vulnerable groups: women, poor	• Prioritized targeting: ensure meaningful consultation with

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
Vulnerable groups			households and persons with disabilities to benefit from project interventions	marginalized and vulnerable groups in all project locations • Promote their full participation in village meetings and decision making processes • Organize focus group discussions to enable them to identify and prioritize activities that best address their needs
4. Human Rights	Land acquisition during the construction of reservoirs and dikes	Risk: **Moderate** Potential impact: **High**	• Community dissatisfaction especially to the land where reservoirs will be constructed	• Consent must be sought prior to the commencement of construction work • If relocation is necessary, support the affected individual to acquire land nearby, ensuring equitable allocation of such land
5. Gender Equity and Women's Empowerment	All interventions	Risk: **High** Potential impact: **High**	• Women disproportionately affected by water scarcity • Low level of participation in governance and leadership roles • Limited access to financial and productive resources • GBV-related incidences during construction • Limited access to communication platforms and information • Data gaps and unmonitored gender outcomes	• Ensure proportional presentation of diverse groups in leadership roles • Training in leadership and water governance to enhance capacity • Provide equal access to credit and other productive resources • Implement Gender Action Plan • Establish mobile communication platforms to disseminate climate information and provide timely early warning alerts on climate related risks • Build capacity on mainstreaming gender, disaggregation methodologies and participatory MEL
6. Core Labour Rights	Construction activities	Risk: **Moderate** Potential impact: **High**	• Workplace hazards and accidents • Women discriminated during work • Possible child labor	• Adhere to labour rights as stated in the Zanzibar Labour Relations Act (2005) • Safety training for workers • Provide Personal Protective Equipment (PPE) where necessary
7. Indigenous Peoples	Not triggered		• No foreseen potential risk	• No differentiation in ethnicity has been observed in project sites
8. Involuntary Resettlement	Drainage canal and Reservoir construction	Risk: **Low** Potential impact: **Low**	• Not anticipated	• No involuntary resettlement will take place
9. Protection of Natural Habitats	Mangrove restoration and dike construction	Risk: **Low** Potential impact: **Moderate**	• Disturbance of natural habitat due to pole cutting (from mangroves) and charcoal production	• Carry out environmental screening prior to implementation • Use native mangrove species for rehabilitation

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
				• Establish buffer zones to protect surrounding ecosystems • Avoid critical habitats and environmentally sensitive areas
10. Conservation of Biological Diversity	Construction of reservoir, Mangrove restoration, agriculture and value addition	Risk: **Low** Potential impact: **Moderate**	• Pollution from agrochemical use • Use of foreign mangrove species • Change in water quality due to overabstraction	• Construct reservoirs in areas that are not environmentally sensitive • Use indigenous species for mangrove restoration and tree planting activities • Use Integrated Pest Management (IPM) practices to minimize use of agrochemicals • Monitor water quality to ensure ecosystem health and safety
11. Climate Change	All interventions	Risk: **High** Potential impact: **High**	• Infrastructure may not be able to withstand climate extremes • Possible crop failure due to salt intolerance	• Adopt climate-resilient engineering standards in the infrastructure design and construction • Conduct hydrological modeling to inform planning and risk reduction • Use climate smart practices
12. Pollution Prevention and Resource Efficiency	Construction of reservoirs	Risk: **Low** Potential impact: **Low**	• Solid waste generation during construction • Gaseous emissions and operational leaks • Dust emission, vibrations and noise pollution	• Comply with the national and international pollution control standards • Implement erosion management measures • Wear protective gears (PPE) • Water quality monitoring to ensure sustainable use
13. Public Health	Reservoir, water tank and dikes	Risk: **Low** Potential impact: **High**	• Dust emission, noise and vibrations • Fire, explosions and chemical spills • Increased mosquito breeding sites (for malaria and dengue diseases) • Possible water-borne diseases (diarrhea) • Other health concerns (HIV/AIDS, STDs)	• Wear PPE for protection • Have an Emergency Response Plan (ERP) in place • Conduct routine maintenance of reservoirs, including clearing nearby bushes and vegetation • Provide health education and awareness to communiity members
14. Physical and Cultural Heritage	Excavation for reservoir	Risk: **Low** Potential impact: **Low**	• Not anticipated	• Confirm that selected sites do not have physical or cultural heritage sites (for example: graveyard site) • Engage local leaders to identify an alternative site if necessary
15. Lands and Soil Conservation	Reservoir, drainage canal, agricultural practices	Risk: **Low** Potential impact: **Moderate**	• Increased salinity • Land degradation due to continued agriculture	• Implement soil and water conservation measures • Continue monitoring salinity levels to ensure sustainable use

Grievance Management

The executing entity will work towards ensuring that the project's direct and indirect beneficiaries are served to the required standards. The PIU will work to ensure that expectations of the communities are met. Therefore, any grievance from the communities will be resolved using the existing governance structures. The grievance management mechanism is designed with the objective of solving disputes at the earliest possible time, which will be in the interest of all parties concerned and therefore, it implicitly discourages referring such matters to the national level government authorities or national level courts for resolution.

A Grievance Committee will be established at the Shehia and District levels for dealing with any grievances as they arise. At Shehia level, the Committee will include the Sheha, Shehia Coordinator, Environmental Officer, and Community Development Officer/Social Welfare Officer. At District level, the Committee will include District Administrative Executive Secretary, Assistant Director of District Council responsible for Agriculture, Natural Resources and Environment. Others include District fisheries Officer District Legal Officer and other invited members related to the grievance.

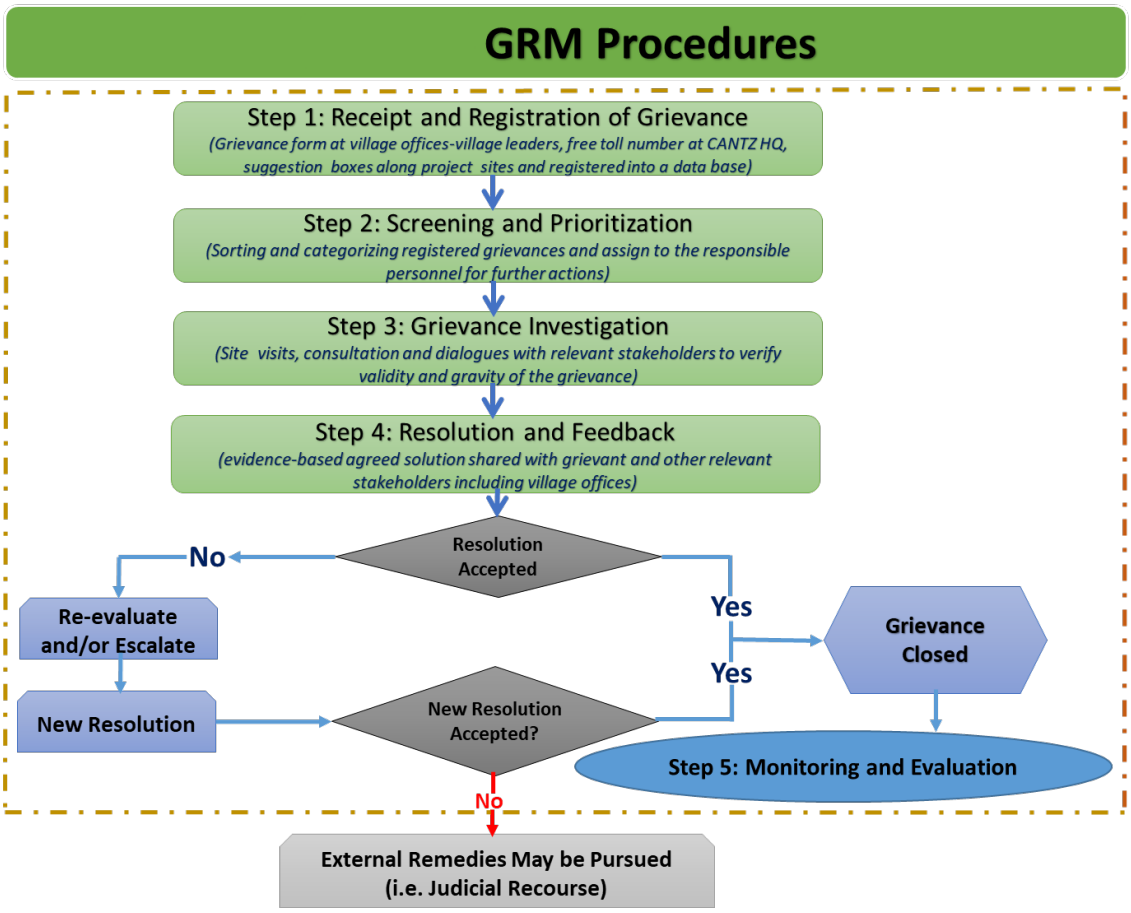
The procedure for handling grievances will be as follows:

1) The affected person shall file his/her grievance in writing, to the Shehia. The grievance note must be signed and dated by the aggrieved person. Where the affected person is unable to write, he/she shall obtain assistance to write the note and emboss the letter with his/her thumbprint.

2) The Shehia may resolve those disputes depending on the nature of the complaint and where the mandate lies for the issue concerned. Unresolved issues/disputes beyond their mandate are referred to adjudication to the Shehia Grievance Committee (SGC). The SGC will record all the complaints received, whether and how the Shehia resolved them and which complaints were forwarded to the Project Focal Person (PFP).

3) If the aggrieved does not receive a response, or is not satisfied with the solution provided within the agreed time, he or she may take the complaint to the District Authority. The District Authority will work with the concerned parties to resolve the issue through discussion and mutual agreement within 14 days after receiving the complaint.

4) If the issue is still not resolved, the complainant has the right to seek help through formal legal channels. For land-related complaints, this may include the Village Land Council, the Ward Tribunal (where applicable), the District Tribunal, and, if necessary, the High Court (Land Division) at the national level.



PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project implementation.

Implementation Arrangements

The project is designed to be seamlessly integrated within the rich tapestry of existing national and sub-national institutional frameworks, fostering a robust framework for stakeholder engagement and promoting enduring sustainability. Our approach will ensure alignment with pertinent policy objectives, while upholding the highest standards of fiduciary integrity. To facilitate effective management and oversight, we will establish an intricate multi-tier structure that actively involves both state and non-state partners. This structure will encompass key national authorities, dedicated implementing and executing institutions, and specialised technical coordination bodies, alongside grassroots community-level delivery mechanisms that reflect the unique needs of the local population.

By nurturing a spirit of collaboration and transparency at all levels, this approach aims to profoundly enhance the project's overall effectiveness and magnify its positive impact on the community, paving the way for a brighter, more sustainable future.

The Vice President's Office (VPO)

The Vice President's Office (VPO) is poised to play a pivotal role as the National Designated Authority (NDA), dedicated to providing robust policy oversight and strategic guidance. This commitment is designed to ensure a seamless alignment with Tanzania's comprehensive climate change policies, the Nationally Determined Contributions (NDCs), and the nation's obligations under international frameworks such as the UNFCCC and the Paris Agreement.

In this capacity, the VPO will actively foster national-level coordination and champion the endorsement of projects that align with national priorities and aspirations. The office will serve as a catalyst for knowledge exchange, facilitating the sharing of

best practices and innovative solutions. Furthermore, it will strive to integrate project outcomes into Tanzania's climate frameworks and reporting processes, ensuring that findings are not only documented but effectively utilised to enhance the nation's resilience and adaptability in the face of climate change challenges.

First Vice President's Office (FVPO) – Zanzibar Designated National Authority (Zanzibar NDA)

The First Vice President's Office (FVPO) will proudly assume the role of Zanzibar Designated National Authority, spearheading initiatives to harmonize efforts with the region's comprehensive climate change policies, innovative environmental strategies, and overarching development priorities. In this capacity, FVPO will diligently oversee compliance with Zanzibar's regulatory frameworks, ensuring that all actions align with established guidelines. The office will facilitate robust institutional coordination among Ministries, Departments, and Agencies (MDAs), fostering collaboration and synergy. Additionally, FVPO will be instrumental in seamlessly integrating project outcomes into Zanzibar's climate adaptation planning and policy processes, paving the way for a resilient and sustainable future that meets the needs of its citizens.

The National Environment Management Council (NEMC).

The entity is designated as the Implementing Entity, where it will be instrumental in establishing robust fiduciary oversight and ensuring effective compliance with environmental and social safeguards. This responsibility encompasses adherence to rigorous procurement standards, all while maintaining a keen focus on quality assurance to optimise project performance in accordance with both national regulations and donor requirements.

Under the guidance of NEMC, the initiative will prioritise sound financial management practices, rigorously uphold environmental compliance, and foster a culture of proactive risk management. Additionally, NEMC will provide comprehensive technical oversight, enhancing the effectiveness and integrity of project implementation to ultimately achieve impactful outcomes.

Climate Action Network Tanzania (CAN Tanzania)

The entity will assume the vital role of Executing Entity, oversee the daily implementation of project activities, and expertly coordinate diverse stakeholders. This will involve meticulous financial management, robust monitoring and evaluation processes, and a commitment to delivering impactful results. CAN Tanzania will spearhead extensive community engagement initiatives, focusing on capacity building, dynamic advocacy efforts, and comprehensive knowledge management. By prioritising the inclusive participation of women, youth, persons with disabilities, and other marginalised groups, the project will foster a sense of ownership and empowerment within the community. Additionally, the approach will seamlessly integrate community-driven strategies and sustainability principles throughout all phases of project execution, ensuring long-lasting benefits and positive change.

The Zanzibar Environmental Management Authority (ZEMA)

The entity will serve as a crucial catalyst for fostering sectoral coordination and providing robust regulatory oversight at the Zanzibar level. By ensuring that all project activities comply with environmental laws, sectoral policies, and technical standards, ZEMA will help create a sustainable development framework. This organisation will also play an essential role in facilitating comprehensive environmental and social screening processes, thereby streamlining permitting operations. Furthermore, ZEMA will encourage dynamic inter-sectoral collaboration and work diligently to weave project outcomes into Zanzibar's climate adaptation strategies and long-term development planning initiatives, enhancing resilience and promoting sustainable growth.

A dedicated Project Implementation Unit (PIU).

The entity will be established under the auspices of CAN Tanzania and ZEMA, and will engage in close collaboration with key partners, including NEMC and the DNAs, to effectively oversee the operational execution of the project. The Project Implementation Unit (PIU) will be composed of a diverse team, including a visionary Project Manager, a Finance and Administration Officer, an M&E Specialist, coastal and marine specialists, an Environmental and Social Safeguards Officer committed to sustainability, and a group of skilled technical officers. This dynamic team will oversee comprehensive annual work planning and budgeting, efficient procurement processes, and detailed reporting to ensure transparency and accountability. Additionally, they will uphold rigorous safeguards compliance and proactive risk management, all while fostering strong coordination among a network of implementing partners and engaging community stakeholders. Together, they will focus on driving impactful outcomes and fostering community resilience, ensuring the project's overarching objectives are met with utmost dedication and collaborative spirit.

A multi-stakeholder Project Steering Committee (PSC)

The entity will be established to foster robust strategic oversight, provide insightful policy guidance, and reinforce accountability across the various stages of project implementation. The Project Steering Committee (PSC) will comprise a diverse group of representatives from the Vice President's Office (VPO), the Fisheries and Veterinary Services Office (FVPO), the National Environmental Management Council (NEMC), and the Zanzibar Environmental Management Authority (ZEMA). Additionally, it will include key figures from relevant sector ministries, local government authorities, civil society organisations, private sector stakeholders, and community representatives.

This inclusive PSC will play a vital role in the project's success by approving comprehensive annual work plans and budgets that reflect the collective objectives of all stakeholders. It will systematically review implementation progress and performance reports to ensure transparency and effectiveness. By addressing both strategic and operational challenges, the PSC will work collaboratively to devise solutions that advance the project. Furthermore, the committee will ensure that project outcomes are not only aligned with national priorities and donor requirements but also thoughtfully reflect the needs and aspirations of the community it aims to serve.

Institution	Primary Role	Key Responsibilities
VPO & FVPO (DNA)	National policy oversight and endorsement	Strategic guidance; alignment with national climate frameworks; inter-ministerial coordination; donor interface
FVPO (DNA)	National policy oversight and endorsement in Zanzibar	In country strategic guidance; alignment with national climate frameworks; inter-ministerial coordination; donor interface
NEMC (Implementing Entity)	Fiduciary oversight and safeguards compliance	Financial oversight; procurement compliance; E&S safeguards supervision; technical assurance
CAN Tanzania (Executing Entity)	Operational execution and delivery	Activity implementation; financial management; stakeholder engagement; M&E; reporting
ZEMA (Sectoral Coordination)	Technical and regulatory coordination	Environmental compliance; sector alignment; technical backstopping; regulatory approvals
PIU	Day-to-day operational management	Work planning; procurement; reporting; safeguards management; risk monitoring

PSC	Strategic oversight and guidance	Approves workplans; reviews performance; resolves risks; ensures national alignment

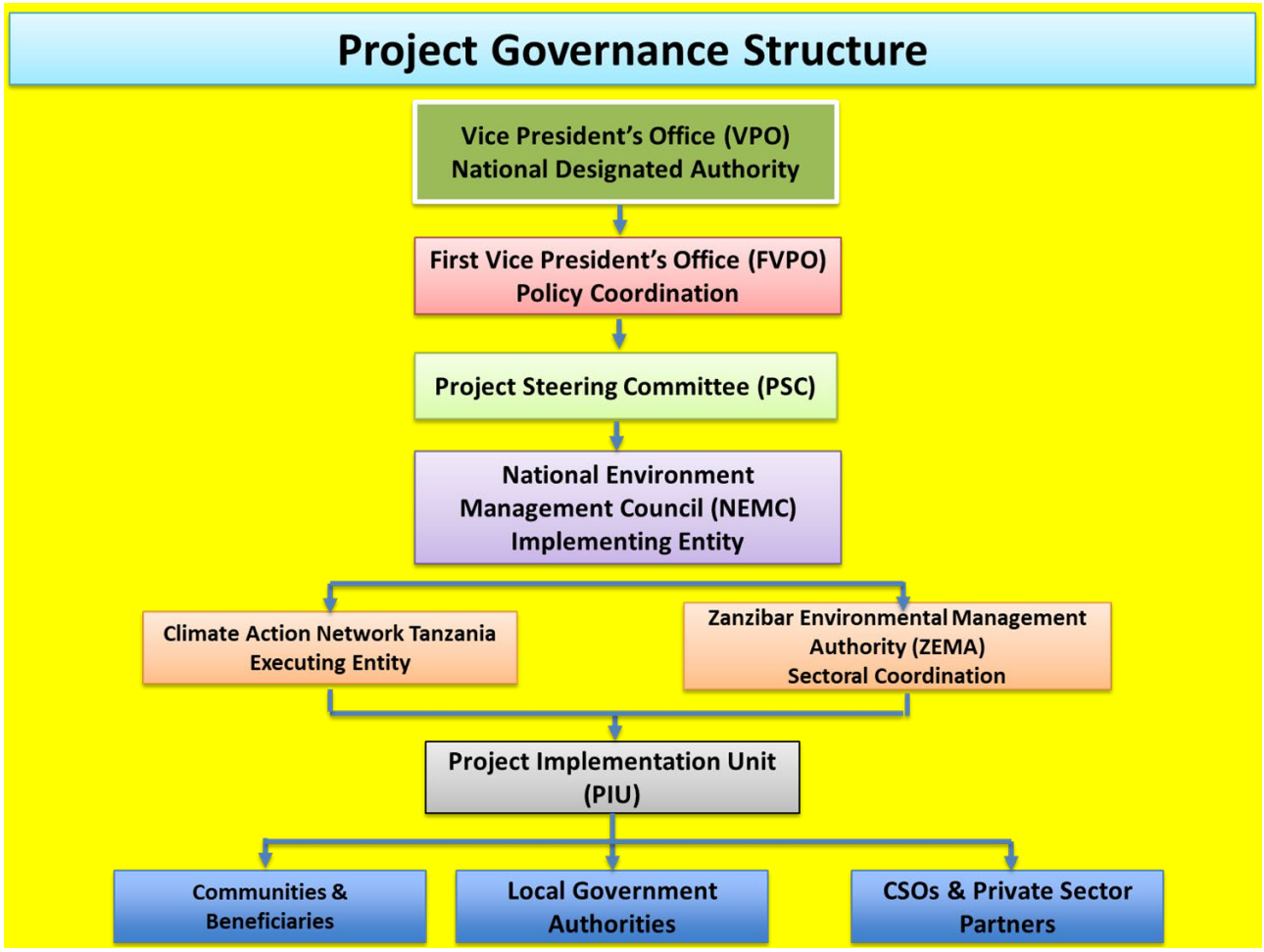


Figure 9. Implementation arrangements

Table 14. Roles and responsibilities of different stakeholders

Potential Stakeholders	**Description of the Roles**
1st Vice President's Office (Department of Environment)	Provides overall policy guidance and oversight on environmental management and climate change. ZEMA will be the overall implementor of project activities
Local Government Authorities (Wete, Mkoani North A, North B and Central District Councils)	District Authorities will coordinate and oversee implementation of project activities in rural areas through relevant district and extension officers, ensuring inclusive participation of women, youth, and vulnerable groups in planning, implementation, and monitoring. Through gender-responsive monitoring systems and the approval and enforcement of inclusive byelaws, District Councils will strengthen community-based natural resource governance, safeguard water resources, and promote equitable access, decision-making, and resilience outcomes.

Implementing Sectors (Ministry of Agriculture, Irrigation, Livestock and Natural Resources- MAILNR), Ministry of Blue Economy and Fisheries (MoBEF), Ministry of Community Development, Gender, Elderly and Children (MoCDGEC)	All relevant sector Ministries and Departments, including Agriculture, Livestock, Forestry, Water, Environment, Fisheries, and Community Development will provide technical and policy guidance during implementation through the PIU and Steering Committee meetings. Their engagement will ensure cross-sectoral coordination and the integration of gender-responsive approaches that address differentiated climate risks and needs of women, men, youth, and vulnerable groups.
Farmer groups/ cooperatives	These stakeholders include farmer associations that represent farmers' interests and advocate for equitable access to land, water, and agricultural inputs, including the management of rice fields and water use. Under the project, elected farmer associations (approximately 20 members) will mobilize women and men farmers, receive gender-responsive training in group management and irrigation governance, and support enforcement of byelaws to ensure inclusive participation and effective delivery of project outcomes.
Non-government organizations/Community Based Organizations	The Non Government Organizations will support community awareness on climate change, climate-smart agriculture, and water resource management, with deliberate efforts to reach women, youth, and vulnerable groups. Community Forests Pemba (CFP), and Practical Permaculture Institute (PPIZ) supported by local NGOs including ZACCA and JECA, will coordinate farmer engagement in Unguja and Pemba under the guidance of the project team and District Authorities, ensuring gender-responsive outreach and collaboration with farmer associations.
Farmers	The grassroots beneficiaries will be mobilized through local institutions to participate in project implementation, including adoption of climate-smart agricultural practices, capacity-building trainings, awareness-raising activities, water source protection, and community meetings, with deliberate inclusion of women, youth, and vulnerable households. As primary implementers of on-the-ground interventions, farmers will provide continuous feedback, share lessons learned, and inform adaptive management to ensure equitable, effective, and sustainable project outcomes.
Technical based: Institute of Marine Science (IMS), Zanzibar Agricultural Research Institute (ZARI), and Zanzibar Water Authority (ZAWA)	For technical advice on areas of marine science, soil and water analysis and mariculture related projects.

B. Describe the measures for financial and project risk management

Table 15. Project risks and mitigation measures

Risk type	Risk Category	Risk Level	Mitigation Measures
Financial risk	Timely disbursement of funds	Low	Fund requests and project progress reports will be timely prepared, communicated and submitted to the Adaptation Fund and other relevant stakeholders to ensure adequate feedback is provided to speed up fund's disbursement. The Project Team will follow the required standards and templates as provided by the Adaptation Fund to ensure proper reporting and avoid unnecessary delays
	Financial control risk	Low	Appropriate structures at the ministerial level and local government authorities exist for the proper management and control of public funds. The project will follow these structures and International Accounting Standards (IAS) and to all Generally Acceptable Accounting Principles (GAAP) to meet all accounting requirements related to reporting, control and transparency and auditing.

Risk type	Risk Category	Risk Level	Mitigation Measures
Project risk	Project performance	Low	Project Team will be carefully constituted based on skills and capacity to manage project on Climate change intervention as well good monitoring tools to facilitate implementation of this project. The Advisor will ensure that project activities are implemented accordingly Detailed work plans will be developed and be approved by both the Project Steering Committee and NEMC.
	Participation of stakeholders	Low	Stakeholders have been actively involved from early stages of the project design and are expected to participate fully during the entire life cycle of the project. Involvement of key stakeholders at community level and inclusion of vulnerable to climate change adaptation communities and groups such as youth, women, local leaders, community beneficiaries, and farmers association as well as responsible ministries will provide opportunities for mitigating any risks related to stakeholders' involvement.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

Individual project activities have been assessed in line with the Environmental and Social Policy requirements of ZEMA, NEMC and the AF, in order to identify potential risks and appropriate mitigation measures. Prior to project implementation, a full Environmental and Social Impact Assessment (ESIA) will be undertaken in accordance with the established regulatory requirements to assess potential impacts and define measures to avoid, minimize and / or mitigate identified risks. The ESIA will also inform the development of a comprehensive monitoring plan and promote the application of high standards of environmental and social management throughout the project implementation. Table 10 illustrates the environmental and social impacts and risks identified as relevant to the project.

Table 16. Environmental and social impacts and risks identified as being relevant to the project

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
1. Compliance with the Law	All interventions	Risk: **High** Potential impact: **High**	• Non compliance with the environmental regulations, water permits, land permits	• Work with ZEMA to prepare an Environmental and Social Management Plan (ESMP) • Secure all necessary permits for land use, dikes and reservoir construction and water abstraction prior to commencement of actual works
2. Access and Equity	For reservoirs, water tanks, climate-smart practices that may require water use	Risk: **High** Potential impact: **High**	• Inequitable water access among groups within the village	• Ensure equitable representation within WUA membership, and fair participation in all project benefits, including capacity building and access to credit • Establish transparent procedures for allocating resources and project support

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
				• Provide a clear and accessible grievance redress mechanism for addressing community concerns
3. Marginalized and Vulnerable groups	All interventions	Risk: **High** Potential impact: **High**	• Risk of excluding vulnerable groups: women, poor households and persons with disabilities will not benefit from project interventions	• Prioritized targeting: ensure meaningful consultation with marginalized and vulnerable groups in all project locations • Promote their full participation in village meetings and decision making processes • Organize focus group discussions to enable them to identify and prioritize activities that best address their needs
4. Human Rights	Land acquisition during the construction of reservoirs and dikes	Risk: **Moderate** Potential impact: **High**	• Community dissatisfaction especially to the land where reservoirs will be constructed	• Consent must be sought prior to the commencement of construction work • If relocation is necessary, support the affected individual to acquire land nearby
5. Gender Equity and Women's Empowerment	All interventions	Risk: **High** Potential impact: **High**	• Women disproportionately affected by water scarcity • Low level of participation in governance	• Ensure proportional presentation of diverse groups in leadership roles • Training in leadership and water governance to enhance capacity • Provide equal access to credit and financial resources
6. Core Labour Rights	Construction activities	Risk: **Moderate** Potential impact: **High**	• Workplace hazards and accidents • Possible child labor	• Adhere to labour rights as stated in the Zanzibar Labour Relations Act (2005) • Safety training for workers • Provide Personal Protective Equipment (PPE) where necessary
7. Indigenous Peoples	Not triggered		• No foreseen potential risk	• No differentiation in ethnicity has been observed in project sites
8. Involuntary Resettlement	Drainage canal and Reservoir construction	Risk: **Low** Potential impact: **Low**	• Not anticipated	• No involuntary resettlement will take place
9. Protection of Natural Habitats	Mangrove restoration and dike construction	Risk: **Low** Potential impact: **Moderate**	• Disturbance of natural habitat due to pole cutting (from	• Carry out environmental screening prior to implementation

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
			mangroves) and charcoal production	• Use native mangrove species for rehabilitation • Establish buffer zones to protect surrounding ecosystems • Avoid critical habitats and environmentally sensitive areas
10. Conservation of Biological Diversity	Construction of reservoir, Mangrove restoration, agriculture and value addition	Risk: **Low** Potential impact: **Moderate**	• Pollution from agrochemical use • Use of foreign mangrove species • Change in water quality due to over-abstraction	• Construct reservoirs in areas that are not environmentally sensitive • Use indigenous species for mangrove restoration and tree planting activities • Use Integrated Pest Management (IPM) practices to minimize use of agrochemicals • Monitor water quality to ensure ecosystem health and safety
11. Climate Change	All interventions	Risk: **High** Potential impact: **High**	• Infrastructure may not be able to withstand climate extremes • Possible crop failure due to salt intolerance	• Adopt climate-resilient engineering standards in the infrastructure design and construction • Conduct hydrological modeling to inform planning and risk reduction • Use climate smart practices
12. Pollution Prevention and Resource Efficiency	Construction of reservoirs	Risk: **Low** Potential impact: **Low**	• Solid waste generation during construction • Gaseous emissions and operational leaks • Dust emission, vibrations and noise pollution	• Comply with the national and international pollution control standards • Implement erosion management measures • Wear protective gears (PPE) • Water quality monitoring to ensure sustainable use
13. Public Health	Reservoir, water tank and dikes	Risk: **Low** Potential impact: **High**	• Dust emission, noise and vibrations • Fire, explosions and chemical spills • Increased mosquito breeding sites (for malaria and dengue diseases) • Possible water-borne diseases (diarrhea) • Other health concerns (HIV/AIDS, STDs)	• Wear PPE for protection • Have an Emergency Response Plan (ERP) in place • Conduct routine maintenance of reservoirs, including clearing nearby bushes and vegetation • Provide health education and awareness to community members

Environmental and Social Principle	Compliance requirement	Potential impacts and risks	Details of potential risks	Mitigation measures
14. Physical and Cultural Heritage	Excavation for reservoir	Risk: **Low** Potential impact: **Low**	• Not anticipated	• Confirm that selected sites do not have physical or cultural heritage sites (for example: graveyard site) • Engage local leaders to identify an alternative site if necessary
15. Lands and Soil Conservation	Reservoir, drainage canal, agricultural practices	Risk: **Low** Potential impact: **Moderate**	• Increased salinity • Land degradation due to continued agriculture	• Implement soil and water conservation measures • Continue monitoring salinity levels to ensure sustainable use

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan in compliance with the ESP and the Gender Policy of the Adaptation Fund.

The project's Monitoring, Evaluation and Learning framework will be designed in accordance with the procedures and guidelines of the National Environment Management Council (NEMC) and the Adaptation Fund (AF). The Results Framework will define performance indicators, baselines, targets, and means of verification for outputs, outcomes, and impacts, and vulnerability-disaggregated indicators in line with the Gender Action Plan (GAP). The M&EL system will also include systematic monitoring of environmental and social parameters, as required under the Environmental and Social Management Plan (ESMP), including potential gender-differentiated environmental and social risks. A detailed M&EL Plan will be finalized, validated, and approved within one month of project effectiveness. The total budget for M&E is US$ 206,350.

1. **Project initiation and systems establishment:** Following project approval, the Vice President's Office – Department of Environment (1st VPO-DoE) will appoint key project personnel and establish all operational systems required for effective implementation. This will include: appointment of project management and M&EL staff with defined gender responsibilities, establishment of financial management and internal control systems, preparation of the Annual Work Plan, Procurement Management Plan, and M&EL Plan, Operationalization of a Risk Management Plan, including gender-related and protection risks.

   The project at entry assessment will determine the level of readiness of the project. It includes strategic relevance of the project, soundness of project design, integration of gender and environmental and social safeguards, Institution and implementation readiness, ME&L readiness, financial and procurement preparedness, and risk assessment and management.

2. **Inception workshop:** An inception workshop will be convened to ensure a shared understanding of the project's goal, outcomes, outputs, duration, and implementation arrangements. The Project Coordinator will define the roles and responsibilities of all stakeholders, including implementing partners at national, district, and Shehia levels. Gender equality, social inclusion, and AF policy requirements will be explicitly addressed to ensure that all stakeholders understand their responsibilities for implementing and reporting on gender-responsive and inclusive adaptation actions.

3. **Routine monitoring and reporting:** Monitoring and evaluation will be conducted in accordance with the approved M&EL Plan, using both quantitative and qualitative methods. Baseline studies, including gender analysis and relevant oceanographic and environmental assessments, will be undertaken at the early stages of implementation to support evidence-based monitoring.

   The ESMP and GAP will be fully integrated into the M&EL framework to ensure systematic tracking of environmental, social nd gender-responsive performance and compliance with AF requirements.

Reporting mechanism: Given the multi-sectoral nature of the project, the following coordination and reporting mechanisms will apply:

a. Monthly coordination meetings will be held with all key implementing partners to review progress, identify bottlenecks, and agree on corrective actions. These meetings will be facilitated by the Project Coordinator (PC) on Unguja and supported by the Liaison Officer on Pemba. Progress will be reviewed against gender-responsive indicators and ESMP requirements.

b. Quarterly review meetings will be organized by the PC, with participation from the Liaison Officer and implementing partners, and will be held alternately on Unguja and Pemba Islands. Quarterly progress reports, including updates on gender outcomes, environmental and social safeguards, and risk mitigation measures, will be submitted to the Implementing Entity for oversight and guidance.

c. Annual review meetings will bring together key implementers, supervisors, and relevant stakeholders to assess overall progress, analyze results against targets, review gender and inclusion performance, and document lessons learned. Annual Progress Reports will be prepared based on these discussions and submitted to NEMC and the Adaptation Fund in accordance with reporting requirements.

4. **Steering Committee (SC):** The Steering Committee will meet twice per year to provide strategic oversight and policy guidance. The SC will comprise senior representatives from key implementing sectors and institutions, with equitable gender representation and will ensure alignment with national priorities, AF policies, and gender commitments.
   The SC will review and approve Annual Work Plans and budgets, endorse major implementation adjustments, and provide guidance on addressing emerging environmental, social, or gender-related risks.

5. **Mid-Term Review (MTR):** A Mid-Term Review will be conducted by an independent external evaluator, in collaboration with NEMC. The MTR will assess progress toward outcomes, effectiveness of gender-responsive approaches, compliance with AF policies, and overall implementation performance. Findings and recommendations will inform any necessary adjustments for the remaining implementation period.

6. **Final evaluation and completion reporting**: At project completion, the Project Coordinator will prepare the Project Completion Report within three months after completion. An Independent Final Evaluation will be conducted by an external evaluator within nine months after project closure to assess relevance, effectiveness, efficiency, impact, sustainability, and transformational gender outcomes, in line with AF evaluation criteria.

7. **External audits**: Annual external audits will be conducted in accordance with Government financial regulations and AF requirements. Audit reports will cover all project funds disbursed through government institutions and will be submitted to the relevant oversight bodies to ensure transparency, accountability, and fiduciary compliance.

Table 17. Monitoring and Evaluation Plan

Type of activity	Gender-mainstreaming indicator	Responsible	Budget	Timeframe
1. Quality at entry	Check the overall readiness of the project, at least 30% of the project staff are women	NEMC	**2,000**	2 months prior to starting of project
2. Inception workshop	At least 40% women participants	Project Coordinator	**15,000**	Within 2 months of project start
3. Monitoring of Project activities	>40% women participating in M&E activities, include women from target communities		**30,000**	Every 3 months
4. Quarterly progress meetings (Technical)	>40% women participating in M&EL activities, include women from target communities	Project Coordinator, GFP, key Project staff	**20,000**	Quarterly

Type of activity	Gender-mainstreaming indicator	Responsible	Budget	Timeframe
5. Annual Project Performance report	Check for >40% women participation target in project activities	Project Coordinator, NEMC, M and E Officer, GFP	**49,350**	Annually
6. Steering Committee meetings	>30% women members of the SC	Project Coordinator	**25,000**	Twice a year
7. Mid-Term evaluation	>40% women participation in evaluation exercise	Project Coordinator, M&EL officer, all implementing institutions	**n/a**	2.5 years after commencement of the project
8. Project Completion Summary Report	Check if >40% women participated during the implementation of activities	Project Coordinator, all implementing institutions	**10,000**	Within 3 months after completion of project
9. Annual Audit reports	Include Gender Audit report as part of the Audit	External Auditor	**20,000**	Annually
10. Final audited Financial statement	Check value for money for implemented activities, taking note of women and youth participation	External Auditor	**10,000**	Within 3 months after completion of the project
11. Monitoring Environmental and Social parameters	At least 40% women participate in monitoring exercises	M& EL Officer	**25,000**	Annually
12. Final evaluation of project activities	Ensure >40% women and youth participation during the evaluation exercise	Project Coordinator, M&EL Officer, all implementing Institutions	**n/a**	6 months after the end of the project
			206,350	

Note: **n/a** means these activities have been budgeted under the IE fee (Table 25), in compliance with Decision B.41/20

Procurement arrangements

The Project Coordinator will follow all procurement procedures outlined by the RoGZ under the 'Public Procurement and Disposal of Public Assets Act, 2016 and the subsequent Regulations. An annual Procurement Plan will be prepared and approved by the Steering Committee in line with the Annual Budget.

For procurement of items exceeding USD 50,000 a request may be lodged to make direct payment once all the procurement procedures and approvals have been granted.

Table 18. Monitoring of Environmental parameters

Potential impacts	Monitoring parameters	Monitoring frequency	Monitoring area	Measurement unit	Target	Responsible	Cost (USD)
Infrastructure development							
Loss of vegetation	Area under vegetation cover	Annually	Project site	Acres	Minimum loss of vegetation	PIU	500
Air pollution	NOx, CH_4, SOx particulate matter	Quarterly	Project site and surrounding area	ppm, mg/m3, µg/m3	Zanzibar quality standards	PIU, ZEMA	500
Occurrence of accidents	Recorded injuries and accidents	Monthly	Project site	No. of PPE provided	Zero or minimal injuries	PIU, Local leaders	500
Waste generation	Quantity of waste generated	Monthly	Project site	Volume of waste generated	No waste left at the site	PIU, Local leaders	500
Groundwater contamination	Chemical, biological and physical	Quarterly	Project site	Kgs, ppm	EMA, 2015 standards	PIU, Local leaders	1000
Soil erosion	Soil washout	Once a year	Project site and surrounding area	Area of eroded surface (acres)	Minimum soil erosion	PIU	500
	- STD incidences - Incidences of water borne diseases - Respiratory infections	Annually	Project site	Number of infected persons	Minimum infections	PIU, Ministry of Health	500
Ecosystem restoration							
Land degradation	Salinity level	Twice a year	Project sites	Electrical conductivity CEC	Soils with minimum salinity	PIU	500
Pollution caused by agrochemicals	Heavy metals, NH_4, NO_x	Twice a year	Project sites	CEC	Zanzibar water quality standards	PIU	500
Total						**5,000**	

Table 19. Results Framework

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
Project Objective: To enhance climate resilience in water stressed areas of Zanzibar through gender-responsive institutional strengthening, sustainable water management, inclusive livelihoods diversification and strengthened adaptive capacity						
Reduced vulnerability and enhanced resilience of water-stressed communities through institutional, behavioural and gender-equitable changes that increase capacity to adapt to climate change	1. Number of Sectors, Districts and Shehias that have integrated gender-responsive measures into approved plans (disaggregated by institution type/level)	Institutions: Sectors (8): Environment, Agriculture, Forestry, Irrigation, Livestock, Fisheries, Community Development Districts (5); Shehias (8)	• >10 Institutions, with at least 40% beneficiaries being women	• Quarterly and Annual progress reports • Mid-term review	Y2: Capacity building completed, gender-mainstreaming tools prepared Y3: 20% adopted planning tools Y5: >60% use the tools for planning and budgeting	All key implementing Sectors: Environment, Agriculture, Forestry, Irrigation, Livestock, Fisheries, Community Development, GFPs, NGOs: CFP, PPIZ, Shehia communities
	2. Number of households with reliable access to climate resilient water infrastructure supported by the project sex, age/ disaggregated	Baseline = 0 Number of physical infrastructures constructed by the project 2 Reservoirs, 3,850m dikes, 500m drainage canal	• Total households: direct beneficiaries: 4,537 • Indirect beneficiaries Total household in 5 target districts: 135,236	• Physical observation (field visits) • Quarterly and Annual progress reports • Mid-term review	Y1: Acquire permits, feasibility studies, ESIA Y2: Site preparation Y3-Y4: Construction of reservoirs, compaction of dikes Y5: Reservoirs operational with O&M schedules in place	
	3. % women and youth represented in decision-making roles within water governance structure established or supported by the	Baseline: 0 Actual number of beneficiaries to be determined	• All 8 target Shehias have Water Users Associations with at least 40% women in governance position Total F in target Shehias 9,111, Youth 4,603	• Meetings' minutes • Field verification • Quarterly and Annual progress reports • Midterm reviews	Y1: Formation of WUAs Y3: At least 50% of the Shehias have women in governance positions Y5: >80%	

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
	project (sex, age/ disaggregated)					
	4. Hectares of ecosystems (mangroves, saline farmland) restored or sustainably managed through livelihood-linked ecosystem based adaptation measures	Baseline to be determined Number of hectares restored or sustainably managed	• 34 hectares planted with mangroves/or acres of farmland restored after construction of dikes	• Physical observation • GIS mapped areas • Quarterly and Annual progress report • Mid-term review report	Y1: Baseline study Y2: At least 5 acres of mangroves planted Y3: More than 30 acres planted/ rehabilitated Y5: More than 60 acres planted/ rehabilitated	
	5. Number of households that adopt climate-resilient livelihoods or ecosystem-based adaptation practices supported by the project (disaggregated by sex of household head, age, livelihood type)	Baseline = 0 Total number of households in target Shehias: 4,537 (no disaggregation data)	• >40% of female headed households, >20% youth adopt climate resilient livelihoods	• Quarterly and Annual Progress reports • Household visits • Midterm review	Y1: Group formation, selection of livelihood activities Y2: Training, start with activities Y3: At least 30% women have started livelihood activities Y5: >40% female headed households, 20% youth	
	6. % increase in average income or productive output from climate-resilient livelihood activities among the supported beneficiaries (actual	Baseline to be established (through bank account/ purchasing power)	• >30% of female headed households women and 20% youth report increase in income by at least 20%	• House visits • Survey reports • Quarterly and Annual progress reports • Mid-term review	Y3: At least 10% female headed households and youth have increased income by 10% or more Y5: >30%	

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
	increase/ increase in purchasing power					
	7. Number of knowledge products disseminated to different target groups (disaggregated by sex/age, education, vulnerability)	Baseline = 0	• At least 12 products disseminated to target groups (income generating female headed households, youth, farmers)	• Produced materials available • Quarterly and Annual progress reports • Mid-term review	Y3: 3 products, one for each category Y4: 4 products produced, one for policy makers Y5: At least 10, 3 targeting business women, 3 farmer groups, youth and	
	8. Number of knowledge products scaled up/used by households or communities outside the target Shehias	Baseline = 0	• At least 3 knowledge products scaled up	• Knowledge products (documentaries, pamphlets, policy briefs) • Quarterly and Annual progress reports • Mid-term review	Y1: identify possible good practices Y2: document all stages of development Y3: Compile and pretest Y4-Y5: disseminate	
OUTPUT INDICATORS						
Component 1: Institutional capacity and governance						
Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilience measures	• % trained staff with gender-responsive planning	Baseline to be determined Total trainees: 61	• At least 40% are female trainees	• Training sessions conducted • Number and composition of participants	Y1: Selection of participants and preparation of training modules Y2: Capacity building	District Officers, GFP, DCDO, selected Shehia Officers
	• Number of institutions with Gender Coordination	Baseline = To be determined	• At least 2 at Sector level, for planning and budgeting	• Revised or prepared tools available for planning and	Y1: Reviewed or prepared mainstreaming	GFPs, Sector representatives, ME&L officers

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
	Unit/ Gender Focal Person responsible for preparation and implementation of climate plans	Sectors (8): Environment, Agriculture, Forestry, Irrigation, Livestock, Fisheries, Community Development Districts (5); Shehias (8)	• At least one for Shehia level	budgeting • Bye-laws available in the Shehias	guidelines, bye laws Y2: Sectors/ Districts, Shehias apply the tools Y3: Sectors and Districts fully apply mainstreaming guidelines Y5: At least 60% of the Sectors fully integrate gender into their planning and budgeting processes	
	• Number of grievances received and resolved through the project grievance redress mechanism	Baseline = 0	>90% of grievances resolved within the stipulated timeframe	• GRM registry logbook • Meeting minutes and resolution records • Quarterly and annual reports • MTR and audit reports	Y1: GRM established or strengthened, and public disclosure to raise awareness Y2-Y5: receipt, registration and action	Shehia, District GRM Committee, GFP, Project Coordinator
Component 2: Water security and climate-resilient infrastructure						
Outcome 2: Enhanced water security and gender-responsive climate resilient infrastructure	• Number of women and youth with access to water for drinking or agriculture	Baseline = 0	Infrastructures: 2 reservoirs, dikes and floodgates, drip irrigation facilities At least 40% of women and 20% youth have	• Surveys and field reports • Progress reports- quarterly, annually • Mid-term review • Final evaluation report	Y2: At least 10% women and youth with access to drinking or irrigation water	Irrigation, Env. Officers, Shehia community leaders, GFP

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
			access to water in the constructed infrastructures Direct beneficiaries: M 9,313, F 9,111, Youth 4,603 Indirect beneficiaries: M 264,661, F 274,355, Youth 134,755		Y3: >30% women, 10% youth with access Y5: >60% women and youth with access	
	• Number of project sites with safety and do-no-harm design features	Baseline = 0 All target sites	• All 8 Shehias	• Inspect designs to see if they have met GBV-safe standards	Y1: design stage Y2-Y3: Construction stage	
	• Number of climate resilient assets with equitable O&M skills	Baseline = 0	• All physical assets Assets: 2 reservoirs, dikes and floodgates, drip irrigation facilities	• Visits of sites • Quarterly and annual progress reports • Mid-term and Final reports	Y1: site selection, clearance, capacity building Y2: design and mobilisation, start dike construction Y3-Y4: Construction of reservoirs	
	• Area of ecosystem restored through nature-based solutions	Baseline to be determined	• At least 34 ha planted with mangrove/ or rehabilitated through dike construction by Y5	• GIS mapping • Physical observation	Y1: Identify areas for restoration, training of community members Y2: 8 ha restored Y3: 20 ha restored Y5: 34 ha restored	Env. Officers, Agriculture, Forestry, Kizimbani ARI
Component 3: Climate-resilient livelihoods and productive services						

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
Outcome 3: Improved access to climate-resilient livelihoods and productive resources	• Number of households that adopt climate resilient livelihoods or ecosystem based adaptation practice supported by the project (disaggregated by sex, age, livelihood type)	Baseline to be determined	• At least 30% female headed households at start • >40% women, 20% youth by Y5 Total nu. of direct beneficiaries: 1,825 M 340, F 1,035 Youth 415, Persons With Disability (PWD) 35 Indirect beneficiaries: Total 23,027: M 9,313, F 9,111, Y 4,603	• Survey report • Physical observations through visits • Quarterly and annual progress reports	Y1: Organise groups, build capacity Y2: Continue building capacity, identify livelihood activities to be supported Y3-Y5: Livelihoods activities managed by beneficiaries	Agriculure, Forestry, Fisheries, beekeeping, DCDO, GFP, NGOs: CFP, PPIZ
	• Number of women, and other vulnerable groups who acquired entrepreneurship skills	Baseline to be determined	• At least 30% female headed households • >40% women, 20% youth by Y5 Total nu. of direct beneficiaries: 1,825 M 340, F 1,035 Youth 415, Persons With Disability (PWD) 35 Indirect beneficiaries: Total 23,027: M 9,313, F 9,111, Y 4,603	• Training report • Physical observation through visits • Quarterly and annual progress reports	Y1: Organise groups, build capacity Y2: Continue building capacity, identify livelihood activities for value addition Y3-Y5: Value added products on market	
	• Number of women and vulnerable groups accessing financing or productive assets through project supported mechanisms and invested successfully	Baseline to be determined % increase in income (achieved through bank account or increase in purchasing power)	• At least 30% female headed households at start • >40% women, 20% youth by Y5 Total nu. of direct beneficiaries: 1,825 M 340, F 1,035 Youth 415, Persons With	• Survey report • Physical observations through visits • Quarterly and annual progress reports	Y2: Continue building capacity, establish credit support facility Y3-Y5: Livelihoods activities managed by beneficiaries	

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
	(disaggregated by sex, age, livelihood type)		Disability (PWD) 35 Indirect beneficiaries: Total 23,027: M 9,313, F 9,111, Y 4,603			
Component 4: Knowledge, learning and scaling up innovations						
Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions	• Number of knowledge products produced and accessed (disaggregated by target group)	Baseline = 0	• At least 12 knowledge products targeting young women, policy makers Knowledge products to target at least 40% women, 20% youth	• Documentaries posted on social media platforms • Pamphlets and policy briefs	Y1: Document baseline (traditional practices) Y2: Post on social media at least 2 media products, prepare 1 policy brief Y3: Post at least 5 products, prepare 2 policy briefs, 2 other products Y5: Prepare 12 products	Communications Officer, Env. Officers, GFP, DCDO, Mobile digital expert
	• Number of adaptation solutions replicated and scaled up (sex/age disaggregated)	Baseline = 0	• At least 5 adaptation solutions selected for scaling up At least 2 packages targeting women (policy makers), 1 for youth	• Documented success stories • Quarterly and Annual reports	Y1: document baseline (traditional practices) Y2: Document early implementation experiences, Y3: Monitoring progress Y4: Validate successful practices	

Expected Results	Indicators	Baseline	Targets	Means of Verification	Milestones Y1-Y5	Responsible
					Y5: Knowledge packaging and dissemination	
	• Accessibility of digital knowledge platforms (sex/age disaggregated)	Baseline = 0	• >50% young women have access to digital knowledge platforms through provision of mobile phones Total nu. of direct beneficiaries: 1,825 M 340, F 1,035 Youth 415, Persons With Disability (PWD) 35 Indirect beneficiaries: Total 23,027: M 9,313, F 9,111, Y 4,603	• Available information on Social media platforms •	Y1: Conduct User needs assessment Y2: Platform development and Content structuring and capacity building Y3: Promote regular use of platform, integrate into government knowledge systems Y4-Y5: Upload new contents regularly	

Table 20. Aligning Project Components and outcomes with Results Framework of the AF

Project Objectives	Project Objective indicator	Fund Outcome	Fund Outcome indicator	Grant amount US$
Objective: To enhance climate resilience in water stressed areas of Zanzibar through gender-responsive institutional strengthening, water management and inclusive livelihoods	1. Number of Sectors, Districts and Shehias that have integrated gender-responsive measures into approved plans (disaggregated by institution type/level)	**Outcome 2**: Strengthened institutional capacity to reduce risks associated with climate-induced socio-economic and environmental losses	2.1 Capacity of staff to respond to, and mitigate impacts of climate related events from targeted institutions increased	495,000
	2. Number of climate resilient and gender-responsive infrastructure supported by the project constructed by the project	**Outcome 4:** Increased adaptive capacity within relevant development sector services and infrastructure assets	4.2 Physical infrastructure improved to withstand climate change and variability induced stress	2,510,000
	3. % women and youth represented in decision-making roles within water			

Project Objectives	Project Objective indicator	Fund Outcome	Fund Outcome indicator	Grant amount US$
	governance structure established or supported by the project (disaggregated by sex, age, vulnerability)			
	4. Total hectares of ecosystems (mangroves, saline farmland) restored or sustainably managed through livelihood-linked ecosystem based adaptation measures	**Outcome 5**: Increased ecosystem resilience in response to climate change and variability induced stress	5.1 Number of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (type and scale)	1,200,000
	5. Number of households that adopt climate-resilient livelihoods or ecosystem-based adaptation practices supported by the project (disaggregated by sex of household head, age, livelihood type)	**Outcome 6**: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1. % households and communities having more secure access to livelihood assets 6.2. % targeted population with sustained climate-resilient alternative livelihoods	
	6. Number of households accessing financing, or productive assets through project-supported mechanisms			
	7. Number of functional knowledge products disseminated to different target groups (disaggregated by sex/age, education, vulnerability)	**Outcome 8**: Support the development and diffusion of innovative adaptation practices, tools and technologies	8.1 Number of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	425,000
	8. Number of knowledge products scaled up/used by households or communities outside the target Shehias		8.2 Number of key findings on effective, efficient adaptation practices, products and technologies generated	
Total Outcome level grant amount				**4,630,000**

Project outcome	Project outcome indicator	Fund Output	Fund output indicator	Grant amount (per outcome) US4
Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilience measures.	• Number of trained staff with gender-responsive planning, budgeting and MEL • Number of guidelines and budgeting tools adopted and used	Output 2.1: Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	2.1.1 No. of staff trained to respond to, and mitigate impacts of climate-related events (by gender)	165,000
	• Number of institutions with Gender Coordination Unit/ Gender Focal Person in place		2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	80,000
	• Number of Institutes/Shehias with Grievance redress mechanism in place			250,000
	Total Outcome 1 budget			**495,000**
Outcome 2: Enhanced water security and gender-responsive climate smart infrastructure.	• Number of households with climate-resilient water access • Number of infrastructures with GBV standards integrated	Output 4.2: Physical infrastructure improved to withstand climate change and variability induced stress	4.1.2 No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	1,910,000
	• Climate-resilient assets with gender-responsive and sustainable O&M process	Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	5.1 No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	280,000
	• Hectares of ecosystems/natural assets (mangroves, saline farmland) restored or sustainably managed			320,000
	Total Outcome 2 budget			**2,510,000**
Outcome 3: Improved access to climate resilient livelihoods, and productive resources.	• Number of livelihood groups formed (sex/age disaggregated per group)	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1 No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	670,000
	• Number of beneficiaries adopted climate smart practices (disaggregated by sex/age)			180,000

Project outcome	Project outcome indicator	Fund Output	Fund output indicator	Grant amount (per outcome) US4
	• Number of beneficiaries who have accessed credit and invested in livelihood activities successfully		6.2.1 Type of income sources for households generated under climate change scenario	350,000
	Total Outcome 3 budget			**1,200,000**
Outcome 4: Enhanced knowledge, learning, and dissemination of climate adaptation solutions	• A gender-responsive Communication Plan prepared	Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated	8.1 No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	120,000
	• Number of gender-targeted exchange events prepared			85,000
	• % women and youth with accessibility of digital knowledge platforms (sex/age/disaggregated)		8.2 No. of key findings on effective, efficient adaptation practices, products and technologies generated	220,000
	• Number of adaptation solutions replicated and scaled up beyond project sites			
	Total Outcome 4 budget			**425,000**
	Total Project Activity Budget			**4,630,000**

Table 21. Core impact indicators

Date of Report: January 4, 2026				
Project Title: Climate change adaptation in saltwater stressed and freshwater deficient communities in Zanzibar				
Country: United Republic of Tanzania				
Implementing Agency: National Environment Management Council				
Project Duration: 5 years				
	Baseline	**Target at project approval (absolute number)**	**Adjusted target first year of implementation**	**Actual at completion**
1. Number of beneficiaries				

Direct beneficiaries supported by the project	Beneficiaries count per Shehia and District is based on the 2022 Population census report)	Dikes: Total: 20,919. (M 8,475, F 8,262, Y 4,182) Drainage canal: 2,108 (M 838, F 849, Y 421) Drip irrigation: 100 (M 30, F 30, Y 40) Reservoirs: 9,279 (M 3,680, F 3,744, Y 1,855) Mangrove restoration: 460 (M 50, F 350, Y 60) Livelihoods: 1,825 (M 340, F 1,035, Y 415, PWD 35) Institutional strengthening: 61 (M36 24 F)		
Female direct beneficiaries	9,135 (4,537 households from target Shehias), capacity building for women in key implementing sectors	Dikes: 8,262; Drainage canal: 849; Drip irrigation: 30, Reservoirs: 3,744; Mangrove restoration: 350; Livelihoods:1,035 Institutional strengthening (F 40%) = 24		
Youth direct beneficiaries	4,603	Dikes: 4,182; Drainage canal: 421; Drip irrigation: 40; Reservoirs: 1,855; Mangrove restoration: 60; Livelihoods: 445 (includes PWD) Institutional strengthening (F 40%) = 24		
Indirect beneficiaries supported by the project	673,771 (135,236 households)	Total population in 5 target districts (673,771) M 264,661, F 274,355, Y 134,755		
Female indirect beneficiaries	274,355	274,355 Total Female population in the Districts		
Youth indirect beneficiaries	134,755	8,000 Total Youth population in the target Shehias		
Indicator: Assets produced, developed, improved or strengthened				
	Baseline	**Target at project approval (absolute number)**	**Adjusted target first year of implementation**	**Actual at completion**
Sector: Water				
Targeted assets (physical): 2 Reservoirs, capacity 60,000 and 50,000 cubic meters Locations: Gando, Kangani	0	M 3,680, F 3,744, Y 1,855 Total: 9,279		
Dikes (3850 meters, with floodgates) Locations: Mto wa Pwani, Kiongwe kidogo, Gando, Kangani, Makombeni	0	(M 8,475, F 8,262, Y 4,162) Total: 20,919		
Drip irrigation systems: Mto wa Pwani, Kiongwe kidogo/ Muwanda	0	Beneficiaries: M 30, F 30, Y 40 Total = 100		

Changes in Assets:				
Drainage canal (500m)	Exists but it needs improvement	M 838, F 849, 421 Total: 2,108		
Core indicator: Increased income or avoided decrease in income				
	Baseline	**Target at project approval (absolute number)**	**Adjusted target first year of implementation**	**Actual at completion**
Income source (name)	• Agribusiness • Fisheries • Beekeeping • Handicraft • Poultry • Tourism promotion	Income increase by at least 25% by Y5		
Income level (US$)	US$ 1,500-2,500 per year (Baseline to be determined)			
Number of households	Agribusiness: All target Shehias (h/holds 4,537) Fisheries: Mto wa pwani, Kiongwe kidogo, Kangani (h/holds 2,129) Poultry: Mto wa Pwani, Kiongwe kidogo/ Muwanda, Pete/ Kitogani, Kangani, Makombeni/ Ng'ombeni (h/holds 3,781) Beekeeping: Kiongwe kidogo, Kitogani (h/holds 996) Handicraft: Mto wa Pwani, Kiongwe kidogo, Kitogani, Gando, Makombeni) h/holds 3,648 Tourism promotion: Pete (h/holds 520)	Target households for each livelihood option: • Agribusiness (915): M 210, F 530, Y 170, PWD 5 • Fisheries (131): M 30, F 30, Y 70 • Beekeeping (100): M 20, F 60, Y 20 • Handicraft (65): M 0; F 10, Y 35 PWD 21 • Poultry (35): F 25, PWD 10 • Tourism (40): F 20, Y 20		
Core indicator: Increased income or avoided decrease in income				

	Baseline	Target at project approval (absolute number)	Adjusted target first year of implementation	Actual at completion
Natural Asset of Ecosystem (type)	Land asset (actual area to be determined)	34 ha		
Ha or km protected/rehabilitated (Scale (1-5)	Farmland: 34 ha of coastal zone	For coastal zone restoration: 34 ha at the following locations: Mto wa Pwani (4.0 ha); Kiongwe kidogo/Muwanda (8.0 ha); Pete (4.0 ha); Gando (6.0 ha); Kangani (8.0 ha); Makombeni/Ng'ombeni (4.0 ha)		
Total number of natural assets or ecosystems' protected/rehabilitated	Farmlands Coastal zone	Mangrove restoration: Total 460: M 50, F 350, Y 60		

G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Table 22a. Detailed project budget and notes

Outputs	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
1.1	1.1.1 Conduct targeted training on gender-responsive data collection at Sector, District and Shehia levels	50,000	35,000	10,000			Covers training costs (Venue, transport, material preparation) for Officers who are responsible for planning and budgeting gender-responsive actions, costs of preparation of guidelines and other planning and budgeting tools (Consultant). Aims to strengthen the Institutions' capacity to integrate climate risks and integrate gender in the planning and budgeting processes
	1.1.2 Prepare/review guidelines on gender-responsive climate resilience in the Districts and Shehias	10,000	10,000	-	-	-	
	1.1.3 Integrate gender-responsive climate risk screening and budgeting tools into Shehia and District plans			20,000	20,000	10,000	
	Output 1.1 Total: 165,000						
1.2	1.2.1 Appoint and build capacity of Gender Focal Points (GFP) in the Districts and Shehias	20,000					Covers Consultancy, training costs (venue, transport of Officers and Shehas, training material and follow-up (at least Y2 and Y3) to assess performance and

Outputs	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
	1.2.2 Strengthen capacity to collect, analyse and disaggregate climate data for planning, reporting, ME&L		20,000	20,000	10,000	10,000	proper use of planning and budgeting tools. Having a GFP will ensure that data collection is appropriately disaggregated and used in the planning and budgeting processes
	Output 1.2 Total: 80,000						
1.3	1.3.1 Implement Gender Action Plan (GAP) - details below (Table 22b)	85,000	60,000	55,000	30,000	20,000	Budget used to conduct capacity needs assessment to get actual data (Consultancy), leadership training to strengthen women empowerment (venue, training material, transport for trainees), awareness raising on land issues
	Output 1.3 Total: 250,000						
	OUTCOME 1 TOTAL: 495,000						
2.1	2.1.1 Select sites for infrastructure construction, with equitable participation of beneficiaries	10,000			-	-	Covers transport costs to eight sites for consultations with beneficiaries. Gender inclusive participation is necessary to ensure full community involvement in the adaptation process
	2.1.2 Design infrastructure that incorporates universal access and GBV safety features	10,000	10,000	10,000			Costs of engineering designs 2 reservoirs, dikes, floodgates, and drip irrigation infrastructure. Designs must show access points and other GBV safety features included
	2.1.3 Construct climate-resilient water systems (reservoirs, dikes, drip irrigation)	300,000	600,000	600,000	370,000		Covers feasibility studies and site investigations, ESIA, permits required, upgrade of access roads, dams and dikes construction costs, costs of 2 vehicles, 2 compactors and drip irrigation facilities. All the infrastructure must have gender-responsive characteristics embedded in the designs, and must ensure that it follows AF Env. And Social Impact Policy and Gender Policy
	Output 2.1 Total: 1,910,000						

Outputs	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
2.2	2.2.1 Establish Water User Association with equitable presentation of women and vulnerable groups	20,000	5,000	5,000	5,000	5,000	Covers travel costs for initial consultations with communities, and preparation of guidelines for establishment of WUA. WUA must ensure equitable representation of women, youth and other vulnerable groups
	2.2.2 Train local community on O&M of infrastructure	20,000	10,000	10,000			Training costs (Trainer, venue) on O&M of infrastructure, preparation of training manuals. O&M team must be inclusive in its representation (women, youth)
	2.2.3 Community based O&M financing mechanism that is affordable to all groups		50,000	50,000	50,000	50,000	Covers O&M costs of 2 reservoirs, dikes and drip irrigation facilities. The proposed financing mechanism must consider the ability of poor households to pay the proposed amount
	Output 2.2 Total: 280,000						
2.3	2.3.1 Integrate nature-based solutions through mangrove planting	30,000	50,000	50,000	20,000	20,000	Covers costs for seedlings purchase and nursery establishment, community labour, monitoring and replanting where necessary. This activity is high priority to women and youth as it is directly linked to conservation of shoreline and restoration of salt-affected farmlands
	2.3.2 Conduct situation analysis of water resources in project sites	45,000					Covers costs for hydrological assessment, water quality analysis, water use and demand, risks and vulnerability assessment to help map out proper soil conservation measures. Women and youth participation during visits is mandatory
	2.3.3 Support participatory research on best practices for soil and water conservation	20,000	20,000	20,000	10,000	10,000	Costs for community meetings, documentation of indigenous practices, field assessment, co-designing conservation measures, learning, and adoption of best practices in gender responsive approach
	2.3.4 Conduct participatory mapping of degraded areas	5,000	5,000	5,000	5,000	5,000	Covers site identification costs, hiring GIS tools, and actual mapping costs. Site selection must be inclusive, involving women and youth
	Output 2.3 Total: 320,000						

Outputs	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
	OUTCOME 2 TOTAL: 2,510,000						
3.1	3.1.1 Support the formation/ strengthening of women, youth led producer groups, with safeguards, inclusion and sustainability criteria	60,000	60,000	50,000	50,000	0	Costs for initial meetings, selection of group members, formation of groups, preparation of guidelines on safeguards, inclusive participation and sustainability, and registration of groups.
	3.1.2 Design and deliver tailored climate-smart livelihood training based on community-identified priorities (e.g: agribusiness, fisheries, beekeeping, handicraft and tourism)	100,000	100,000	50,000	20,000	-	Costs cover training of climate smart livelihood activities: Consultancy, training materials, venue and travel costs for participants. It aims to provide practical experience on management and sustainability of livelihood activities
	3.1.3 Promote value addition, quality enhancement and market linkage		60,000	60,000	50,000	10,000	Costs cover capacity building on technical and production skills, market and value chain knowledge, and provision of inputs such as small equipment where necessary. It aims to empower target beneficiaries to increase their income and enhance their resilience to climate shocks
	Output 3.1 Total: 670,000						
3.2	3.2.1 Develop tailored business development and entrepreneurship skills	60,000	60,000	60,000	-	-	Covers capacity building costs: venue, travel costs of participants, trainer. Business development skills are necessary for sustainability of gender-responsive livelihood activities
	Output 3.2 Total: 180,000						
3.3	3.3.1 Establish credit support facility, with guidelines that ensure equitable access of financial and other resources within the community	60,000	120,000	120,000	50,000		Covers costs of establishment and operation of a financial facility for targeted gender-inclusive beneficiaries. Aims to support climate resilient investments by providing cash, inputs or small machinery to support the activities. It will also cover training to improve performance
	Output 3.3 Total: 350,000						

Out puts	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
	OUTCOME 3 TOTAL: 1,200,000						
4.1	4.1.1 Prepare gender-responsive Communication Plan	40,000					Covers Consultancy for preparation of Communication Plan, consultations with different target groups, report that ensures that all target groups (men, women, youth and vulnerable groups) are addressed
	4.1.2 Document gender-differentiated knowledge products and disseminate to target groups		30,000	20,000	20,000	10,000	Covers preparation of different gender-responsive knowledge products, consultations with beneficiaries, production and dissemination of the products to target groups
	Output 4.1 Total: 120,000						
4.2	4.2.1 Organize learning and exchange events to disseminate good practices and promote their replication		20,000	15,000	10,000	10,000	Covers costs for organizing events, transport costs of participants, payments for venue and preparation of materials for presentation. Ensure equitable presentation of different gender groups
	4.2.2 Conduct targeted media campaigns to raise awareness on climate risks	10,000	5,000	5,000	5,000	5,000	Covers costs of preparation of messages to target beneficiaries, and use of media to disseminate the information aimed at men, women, youth, policy makers and beneficiaries at large
	Output 4.2 Total: 85,000						
4.3	4.3.1 Provide accessibility of smartphones through low interest loans to low income beneficiaries	50,000	50,000				Covers costs of purchasing smartphones that will be loaned to target beneficiaries through their registered groups. It aims to empower women, youth and vulnerable groups to enable them to access early warning information through the mobile platform.
	4.3.2 Disseminate early warning and seasonal climate information through accessible channels (radio, television, mobile phones)		10,000	10,000	10,000	10,000	Covers cost for preparation of messages, equipment and dissemination. It aims to reduce climate related risks and losses, and to support climate resilient planning

Outputs	Activities	US$					Budget notes
		Year 1	Year 2	Year 3	Year 4	Year 5	
	4.3.3 Document successful adaptation solutions replicated or scaled up beyond the original project sites		20,000	20,000	20,000	20,000	Covers cost for documenting successful practices, archiving information through several field visits, preparation of documentaries and dissemination of information through media channels. Information must be gender-differentiated to ensure that all groups benefit from the scaled up innovations
	Output 4.3 Total: 220,000						
	OUTCOME 4 TOTAL: 425,000						

Table 22b. Budget for implementation of Gender Action Plan (Output 1.3)

GAP Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Budget details
		(US$)	(US$)			(US$)	(US$)	
G1 Enhanced capacity on leadership and gender responsive planning	G1.1 Conduct baseline assessment on gender risk assessment	30,000	20,000				50,000	Costs for Consultancy, data collection, venue, consultation with beneficiaries. It aims to determine the actual capacity needs of different target groups
	G1.2 Conduct leadership training on mainstreaming gender to different target groups	15,000		15,000			30,000	Costs for Trainer, participants, venue and material production. It aims to empower women and youth on leadership skills
G2 GBV grievance redress and referral mechanisms in place	G2.1 Prepare guidelines for grievance redress and referral mechanisms in Shehias	10,000					10,000	Consultancy and consultation costs for preparation of guidelines. Aims to provide referral pathway for those affected by GBV in target Shehias, PIU or target Sectors
	G2.2 Raise awareness on community protection and GBV		20,000	20,000	10,000		50,000	It is a GBV risk management approach, empowers women and improves community resilience, accountability and safeguard compliance

GAP Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Budget details
		(US$)	(US$)			(US$)	(US$)	
	G2.3 Monitor the implementation of the project's gender-responsive interventions	10,000	10,000	10,000	10,000	10,000	50,000	Costs for monitoring gender responsive actions for accountability, compliance and to track whether there are equitable benefits from project interventions
G3 Women's access to land rights improved	G3.1 Raise awareness on land rights and ownership	20,000					20,000	Funds to be used to increase understanding of women to exercise their rights on land ownership
	G3.2 Provide assistance to women to secure land rights for agriculture and other productive uses		10,000	10,000	10,000	10,000	40,000	To provide understanding of women's legal and customary rights, ownership, inheritance and transfer rights

23. Output budget

Expected Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Total output cost
		(US$)	(US$)			(US$)	(US$)	(US$)
Outcome 1: Strengthened institutional capacity to plan and implement gender-responsive climate resilient measures								
1.1 Gender responsive planning and budgeting instruments adopted and operationalized across Districts and Shehias	1.1.1 Conduct targeted training on gender-responsive data collection at Sector, District and Shehia levels	50,000	35,000	10,000			95,000	
	1.1.2 Prepare/review guidelines on gender-responsive climate resilience in the Districts and Shehias	10,000	10,000	-	-	-	20,000	
	1.1.3 Integrate gender-responsive climate risk screening and budgeting tools into Shehia and District plans			20,000	20,000	10,000	50,000	**165,000**
1.2 Gender coordination unit established and	1.2.1 Appoint and build capacity of Gender Focal Points (GFP) in the Districts and Shehias	20,000					20,000	**80,000**

Expected Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Total output cost
		(US$)	(US$)			(US$)	(US$)	(US$)
operational at targeted institutions	1.2.2 Strengthen capacity to collect, analyze and disaggregate climate data for planning, reporting, ME&L		20,000	20,000	10,000	10,000	60,000	
1.3 Reduced protection risks and strengthened social resistance (GAP implementation)	1.3.1 Implement Gender Action Plan (GAP) - Table 23b	85,000	60,000	55,000	30,000	20,000	250,000	**250,000**
Outcome 1 total		**165,000**	**125,000**	**105,000**	**60,000**	**40,000**	**495,000**	**495,000**
Outcome 2: Enhanced water security and gender responsive climate smart infrastructure								
2.1 Climate smart water infrastructure constructed	2.1.1 Select sites for infrastructure construction, with equitable participation of beneficiaries	10,000			-	-	10,000	
	2.1.2 Design infrastructure that incorporates universal access and GBV safety features	10,000	10,000	10,000			30,000	
	2.1.3 Construct climate-resilient water systems (reservoirs, dikes, drip irrigation)	300,000	600,000	600,000	370,000		1,870,000	**1,910,000**
2.2 Inclusive planning and gender-responsive O&M and management established	2.2.1 Establish Water User Association with equitable presentation of women and vulnerable groups	20,000	5,000	5,000	5,000	5,000	40,000	
	2.2.2 Train local community on O&M of infrastructure	20,000	10,000	10,000			40,000	
	2.2.3 Community based O&M financing mechanism that is affordable to all groups		50,000	50,000	50,000	50,000	200,000	**280,000**
2.3 Risk reduction and ecosystem integration promoted	2.3.1 Integrate nature-based solutions through mangrove planting	30,000	50,000	50,000	20,000	20,000	170,000	
	2.3.2 Conduct situation analysis of water resources in project sites	45,000					45,000	
	2.3.3 Support participatory research on best practices for soil and water conservation	20,000	20,000	20,000	10,000		70,000	**320,000**

Expected Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Total output cost
		(US$)	(US$)			(US$)	(US$)	(US$)
	2.3.4 Conduct participatory mapping of degraded areas	5,000	15,000	5,000	10,000	-	35,000	
Outcome 2 total		**460,000**	**760,000**	**750,000**	**465,000**	**75,000**	**2,510,000**	**2,510,000**
Outcome 3: Improved access to climate resilient livelihoods and productive resources								
3.1 Livelihood diversification programs co-designed with communities	3.1.1 Support the formation/strengthening of women, youth led producer groups, with safeguards, inclusion and sustainability criteria	60,000	60,000	50,000	50,000	-	220,000	
	3.1.2 Design and deliver tailored climate-smart livelihood training based on community-identified priorities (e.g: agribusiness, fisheries, beekeeping, handicraft and tourism)	100,000	100,000	50,000	20,000	-	270,000	
	3.1.3 Promote value addition, quality enhancement and market linkage		60,000	60,000	50,000	10,000	180,000	**670,000**
3.2 Business development skills enhanced	3.2.1 Develop tailored business development and entrepreneurship skills	60,000	60,000	60,000	-	-	180,000	**180,000**
3.3 Households supported with diversified livelihood packages	3.3.1 Establish credit support facility, with guidelines that ensure equitable access of financial and other resources within the community	60,000	120,000	120,000	50,000	-	350,000	**350,000**
Outcome 3 total		**280,000**	**400,000**	**340,000**	**170,000**	**10,000**	**1,200,000**	**1,200,000**
Outcome 4: Enhanced knowledge, learning and dissemination of climate adaptation solutions								
4.1 Target specific knowledge products developed and disseminated	4.1.1 Prepare gender-responsive Communication Plan	40,000					40,000	
	4.1.2 Document gender-differentiated knowledge products and disseminate to target groups		30,000	20,000	20,000	10,000	80,000	**120,000**

Expected Outputs	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Activity cost	Total output cost
		(US$)	(US$)			(US$)	(US$)	(US$)
4.2 Community and stakeholder learning events conducted	4.2.1 Organize learning and exchange events to disseminate good practices and promote their replication		20,000	15,000	10,000	10,000	55,000	
	4.2.2 Conduct targeted media campaigns to raise awareness on climate risks	10,000	5,000	5,000	5,000	5,000	30,000	**85,000**
4.3 Digital platforms for knowledge sharing established and operational	4.3.1 Provide accessibility of smartphones through low interest loans to low income beneficiaries	50,000	50,000				100,000	
	4.3.2 Disseminate early warning and seasonal climate information through accessible channels (radio, television, mobile phones)		10,000	10,000	10,000	10,000	40,000	
	4.3.3 Document successful adaptation solutions replicated or scaled up beyond the original project sites		20,000	20,000	20,000	20,000	80,000	**220,000**
Outcome 4 total		**100,000**	**135,000**	**70,000**	**65,000**	**55,000**	**425,000**	**425,000**
Total Project Activities cost (A)		**1,005,000**	**1,420,000**	**1,265,000**	**760,000**	**180,000**	**4,630,000**	**4,630,000**
1. Project execution cost B (9.5%)		95,475	134,900	120,175	72,200	17,100	**439,850**	
2. Total Programme cost (A+B)		**1,100,475**	**1,554,900**	**1,385,175**	**832,200**	**197,100**	**5,069,850**	
3. IE Project Management Fee (8.5% of A+B)		93,540	132,167	117,740	70,737	16,754	**430,937**	
4. Amount of financing required		**1,194,015**	**1,687,067**	**1,502,915**	**902,937**	**213,854**	**5,500,787**	

Table 24. Project execution costs

	Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Budget notes
1	Staff salary top ups						-	Salary top ups for Project Coordinator and Liaison Officer (Pemba) who will be on full time basis working for the project
	- Project Coordinator	12,000	12,000	12,000	12,000	12,000	**60,000**	
	- Liaison Officer (Pemba)	7,200	7,200	7,200	7,200	7,200	**36,000**	

	Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Budget notes
2	Quality at entry	2,000	-	-	-	-	**2,000**	To ensure that PIU is in place, procurement readiness, ESF compliance is triggered
3	Inception workshop	15,000	-	-	-	-	**15,000**	Covers transport and venue for key implementors. Aims to provide a platform to clearly define roles and responsibilities of key players, review the work plan and adjust where necessary
4	Monitoring of Project activities	6,000	6,000	6,000	6,000	6,000	**30,000**	Covers transport, overnight allowances for staff. Monitoring is carried out to ensure compliance and timely delivery of interventions
5	Quarterly progress meetings (Technical)	4,000	4,000	4,000	4,000	4,000	**20,000**	Covers costs for transport, venue. Aims to discuss about the progress and to see if activities are being implemented according to plan
6	Annual progress reports	10,000	10,000	10,000	10,000	9,350	**49,350**	Covers venue and transport for staff. To support performance bench-marking and to ensure that project milestones are achieved
7	Steering Committee meetings	5,000	5,000	5,000	5,000	5,000	**25,000**	Covers transport and venue for SC members. To provide strategic direction, oversight and accountability by reviewing project performance and to ensure compliance
8	Project Completion Report	-	-	-	-	10,000	**10,000**	To ensure accountability by documenting use of resources, and assess whether project objectives, outputs and outcomes were achieved, to capture lessons learned and sustainability arrangements
9	Annual audit reports	4,000	4,000	4,000	4,000	4,000	**20,000**	Covers audit costs. Aims to ensure that funds and other resources are being managed accordingly
10	Final Audited Financial Statement					10,000	**10,000**	Consultancy. For verification of fund utilization by providing expert opinion that all project funds were spent on approved activities and not diverted or misused
11	Monitoring Environmental parameters	5,000	5,000	5,000	5,000	5,000	**25,000**	Charges for analysis of parameters, part of the ESMP
12	Office space and utilities	1,500	1,500	1,500	1,500	1,500	**7,500**	Contribute towards office expenses (water, electricity, telephone, internet)
13	Procurement of Computers, printers and accessories	10,000	5,000	5,000	5,000	5,000	**30,000**	For operational efficiency, communication, and facilitate digitization of field data

	Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Budget notes
14	Office consumables (includes communication)	2,000	2,000	2,000	2,000	2,000	**10,000**	Essential office operating costs
15	Fuel and car maintenance (2 vehicles)	10,000	20,000	20,000	20,000	20,000	**90,000**	To facilitate transportation of equipment, staff to and from sites
	Total	**93,700**	**81,700**	**81,700**	**81,700**	**101,050**	**439,850**	

Table 25. IE Project management fee

	Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	NEMC staff allowances	35,000	35,000	35,000	35,000	35,000	175,000
2	Baseline study	30,000					30,000
3	Mid-term evaluation costs			40,000			40,000
4	Project supervision visits	15,000	15,000	15,000	15,000	15,000	75,000
5	Outreach and knowledge sharing	10,000	10,000	10,000	10,000	10,000	50,000
6	Final project evaluation					50,937	50,937
7	Bank charges	2,000	2,000	2,000	2,000	2,000	10,000
	Total	**92,000**	**62,000**	**112,000**	**62,000**	**102,937**	**430,937**

Table 26. Disbursement schedule with time-bound milestones

	Upon signature of the Agreement	One Year after Project Start	Year 3	Year 4	Year 5	Total
Scheduled date	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	
Project funds	1,100,475	1,554,900	1,385,175	832,200	197,100	**5,069,850**
Implementing Entity Fee	93,540	132,167	117,740	70,737	16,754	**430,937**

Total	**1,194,015**	**1,687,067**	**1,502,915**	**902,937**	**213,854**	**5,500,787**

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

A. Record of endorsement on behalf of the government[36]

Provide the name and position of the government official and indicate date of endorsement. The endorsement letter should be attached as an annex to the project proposal.

Prof. Peter Lawrance Makenga Msoffe, Deputy Permanent Secretary, Vice President's Office	Date*:* Date*: August, 8th, 2025*

B. **Implementing Entity certification**

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

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 (National Environmental Policy (2021; National Climate Change Response Strategy (2021-2026); Nationally Determined Contributions (2021-2030); National Adaptation Program of Action (2007); National Environmental Master Plan for Strategic Interventions (2022-2032); Tanzania Development Vision 2025-2050) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social 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.	
 ***Fredrick F. Mulinda*** Implementing Entity Coordinator	
Date: 22nd January 2025	Tel. and email: **+255 753 240 517**, nieaf@nemc.or.tz / kasigazi.koku@gmail.com
Project Contact Person: Nassir Ally	
Tel. +255773245398 And Email: nassirtahiir@gmail.com	

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

Government Endorsement Letter

THE UNITED REPUBLIC OF TANZANIA
VICE PRESIDENT'S OFFICE

Telegram: "MAKAMU", HQ
Telephone No: +255 026 2329006
Fax No: +255 026 2329007
Barua Pepe:ps@vpo.go.tz
In reply please quote:

Government City,
Mtumba Area,
Vice President's Street,
P.O. Box 2502,
40406 DODOMA,

Our Ref: CBA.78/90/03 22nd January, 2026

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

SUBJECT: ENDORSEMENT FOR CLIMATE CHANGE ADAPTATION IN SALTWATER-STRESSED AND FRESHWATER-DEFICIENT COMMUNITIES, ZANZIBAR

Please refer to the subject captioned above.

2. In my capacity as the designated authority for the Adaptation Fund in Tanzania, 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 Zanzibar.

3. Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by National Environment Management Council (NEMC) and executed by Climate Action Network (CAN) Tanzania in collaboration with Zanzibar Environmental Management Authority (ZEMA).

4. Thank you for your continued support

Digitally Signed By Prof. Peter Msoffe
Mon Jan 26 11:02:57 EAT 2026
Prof. Peter Msoffe

NATIONAL DESIGNATED AUTHORITY-DEPUTY PERMANENT SECRETARY

Annex 1. List of Plates

Plate 1. Saltwater affected area, Gando

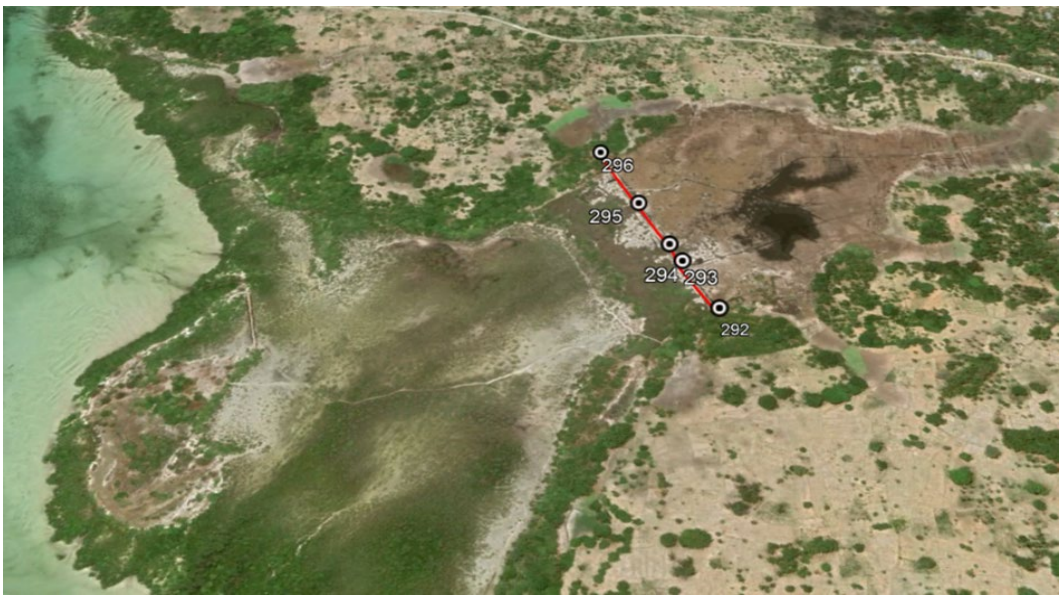


Plate 2. Proposed site for the construction of a reservoir in Gando, Pemba.

Plate 3a. Kiongwe kidogo proposed dike – 1000m

Plate 3b. Mto wa Pwani proposed dike – 600m

Plate 3c. Kangani Maotwe valley proposed dike – 250m

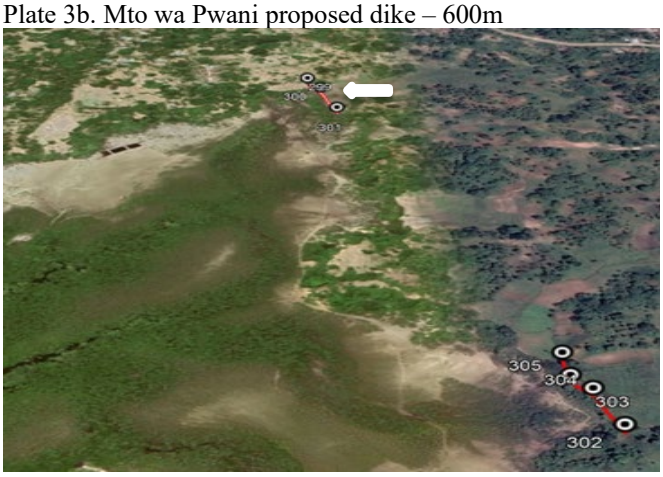


Plate 3d. Gando Mwanamakuku valley dike – 150m (top right) and Majomani valley dike – 150m (bottom right)

Plate 4. Proposed drainage canal (500m) in Pete, Central District

Plate 5. Community participation at Mto wa Pwani

Plate 6. Women participation at the village meeting, Kangani

Plate 7. Presentation of findings during a meeting with key implementing institutions in Pemba.

Plate 8. Value addition: from cultivated seaweed to seaweed powder

Annex 2. Mean annual rainfall, maximum and minimum temperatures: 2020-2024

	UNGUJA					PEMBA				
	Millimetres of rainfall (Unguja)					Millimetres of rainfall (Pemba)				
	2024	2023	2022	2021	2020	2024	2023	2022	2021	2020
January	253.4	63.6	241.2	28.3	226.3	31.3	31.6	31.4	30.4	31.4
February	11.0	7.9	63.9	37.1	26.8	32.7	31.4	31.4	30.9	31.6
March	171.5	99.4	62.6	34.9	152.7	32.6	30.2	31.8	31.6	31.7
April	504.5	345.5	318.4	286.4	811.7	30.3	29.8	30.6	29.7	29.9
May	46.8	101.8	42.0	107.6	156.0	30.5	29.0	29.8	29.2	29.3
June	81.5	153.4	9.6	20.6	1.1	29.4	28.6	28.3	28.3	28.6
July	20.5	37.4	75.5	20.6	41.8	28.8	28.6	27.2	27.7	27.8
August	29.4	30.1	29.1	29.7	29.5	28.8	28.8	27.5	27.9	28.0
September	29.8	31.1	30.4	30.5	30.5	29.6	29.7	28.1	28.5	28.5
October	30.5	31.4	30.9	31.6	31.5	28.8	31.0	28.7	29.6	30.1
November	31.7	29.7	31.1	32.7	30.5	31.9	30.0	30.4	31.1	30.3
December	31.2	31.4	32.0	311.4	31.8	31.8	31.6	31.7	31.2	31.3
	Mean Maximum Temperatures ºC									
January	31.4	32.2	32.7	32.2	32.4	31.3	31.6	31.4	30.4	31.4
February	33.9	33.4	32.3	32.5	33.8	32.7	31.4	31.4	30.9	31.6
March	33.1	32.8	33.5	33.2	33.1	32.6	30.2	31.8	31.6	31.7
April	29.4	30.4	31.1	30.6	30.6	30.3	29.8	30.6	29.7	29.9
May	30.6	30.4	31.3	30.5	30.5	30.5	29.0	29.8	29.2	29.3
June	30.1	29.5	30.4	29.5	30.4	29.4	28.6	28.3	28.3	28.6
July	29.2	29.0	28.7	29.7	29.4	28.8	28.6	27.2	27.7	27.8
August	29.4	30.1	29.1	29.7	29.5	28.8	28.8	27.5	27.9	28.0
September	29.8	31.1	30.4	30.5	30.5	29.6	29.7	28.1	28.5	28.5
October	30.5	31.4	30.9	31.6	31.5	28.8	31.0	28.7	29.6	30.1
November	31.7	29.7	31.1	32.7	30.5	31.9	30.0	30.4	31.1	30.3
December	31.2	31.4	32.0	31.4	31.8	31.8	31.6	31.7	31.2	31.3
	Mean Minimum Temperature ºC									
January	25.5	25.3	25.5	25.2	25.5	25.8	25.0	25.1	24.4	25.8
February	26.1	25.5	25.5	25.3	25.7	26.2	23.1	25.1	24.5	25.1
March	25.8	25.7	25.7	25.5	25.0	26.1	25.2	24.7	24.2	25.5
April	24.9	25.1	25.1	24.9	24.9	24.9	24.7	25.0	24.5	24.7
May	24.9	24.7	25.1	24.6	24.9	25.3	25.0	25.6	24.6	24.4
June	23.8	23.7	23.8	23.1	24.2	24.6	23.7	24.1	23.6	24.5
July	22.3	23.1	22.2	23.4	23.1	23.6	23.9	22.9	23.8	23.8
August	22.7	22.5	21.4	22.3	22.3	23.6	23.5	21.9	22.3	23.0
September	22.0	22.3	22.5	23.0	23.0	22.3	23.9	22.5	23.7	22.8
October	25.2	23.5	22.6	23.3	23.7	24.1	24.5	23.2	23.5	23.7
November	24.1	24.2	24.2	24.7	24.2	24.9	24.5	24.8	24.2	24.7
December	24.7	23.5	24.8	25.1	25.0	25.1	25.5	25.1	24.7	23.2

Source: Zanzibar Statistical Abstracts (2025)

Annex 3. Gender Assessment Report

Strengthening gender-responsive resilience to saltwater stressed and freshwater deficient communities in Zanzibar

1. INTRODUCTION

1.1 Background

Women in Zanzibar, similar to those in other coastal regions of Tanzania, continue to experience structural gender inequalities that increase their vulnerability to climate change. Limited access to education, formal employment opportunities, access to finance, land and other productive assets contributes to economic dependency and restricts women's decision-making power. Women farmers, small-scale producers and those responsible for household water supply are disproportionately affected by saltwater intrusion, groundwater depletion and climate-induced food insecurity, while cultural norms that define traditional gender roles limit access to climate information and their participation in high value sectors such as tourism and natural resource governance. A gender-responsive approach is therefore essential to ensure that Adaptation Fund investments deliver equitable and resilient outcomes. Measures that expand women's access to productive resources, climate-smart technologies, financial services, inclusive participation, and leadership opportunities not only narrows gender gaps but also strengthen the overall effectiveness and sustainability of adaptation interventions.

1.2 Legal and Policy framework

Zanzibar is signatory to key international and regional human rights instruments, including the Conventions on Elimination of All Forms of Discrimination Against Women (CEDAW, 2004), the Convention on the Rights of the Child (CRC, 1989), and the Convention on the Rights of Persons with Disabilities, (2006), as well as regional protocols under the African Union (AU), the Southern African Development Community (SADC) and the East African Community (EAC). At the national level, the Zanzibar constitution, the Gender Policy, the National Plan of Action for Violence Against Women and Children (VAWC), Zanzibar Development Plan (ZADEP 2021-2026) and sector specific policies (fisheries, environment, and food security), incorporate gender sensitive measures for equitable access and participation. These global, regional and national commitments collectively create a strong enabling environment for gender equality. However, persistent legal pluralism, where Islamic and statutory laws coexist, continues to limit the full realization of women's rights, underscoring the need for gender-responsive implementation of climate adaptation actions (RoGZ, 2024)[37].

This gender assessment report builds on the analysis of structural barriers and climate-related vulnerabilities affecting women and other vulnerable groups in Zanzibar. Specifically, the assessment seeks to identify key gender-specific vulnerabilities within the water-stressed project locations, identify risks and their potential impacts, propose mitigation measures and recommend viable, climate-resilient actions that strengthen women's resilience and economic independence. The Gender Action Plan translates the findings of the gender assessment into concrete actions, ensuring that identified gender differentiated vulnerabilities are systematically integrated into project planning, implementation and monitoring. The GAP is aligned with the AF Gender Policy and Action Plan (2021) and the Environmental and Social Policy (2013), which promote gender equality, social inclusion and fair distribution of adaptation benefits.

1.3 Scope

[37] RoGZ. Zanzibar Gender Equality Profile. 2024. African Development Bank Group, UN Women. Internet source: https://africa.unwomen.org/sites/default/files/2024-01/zanzibar_gender_equality_profile_final.pdf

The assessment covered project sites across both islands in the Zanzibar archipelago. In Unguja island the target areas included Pete in Central district, Kiongwe Kidogo/Muwanda in North B district and Mto wa Pwani in North A district; Pemba island: Gando in Wete District and, Kangani and Makombeni/ Ng'ombeni in Mkoani district. These locations were selected based on evidence of significant saltwater intrusion. Table 1 shows the population and household size for each Shehia. The Shehias in Pemba have relatively large household sizes with more number of females per household when compared with those of Unguja.

Table 1. Population size and household characteristics of the target Shehias

	M	F	Youth	Total	No. of households	Household size	Sex ratio M:F
Mto wa Pwani	**1,633**	1,170	700	3,503	764	4.6	140
Kiongwe kidogo/Muwanda	**954**	864	454	2,272	262	4.9	110
Pete/Kitogani	**838**	849	421	2,108	734	4.1	99
Gando	**1,682**	1,730	853	4,265	756	5.6	97
Kangani	**1,998**	2,014	1,002	5,014	889	5.6	99
Makombeni/Ng'ombeni	**2,208**	2,484	1,173	5,865	1132	5.3	90
Total	**9,313**	**9,111**	**4,603**	**23,027**	**4,537**		

note: (I) Kiongwe kidogo and Muwanda, and (ii) Makombeni and Ng'ombeni have been grouped together because residents of these Shehia share the salt-affected areas used for crop cultivation.

1.4 Methodology

Information was gathered through a combination of literature review; village level group discussions, focus group discussions with men, women, youth and disabled; and structured interviews with women of different age groups and employment status. The process also involved visits to target locations and direct observation of existing situations, including the extent of saltwater intrusion.

Visits to individual Shehias. The assessment team comprised the Consultant, Environmental Officers from the National Environment Management Council (NEMC), representatives from the Directorate of Environment, the Zanzibar Environmental Management Authority (ZEMA), and District Environmental and Agricultural Officers. The initial preparatory visit focused on engaging village leadership (committee members headed by the Sheha), to collect baseline information, observe site conditions and assess community interest in participating in the proposed interventions. The findings from this visit informed the development of the project concept note.

During the preparation of a full proposal, a follow-up visit was conducted to facilitate broader community consultations with all interested villagers. These consultations jointly assessed and validated the proposed sites for reservoirs, tanks, dikes, and mangrove restoration, ensuring that the selected sites were technically feasible, socially acceptable and environmentally sound. In addition, the team undertook learning visits to areas with similar climate-resilience initiatives in Unguja (Kilombero) and Pemba (Tovuni) to draw practical lessons and best practices to inform effective implementation.

Information gathering. Primary data sources were obtained through structured questionnaires and during focus group discussions, while secondary data sources were obtained from the 2022 Population and Housing Reports, Household Budget Surveys, Zanzibar Statistical Abstracts and other key documents, Poverty Assessment reports, and other individual research papers.

a) Locations specific information was collected through structured questionnaires administered to Shehas and through pre-organized Shehia meetings. Village meetings aimed to capture diverse perspectives and needs, and to ensure inclusive consultations with men, women, youth and persons with disabilitiess. The information gathered supported an improved understanding of the characteristics of different gender and social groups, the challenges they face, and their preferred solutions. Discussions focused on livelihood activities, available resources, land use and other resources (access), levels of participation in village committees, key environmental and social challenges, practical response options, and community willingness to participate in the proposed project, thereby strengthening ownership. These consultations also promoted transparency through open dialogue and ensured that community knowledge was meaningfully integrated into the project design.

Following village meetings, separate focus groups of men, women, youth and persons with disabilities were requested to prioritize their preferred activities. Interviews with persons with disabilities were conducted at Kiongwe kidogo (F), Mto wa Pwani (M), Gando (F), Pete (F) and Kangani (F), although only one participant was available at each location. In addition, structured interviews were conducted with three randomly selected women in each Shehia, to gather in-depth information on issues that specifically affect women. A list of stakeholders that were consulted is provided in Annex 5.

2. SITUATION ANALYSIS

The findings presented in this section primarily relate to women and other vulnerable groups. Results pertaining to other issues are presented in **Section H** of the main report (Stakeholders consultation)

2.1. Age of the respondents

- 30 - 55 years, mostly farmers (13), nursery school teacher (1), seaweed farmers (2), government-employee (1), Assistant to the Sheha (2), and Motivator (2).

2.2. Household (non-economic) activities

- Household responsibilities like cooking, cleaning, water collection, childcare and care for the elderly are primarily undertaken by women. Women also cultivate food crops such as rice, cassava and bananas, complemented by backyard gardening, and rearing a few chicken. Most of the harvest is consumed at the household level, leaving women with limited time and opportunity to engage in income generating activities.
- The relatively large household sizes in the Shehias of Pemba (Table 1) have important implications for women's vulnerability. Larger households increase women's domestic workloads and heighten their vulnerability to climate shocks by further reducing the time available for productive and adaptive livelihood activities.

2.3. Food production

- Women and men engage in different food production activities. Women play a central role in food production, primarily focusing on subsistence crops such as rice, cassava, sweet potatoes, vegetables. Production methods are largely traditional and rely on local crop varieties, resulting in relatively low yields.
- Women are responsible for most on-farm and post-harvest activities: planting, weeding, harvesting, drying, threshing and winnowing (rice), all of which are done manually.
- Men are mainly responsible for land preparation, harvesting, crop transport from fields to households. They are more involved in cash crop production and the use of machinery, particularly for land preparation.
- Income earned by women from supplementary income-generating activities contributes to household needs such as food and clothing for children.

2.4. Other economic activities

- Other economic activities undertaken by women include handicraft such as making local baskets and mats, poultry keeping, aquaculture, sea-weed and sea cucumber farming, beekeeping, small scale enterprises such as soap making, spices and sewing.
- Men's economic activities primarily include cash crop farming, livestock keeping (cattle, goats), fishing, aquaculture (particularly among youth), beekeeping, shops and tourism-related services (youth).

2.5. Cultural norms

- Cultural norms in Zanzibar's saltwater-stressed coastal areas strongly influence vulnerability, adaptive capacity and access to adaptation benefits.
- Gender roles assign women primary responsibility for household chores such as water collection and management, food preparation and subsistence farming. As saltwater intrusion degrades freshwater sources and agricultural land, women's workload increases. During water shortage, occasional support is provided by boys, and in some cases, men when water sources are very far from the homestead or during emergencies. Under such circumstances boys and men usually use bicycles (owned or borrowed) to transport water.
- As the population is predominantly Muslim, religious leadership within mosques are exclusively male. These leaders hold substantial influence in the community decision making and conflict resolution. This influence is complemented by women Qur'an teachers, who are highly respected within communities, although their roles are largely confined to religious and social spheres.
- Young unmarried women often serve as primary assistants to their mothers in household and livelihood activities, which limits their time and ability to participate in community meetings and public events. In addition, prevailing norms consider it inappropriate for young unmarried women to speak in public meetings, as this may be perceived as negatively affecting their marriage prospects.
- Both unmarried young men and women are frequently viewed as inexperienced in life matters and therefore afforded limited opportunities to contribute to community-level decision making processes.

- Men are more engaged in cash-based livelihoods, which provides them with greater financial control in their households and increased influence over adaptation related decisions.
- Predominantly patrilineal land tenure and inheritance systems restrict women's control over land and reduce their ability to invest in or benefit from climate-resilient measures.
- Male-dominated Shehia leadership structures constrain the participation and voice of women, youth and persons with disabilities in planning processes. Men commonly represent households in Shehia meetings and make decisions on behalf of other household members.
- Cultural expectations sometimes restrict sometimes may further limit women's engagement in higher-value or non-traditional livelihoods, while climate-induced male migration increases women's unpaid care responsibilities and production burdens, thus exacerbating their vulnerability.

2.6. Access to land and other assets

- In Zanzibar, all land is classified as public land, and freehold ownership is not available to either citizens or foreigners. Land rights are granted through a Right of Occupancy for citizens and long-term leases of up to 99 years for foreigners, primarily for investment purposes.
- Legally, individuals may hold land rights either individually or through family inheritance of plantations. However, awareness of women's legal rights to land ownership remains very limited. For example, under Islamic Shariah, inherited property is expected to be distributed among siblings according to prescribed shares of male-to-female ratio of 2:1. In reality, many families retain plantations under the management and decision-making authority of a male relative (eldest brother or uncle) rather than distributing them. Women derive limited benefits from the produce of such plantations (e.g, coconuts and cloves), as men typically control harvesting and sales, often providing women with minimal token shares that do not reflect their entitlements.
- This situation is particularly disadvantageous when all heirs are women, as plantations are frequently absorbed into the estates of male relatives. In rare cases, women resort to forcibly claim denied land and constructing houses without the consent of male relatives. In some instances mothers themselves deny daughters their inheritance by allocating land exclusively to male children. However, land that is used for subsistence crop production (rice, cassava) is more commonly transferred through matrilineal arrangements from mothers to daughters.
- In principle, the Waqf and Trust Commission has the mandate to administer the estates of deceased Muslims, including inherited properties such as plantations and houses, whether or not a will exists. Its role is to ensure equitable and lawful distribution of inherited assets. In practice, this mechanism is rarely utilized, and across the assessed locations no respondents reported using the Commission's services, reflecting low awareness of its mandates and functions.
- In locations such as Pete and Mkokotoni (near Kiongwe kidogo) a small number of women have successfully purchased land and hold legal rights to it. These areas tend to have high levels of interaction with external communities and markets.
- Women have recognized ownership rights over non-land assets such as houses, vehicles and household items like televisions, electric irons and cookstoves. Women may also own small businesses like informal shops, although these are often operated under the supervision or influence of male relatives.

2.7. Access to clean water

- All Shehias have some level of access to clean water supplied either by ZAWA (Zanzibar Water Authority), or privately owned boreholes. Where piped water is available, collection points are generally located within one kilometer walking distance. With the exception of Kiongwe kidogo, piped water in other locations is not consistently, as the boreholes serving these communities have sufficient capacity to meet demand at all times. As a result, households rely on locally dug wells, which may be privately owned or, in some cases, constructed with the support from charity organizations. Decisions on the location of such wells are typically made by Shehia leadership or mosque elders. Some locally dug wells have saline water, however, communities are often compelled to use them due to the lack of viable alternatives.
- In certain locations such as Mto wa Pwani, some communities access water from privately owned boreholes, and are required to contribute financially to cover electricity costs associated with water pumping.

2.8. Access to education

- Education enrolment trends of boys and girls show mixed patterns at the primary level, but clear and sustained growth at secondary and advanced secondary levels, indicating improving access, retention, and progression

within the education system. Ordinary secondary school enrolment increased significantly from 92,510 students in 2023 to 104,987 in 2024. Growth was observed for both sexes, with male enrolment rising from 41,574 to 47,863 and female enrolment increasing from 50,936 to 57,124. Female students continue to outnumber male students at this level, reflecting positive gains in girls' education outcomes.

- Advanced secondary education also demonstrates a consistent upward trend. Total enrolment increased from 6,512 students in 2023 to 8,564 students in 2024: male enrolment rose from 3,215 to 4,193, while female enrolment increased from 3,297 to 3,700 over the same period. In 2024, overall higher education enrolment across public and private institutions reached 22,434 students, further indicating increased participation in tertiary education. Female students accounted for a larger proportion in most programmes, particularly at diploma and degree levels (RoGZ, 2025[38]).
- Despite these positive trends, gender-differentiated vulnerabilities persist, particularly at the secondary level. Boys are more likely to drop out of school to engage in income-generating activities, often driven by household economic pressures. Girls, especially in the rural areas, tend to drop out due to household responsibilities, illness, early marriage, or pregnancy. Educational attainment is strongly linked to gender and life-course outcomes: among women aged 25–49, the median age at first marriage is 17.8 years for women with no education, compared to 23.6 years for women with at least secondary education (RoGZ, 2025b[39]).
- In this context, education outcomes directly influence adaptive capacity, livelihood choices, and resilience to climate shocks. Lower educational attainment among girls and young women increases vulnerability to climate risks by limiting access to skills, information, and economic opportunities. AF-supported interventions that reduce household climate stressors (such as water scarcity and livelihood instability), expand climate-resilient income opportunities, and promote gender-responsive capacity building can indirectly improve school retention, particularly for girls, by reducing early marriage pressures and unpaid care burdens. By strengthening inclusive livelihoods and household resilience, the project contributes to creating enabling conditions for sustained educational participation and long-term gender-equitable adaptation outcomes

2.9. **Access to health services**

- There is at least one primary healthcare facility within a radius of 1-3 kilometers in each project area, operated either by government or privately owned. For example, primary healthcare facilities at Makombeni and Kangani serve these and neighbouring Shehias, but for cases requiring advance services such as surgery or X-ray, patients are referred to the referral hospital in Mkoani, located approximately 3 and 10 kilometers, respectively. A similar situation exists at Mto wa Pwani, where more serious health conditions are referred to Kivunge hospital (about 4 kilometers away).

2.10. **Access to communication**

- Women across all Shehias are aware that information is primarily communicated through oral channels, including community meetings and announcements by Shehas or their assistants and religious leaders, as well as through broadcast media (radio, television), printed materials such as posters and booklets, and increasingly through mobile and digital tools, particularly mobile phones.
- Improved access to communication technologies has the potential to strengthen community resilience, social inclusion and economic opportunities by enhancing information flow, expanding access to services, and increasing participation in socio-economic decision-making. This is a crucial enabler of equitable development in Zanzibar's rapidly modernizing communities. All target Shehias have some level of mobile data coverage, however internet connectivity remains limited. This may affect the timely and transparent dissemination of information, including extension services, climate resilient practices, capacity building opportunities, and access to credit, particularly for women.
- Across the islands, about 46.2% of the urban households and 37.9% of the rural households own a radio, while 62.5% of the urban households and 29.8% of the rural households own televisions.
- About 95.5% of the Zanzibar households own at least one mobile phone, significantly facilitating communication across the Islands. Mobile phones are widely used by all age groups for browsing the internet, making calls, sending short messages (SMS), online business, and most importantly for mobile money services. However, the highest group owning smartphones fall between 20-29 years of age, and those with secondary education or higher, across all gender. Ownership of smartphones is higher among females (49.1%) than males (40.6%). In

[38] RoGZ. 2025. Zanzibar Statistical Abstracts 2024. Office of the Chief Government Statistician, Zanzibar.

[39] RoGZ. 2025b. Zanzibar Gender Equality Profile. UNWomen/ African Development Bank.

contrast, ownership of computers remains low: only 4.2% of individuals aged 15 years and above own a laptop, while 1.4% own a desktop computer. Ownership of both laptop and desktop is higher among men (5.3%, 2.0%) than among women (3.3%, 0.9%), respectively.

2.11. Access to credit

- There are several community groups in each Shehia, including men-only, mixed-gender, women-only and youth groups. Most of these groups are formally registered and serve as important mechanisms for financial inclusion and grassroots economic empowerment. They provide accessible financial services that are often not available through formal banking institutions.
- Many of these groups are only partially active, as they were most functional during the implementation of the Tanzania Social Action Fund (TASAF) project, which supported their formation through a community-driven development approach. TASAF promoted local decision-making, provided direct financing, facilitated the formation of savings groups which were predominantly led by women, built capacity in financial literacy and entrepreneurship, funded community-identified subprojects and strengthened accountability and participation. With targeted capacity building and institutional support, many of these groups can be revitalized to play a leading role in the implementation of community-level initiatives.
- Since 2021, the RoGZ and the URT have been financing group-based credit schemes to support women. These initiatives aim to promote women's financial inclusion, support small business and income-generating activities, promote group-based lending and savings cultures, and reduce lending risks through credit guarantee mechanisms. By de-risking lending, these schemes encourage financial institutions to extend credit to small and potentially higher risk enterprises.
- The Zanzibar Economic Empowerment Agency (ZEEA) is the main government institution responsible for economic empowerment, provides zero interest or soft loans targeting women, youth and persons with disabilities. ZEEA has also recently launched a digital platform that enables eligible borrowers to apply for loans online, track application status and make repayments digitally.
- Major challenges affecting these schemes include the high risks of non-repayment, which undermine the viability and sustainability of many groups. Non-repayment is sometimes driven by market fluctuations, environmental or other external shocks that make it difficult to meet repayment schedules. Additional constraints include limited financial literacy, weak business planning, and inadequate accounting and record keeping skills, which undermine women's capacity to use credit effectively. Risks are further heightened when some women join multiple groups and access loans concurrently, leading to over-indebtness and repayment failures, or when loans are diverted to meet immediate household needs rather than productive investments (Mungure, 2015)[40].

2.12. **Participation in leadership roles**

- The distribution of leadership roles across Unguja and Pemba islands reveals significant gender disparities with direct implications for gender-responsive adaptation actions. For instance, in the targeted districts of Unguja, of the 117 recorded Shehia leadership positions, 101 (86%) are held by men and only 16 (14%) by women, indicating a pronounced gender imbalance. In contrast, Pemba shows a comparatively stronger female presentation; of the 72 leadership positions recorded, 47 (65%) are held by men and 25 (35%) by women. This contrast highlights uneven progress in women's leadership between the two islands, with Unguja requiring more targeted measures to strengthen women's participation and influence in local governance and adaptation planning.
- Most interviewed women reported some level of involvement in the Shehia committee's leadership structures, which is consistent with the observed gender imbalance in leadership positions. However, it remains unclear whether women actively voice their concerns during committee meetings, or whether their priorities are meaningfully reflected and addressed in the development plans. Notably, some Shehias such as Ng'ombeni and Pete have women serving as Shehas, while others like Mto wa Pwani and Kangani have Assistant Shehas.
- Despite this numerical representation, women's participation in decision-making on climate resilience remains limited, largely due to gaps in knowledge, information, and technical understanding of climate change and adaptation issues.

[40] Mungure, M. E. 2015. https://scholar.mzumbe.ac.tz/server/api/core/bitstreams/12577fa0-a518-4e9d-805d-719a015800ff/content

2.13. **Incidences of Gender Based Violence (GBV)**

- GBV remains a sensitive issue that is rarely addressed openly and is often underreported, particularly when the perpetrator is a family member such as father, brother or uncle. Reported cases of violence against women, including physical abuse and rape, are typically brought to the attention of the Sheha, who then refers the matter to the relevant authorities, including the police (Women and Children Desk) for further action.
- In practice, however, many families choose to remain silent in order to protect family honour, and avoid the shame and stigma borne by the victim (boy or girl). Several incidents therefore go unreported. For example, cases involving schoolgirl pregnancies are frequently not recognized or treated as 'GBV' and are instead resolved between families. Even when such cases are reported to the Women and Children Desk, follow-up action is often limited, as sometimes there is prior agreement reached between the families, including marriage arrangement between the girl and the man involved.
- These practices are further reinforced by perceptions that cases can be resolved informally through financial settlements. Most women believe that wealthy perpetrators or their families often pay compensation to the affected family to silence the matter. One female respondent cited an example in which a rape case within her district was reportedly settled after the victim's father accepted a payment of seven million shillings, and the case was never taken to court.
- In addition, incidents of violence within families are frequently not reported, as they are expected to be resolved internally. Even when such cases are reported, they are often not treated seriously and are instead dismissed as 'family matters' to be settled within the household. These practices reflect limited awareness of legal rights, particularly among women, and entrenched social norms that discourage formal reporting and accountability.
- Despite these constraints, legal aid officers in North A District provide support to the affected individuals. Table 2 presents the reported cases from the target districts between 2020 and 2024, indicating that girls consistently account for the highest proportion of reported cases across all years.

Table 2. Incidences of Gender-Based Violence reported from 2020-2024

	Children						**Adults**					
District		**2024**	**2023**	**2022**	**2021**	**2020**		**2024**	**2023**	**2022**	**2021**	**2020**
	Girls	43	66	35	43	44	F	14	21	9	11	11
North A	Boys	2	11	8	6	5	M	1	0	0	0	0
	Girls	48	78	38	53	50	F	12	19	11	20	13
North B	Boys	15	15	10	7	10	M	0	1	0	0	0
	Girls	82	67	76	88	78	F	7	12	12	5	9
Central	Boys	12	15	21	8	10	M	1	0	1	0	0
	Girls	54	63	78	90	63	F	6	5	24	6	6
Wete	Boys	15	24	13	15	11	M	2	1	0	0	0
	Girls	37	46	30	45	60	F	4	7	4	3	10
Mkoani	Boys	10	1	8	5	7	M	1	0	0	0	0
Total reported cases (including other Districts of Unguja and Pemba)												
	Girls	**1239**	**1263**	**889**	**846**	**899**	**F**	**211**	**236**	**185**	**154**	**217**
	Boys	**286**	**376**	**284**	**222**	**247**	**M**	**73**	**84**	**3**	**0**	**0**

Source: Zanzibar Statistical Abstracts (2025)

2.14. Other social challenges

- The increasing use of illegal substances within the target communities has contributed to higher levels of theft and antisocial behaviour, which in turn undermines social cohesion and community safety. These social stresses weaken collective action, limit effective participation in community-based adaptation measures, and reduce the capacity of households, particularly women, youth and vulnerable groups, to engage in climate-resilient

livelihood activities. As climate change intensifies pressure on natural resources and livelihoods, such social instability further erodes adaptive capacity and increases vulnerability to climate shocks.

- In addition, long distances between settlements and agricultural fields exacerbate climate vulnerability, particularly under conditions of rising temperatures, prolonged droughts and erratic rainfall. Long distances to the fields increase physical strain, reduce productive hours available for farming, elevate the risks of GBVs for women, and limit the timely implementation of farm management practices such as irrigation, pest control and harvesting. These challenges disproportionately affect women, elderly farmers and individuals with limited mobility, thereby constraining household food security and income diversification. The distance to farmlands heightens exposure to climate risks and reduces the effectiveness of adaptation interventions aimed at sustaining agricultural productivity.

2.15. Intersectional dimensions

- In water-stressed areas, climate vulnerability is shaped by intersecting factors such as gender, age, poverty, disability, livelihood dependence and prevailing social norms, which collectively influence the capacity to adapt. Women and girls bear disproportionate burdens due to their roles in water collection, food production and care giving responsibilities.
- Children, youth and older persons face heightened risks related to health, food security and reduced livelihood opportunities as water sources become more distant and unreliable, while people with disabilities and limited mobility face additional barriers in accessing safe water and sanitation. These constraints are compounded in poor households that depend on rain-fed agriculture have limited coping mechanisms and buffers against climate shocks.
- Girls are more prone to facing GBV incidences than boys or adults due to systemic gender inequality (gender norms and power imbalances, harmful traditional practices, economic dependency and poverty).

The following Table (3) summarizes the key gender-related vulnerabilities and corresponding mitigation measures, identified through the discussions.

(Table 3). Gender-associated vulnerabilities, potential impacts and proposed adaptation responses.

Risk	Risk level and potential impacts	Adaptation response and beneficiaries
1. Limited land and resource rights Little awareness on the women's legal rights on land ownership, hinders access to the utilization of such land	**Risk level: H** **Potential impact: H** Women excluded from decisions, benefit sharing, or infrastructure placement	• Awareness raising on their right of ownership • Advocate for registration of owned land. Beneficiaries: At least 20 women from each location (Total 120)
2. **Increased workload due to water scarcity** More time spent in search of freshwater for household use. Schoolchildren (boys and girls) forced to fetch water for use in schools.	**Risk level: H** **Potential impact: H** Increased care burden, reduced time for income activities, and school absenteeism for girls.	• Establish Water Users Associations (WUAs), with proper guidelines on equitable presentation of gender and disadvantaged groups during the formation of village committees. • Construct water harvesting structures to support availability of fresh water and water for crop production (reservoirs, school tank). • Establish proper guidelines to manage water resource with equal gender presentation among users. Beneficiaries: Total 9,279 Water reservoirs: M 3,680, F 3,744, Youth 1,855
3. Livelihood vulnerability due to saltwater intrusion	**Risk level: H** **Potential impact: H**	• Construction of dikes to prevent seawater intrusion.

Risk	Risk level and potential impacts	Adaptation response and beneficiaries
Subsistence agriculture, seaweed farming and other small income generating activities are disrupted by salinization, erosion and drought. Flood risks include loss of assets and disruption caused by having to relocate and live with other family members.	Loss of income and food insecurity burden to women.	• Construction of drainage canal to flush out saline water. • Mangroves planting to act as natural buffers against natural surges and saltwater intrusion. • Introduce climate smart agriculture by using salt-tolerant varieties. • Support resilient livelihood diversification. • Capacity building on salinity management for farmers. Direct beneficiaries: Total: 23,027. M: 9,313, F 9,111, Y 4,603
4. Limited access to financial services restricts women from undertaking climate resilient interventions Women, youth and disabled have limited knowledge on entrepreneurship skills and limited financial literacy.	**Risk level: M** **Potential impact: H** Limited opportunities for diversifying income sources, participate in climate smart technologies or investing in value addition, hence reducing adaptive capacity.	• Capacity building on different aspects of climate resilience measures (mangrove restoration, climate smart agriculture of crops of choice). • Build capacity on entrepreneurship skills and financial literacy to identified groups (desegregated based on their priorities). • Promote equitable presentation of gender and other less advantaged groups when accessing credit. • Build capacity of Shehias' community groups on climate risk management and resource governance. Direct beneficiaries: 1,825 M: 340, F 1,035, Youth 415
5. **Limited participation of women in water governance** Some cultural norms restrict young women's presence or influence in decision making among the elders	**Risk level: MH** **Potential impact: H** Low influence on water allocation in the fields, or interventions may not reflect women's needs. There is also restricted access to capacity building on water use management especially to young women.	• Equitable representation of membership among the men, women, youth and disabled (at least 40% women and youth). • Capacity building on WUA issues (men, women, youth and disabled). Beneficiaries: Capacity building on WUA issues (members to be determined) All participating community members: Total: 23,027 M 9,313, F 9,111, Y 4,603
6. **Exclusion of youth from decision-making** Cultural norms do not favour youth (young men and women) to take part in adaptation planning	**Risk level: L** **Potential impact: H** Reduced ownership of interventions, reduced adoption of interventions especially those that trigger uptake of new innovations	• Target youth for training on climate smart technologies. • Create community dialogues to influence other youths to join. Direct beneficiaries: Youth 4,603
7. **Exposure to Gender-Based Violence (GBV) during the construction of reservoirs and dikes**	**Risk level: L** **Potential impact: H** Physical and psychological harm,	• Integrate Code of Conduct in the contracts. • Mandatory GBV training for project staff. • Sensitization on gender equality to Shehas, Ward leaders and women's groups.

Risk	Risk level and potential impacts	Adaptation response and beneficiaries
Women and girls may be intimidated by men when participating in the construction work or when providing services (sell food, drinks). Women may also face harassment from their husbands.	restricted mobility to avoid confrontation.	• Engage respected and religious leaders to promote nonviolence. • Raise awareness about available GBV legal support and reporting channels. Direct beneficiaries: 23,027 M 9,313, F 9,111, Y 4,603 District Officers (total 61)
8. **Low level of participation of women officers in capacity building** Social, economic and political barriers that limit women to actively engage in climate change actions.	**Risk level: M** **Potential impact: H** Delayed adoption of climate resilient planning and budgeting	• Establish proper guidelines on participation of female district officers on climate change related capacity building activities. • Ensure selection of at least 40% of women as participants in Capacity and knowledge management and other project interventions. Beneficiaries: District Officers from the following sectors: Environment, Agriculture, Forestry, Fisheries, Livestock, Gender and Community development: M: 50 F:50 Women leaders: 20 (10 from Districts, 10 from project sites)
9. Most key leadership roles are held by men, hence women's priorities may be overlooked Relatively low level of education forces women to lag behind in leadership roles.	**Risk level: M** **Potential impact: MH** Unequal access to opportunities and resources, and increased social insecurity	• Proper and inclusive criteria for selection of members of Project Management Unit (PMU) and Project Steering Committee (PSC) to ensure at least 40% of both PMU and PSC members are women • Conduct leadership training for women and youth. • Capacity building in Planning, Monitoring and Evaluation of project activities (at least 40% F). Beneficiaries: Capacity building on project management issues: M 5 F 5 Gender responsive M&E: 61 Community Development Officers, District Environmental Officers, Agriculture, Forestry, Fisheries, GFP
10. Limited access to communication platforms and information The existing major mobile and digital communication tools (radio, television and mobile phones) are currently not being used for climate information services in Zanzibar, denying women timely information on the possible existence of climate related hazards such as floods. Costs of mobile communication also excludes	**Risk level: M** **Potential impact: MH** Reduced ability to report environmental risks in a timely manner. It may also result to misinformation due to dependency on informal network (rumor), which may lead to dispute over resource allocation;	• Prepare a Communication Strategy to ensure inclusivity of all target groups. Outline the use of different tools to different target groups • Develop mobile-based climate information and early warning systems that deliver weather updates and early warning alerts in simple Kiswahili language. • Train Extension Officers on how to integrate the use of smartphones into agricultural extension services, for example, to develop a database of farmers, and to send climate-smart deliveries. • Strengthen digital literacy to farmers through training.

Risk	Risk level and potential impacts	Adaptation response and beneficiaries
the poor households who cannot afford internet bundles.		• Promote affordable access to digital devices and climate apps. Beneficiaries: District Agricultural, Livestock, Environmental, Fisheries, Forestry, Community Development Officers (60 - at least 40% F) All community members: Total 23,027 M: 9,313, F 9,111, Y 4,603
11. Data gaps and unmonitored gender outcomes There is limited disaggregated climate-related data that relates to resilience measures.	**Risk level: H** **Potential impact: H** There will be inequitable distribution of benefits, weak targeting of adaptation interventions as vulnerable groups will not be 'visible', and reduced effectiveness of gender responsive interventions.	• Capacity building on mainstreaming gender, disaggregation of data, and M&E approaches. • Ensure disaggregated data that will be collected during the project life cycle. • Carry out Gender audits. • Participatory monitoring and evaluation of results. Beneficiaries: District Agricultural, Livestock, Environmental, Fisheries, Forestry, Community Development Officers (30 - at least 40% F) All community members: Total 23,027 M: 9,313, F 9,111, Y 4,603

2.16. Stakeholders' selection of possible interventions

Table 4 below shows the different types of interventions preferred by different gender groups

Location/ beneficiaries	Proposed adaptation action (key infrastructure and land asset)	Proposed livelihood activities			
		Adult men	Youth groups	Women groups	Special needs
Mto wa Pwani Total 3,503 M 1,633, F 1,170, Y 700	1.Construction of dike (600m) 2. Boreholes drilling 3. Mangrove planting	Agriculture (Vegetables) Fisheries Poultry	Tree planting Vegetables Fisheries	Fisheries Poultry Agriculture (Vegetables)	Poultry Agriculture (Vegetables) Handicraft
Kiongwe Kidogo/ Muwanda Total: 2,272 M 954, F 864, Y 454	1. Construction of dike (1000 m) 2. Mangrove planting (20 acres)	Agriculture Dairy cows	Agroforestry Vegetables	Agriculture (Vegetables) Poultry Beekeeping Handicraft	Fish farming Poultry
Pete/Kitogani Total: 2,108 M 838, F 849, Y 421	1. Drainage canal (500m). 2. Mangrove planting (10 acres- 4.05 ha)	Beekeeping Agriculture (vegetables)	Agroforestry Mariculture Beekeeping Tourism	Mariculture Beekeeping	Poultry Handicraft
Gando Total: 4265 M 1682, F 1730, Y853	1. Construction of dikes 650m: Mpanja: 350 m; Majomani 150m; Mwanamakuka: 150m 2. Construction of reservoir: (60,000 m^3)	Agriculture (Vegetables, Rice)	Agroforestry Agriculture (Vegetables)	Agriculture (Vegetables Spices) Mariculture	Mariculture Poultry Small scale enterprises

Location/ beneficiaries	Proposed adaptation action (key infrastructure and land asset)	Proposed livelihood activities			
		Adult men	Youth groups	Women groups	Special needs
	3. Mangroves planting (15 acres-6.1 ha)				
Kangani Total: 5,014 M 1,998, F 2,014, Y 1002	1. Construction of dikes 1,100m: Maweni – 850m; Maotwe – 250m 2. Rainwater harvesting Kangani school (500 m^3) 3. Reservoir (50,000 m^3) 4. Mangrove planting (20 acres-9.1 ha)	Agriculture (Vegetables, Rice)	Agroforestry Agriculture (Vegetables) Mariculture Fish farming	Agriculture (Vegetables Spices) Seaweed farming	Poultry Agriculture (Vegetables)
Makombeni/ Ng'ombeni Total: 5,865 M 2,208, F 2,482, Y 1,173	1. Construction of dike (500) 2. Planting mangroves (10 acres- 4.1 ha)	Agriculture (Rice) Poultry	Agriculture (Rice) Mariculture	Agriculture (Rice) Mariculture Agroforestry	small businesses (eg, small shops, soap making, sewing)

3. INTEGRATING GENDER-RESPONSIVE MEASURES IN ADAPTATION INTERVENTIONS

Background. A gender assessment was undertaken to analyze how climate change, saltwater intrusion and sociocultural dynamics differentially affect women, men, youth and vulnerable groups in the target Shehias of Zanzibar. The analysis has revealed that climate change exacerbates existing inequalities, with persistent gender gaps in access to land, finance, technology uptake, climate information, sex-disaggregated data, and participation in natural resource governance. Women's disproportionate responsibilities for unpaid work such as household care, water management, and food security increase their exposure to climate risks, especially in water-stressed areas affected by saltwater intrusion, groundwater depletion and declining agricultural productivity. Intersectional factors such as age, disability, marital status and income levels further shape differentiated vulnerabilities and adaptive capacities. These findings underscore the need for gender-responsive interventions articulated through the Gender Action Plan (GAP), to systematically strengthen resilience, ensure equitable access to project benefits and prevent the reinforcement of existing inequalities throughout the project implementation period.

The GAP aligns with the Adaptation Fund (AF) Gender Policy and Action Plan (2021), AF Environmental and Social Policy (2013), the Zanzibar Gender Policy (2016), the Zanzibar Climate Change Strategy, and relevant agricultural and land-use policies. The GAP further translates these policy commitments into concrete, measurable actions by defining clear outcomes, outputs, indicators, responsibilities, timelines, and budgets for gender-responsive implementation. It promotes the meaningful participation and leadership of women, youth, and vulnerable groups in decision-making structures related to water governance, land and natural resource management, and livelihood planning. Targeted measures are incorporated to improve equitable access to productive assets, climate-resilient technologies, finance, extension services, and climate information, while strengthening institutional capacity at Shehia and district levels to plan, budget, and monitor gender-responsive adaptation interventions.

In addition, the GAP integrates safeguards to identify and mitigate potential gender-related risks, including increased unpaid care burdens, exclusion from benefits, and protection and gender-based violence risks associated with infrastructure development and livelihood activities. Through systematic sex- and age-disaggregated data collection, learning, and knowledge sharing, the GAP supports adaptive management and accountability, ensuring that project benefits are equitably distributed and that gender equality and social inclusion are advanced as integral components of climate resilience in Zanzibar's salt-affected and water-stressed communities.

Implementation. The interventions identified in this action plan (Table 4) have been fully integrated under **Component 1: Institutional capacity and governance**. Additional risk mitigation measures identified in table 2 have been mainstreamed across all project components (2, 3 and 4). These include measures to be taken during the design and construction of GBV safe infrastructures, and inclusive participation of women and vulnerable groups in all interventions (capacity building, O&M of infrastructure, livelihood activities, access to finance and knowledge exchange activities).

Monitoring, Evaluation and Learning. GAP activities will be implemented and tracked through the project M&EL plan, under the supervision of GFP. Progress and results will reported through the established reporting mechanisms, ensuring accountability, adaptive management and continuous learning on gender-responsive climate adaptation outcomes.

GAP Outputs	Activities	Activity cost	Budget details
		(US$)	
G1 Enhanced capacity on leadership and gender	G1.1 Conduct baseline assessment on gender risk assessment	50,000	Costs for Consultancy, data collection, venue, consultation with beneficiaries. It aims to determine the actual capacity needs of different target groups

GAP Outputs	Activities	Activity cost	Budget details
		(US$)	
responsive planning	G1.2 Conduct leadership training on mainstreaming gender to different target groups	30,000	Costs for Trainer, participants, venue and material production. It aims to empower women and youth on leadership skills
G2 GBV grievance redress and referral mechanisms in place	G2.1 Prepare guidelines for grievance redress and referral mechanisms in Shehias	10,000	Consultancy and consultation costs for preparation of guidelines. Aims to provide referral pathway for those affected by GBV in target Shehias, PIU or target Sectors
	G2.2 Raise awareness on community protection and GBV	50,000	It is a GBV risk management approach, empowers women and improves community resilience, accountability and safeguard compliance
	G2.3 Monitor the implementation of the project's gender-responsive interventions	50,000	Costs for monitoring gender responsive actions for accountability, compliance and to track whether there are equitable benefits from project interventions
G3 Women's access to land rights improved	G3.1 Raise awareness on land rights and ownership	20,000	Funds to be used to increase understanding of women to exercise their rights on land ownership
	G3.2 Provide assistance to women to secure land rights for agriculture and other productive uses	40,000	To provide understanding of women's legal and customary rights, ownership, inheritance and transfer rights

Table 4. Action plan for implementation of gender-based activities (GAP)

References:

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Annex 4. Field report

THE UNITED REPUBLIC OF TANZANIA

VICE PRESIDENT'S OFFICE

UNION AND ENVIRONMENT

NATIONAL ENVIRONMENT MANAGEMENT COUNCIL (NEMC)

BACK TO OFFICE REPORT

DATA COLLECTION FOR FULL PROJECT PROPOSAL OF THE CLIMATE CHANGE ADAPTATION IN SALT WATER STRESSED AND FRESH WATER DEFICIENT COMMUNITIES IN ZANZIBAR

March, 2022

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1.0 INTRODUCTION

1.1 BACKGROUND

The National Environment Management Council (NEMC) is an Accredited Institution for the Adaptation Fund and receives grant for preparation of project proposals and implementation of projects that aim to support the objectives of the Fund. In 2021, a project concept note on the climate change adaptation in salt water stressed and fresh water deficient communities in Zanzibar was prepared and submitted to the AF Board for approval. The concept note presented ideas as to how these goals can be achieved, focusing on Zanzibar Islands (Unguja and Pemba) as the main beneficiaries of the project actions. Following the acceptance of the concept not, the Adaptation Fund (AF) approved a total of US 3.5 million of which a detailed project proposal has to be prepared to account for the stated funds, with the adaptation concrete actions detailed in the proposal, taking on board the proposed measures identified by the technical review team of the AF.

1.2 OBJECTIVES OF THE VISIT

The objective of the visit is mainly to collect data to be used in the preparation of a detailed proposal and respond to issues highlighted in the comments from the technical team of the AF. Specifically, the collected data will be used to prepare the following reports included in the project proposal

i. Environmental and Social Management Plant (ESMP) and Environmental and Social Monitoring Plan for the proposed project in accordance with the Environmental and Social Safeguard measures of the AF.
ii. Gender Analysis report.
iii. Stakeholder consultations which is mandatory for the success of the project

1.3 DESCRIPTION OF THE PROJECT AREA

Zanzibar forms part of the United Republic of Tanzania and comprises two major islands (Unguja and Pemba) plus a number of smaller islands with a total area of 1651 km^2. Administratively, the two islands are subdivided into five regions, three in Unguja (North, Urban West and South) and two in Pemba (North and South), with an estimated population of 1.67million (based on NBS growth rate). The increasing population on the same area of land (from around 400 persons/km^2 in 2002, 530 persons/km^2 in 2012 to the current estimate of 960/km^2) poses a lot of challenges in terms of settlements, availability of freshwater and agricultural land and other livelihood implications. The population growth also increases the level of vulnerability to climate change in which a pattern is observed in other Small Island Development States (SIDS).

Saltwater intrusion and clearing of mangroves for construction of tourist hotels and agricultural expansion have detrimental environmental effects in Zanzibar community, notably increased beach erosion owing to sea waves which were in the past absorbed by mangroves.

The selected area for the project implementation in Unguja Island is Kiongwe Kidogo (North B district), Mto wa Pwani (North A district) and Pete (Central district) and Pemba Island is Gando (Wete district) and Kangani (Mkoani district). The sites were selected after consultations with stakeholders in Unguja and Pemba islands, which include Officers from the First Vice President's Office (Environment), Zanzibar Environmental Management Authority (ZEMA), Districts environmental officers, Shehia (village) leaders and community members who live within the proposed areas (Detailed stakeholder's consultations in appendix 4).

1.4 SITE VISIT TEAM

Site visit and consultation was conducted from 02nd March, 2022 to 16th March, 2022 by the team of;

1. Dr Fadhila Hemed Ali

Cons

ultant
2. Fredrick Mulinda

NE

MC

3. Edika Masisi

NE

MC

4. Hassan A. Maalim

NE

MC

5. Eunice Ezra

NE

MC

6. Salim Mohamed Abdalla

1st

Vice President's Office

(Environment),

2.0 METHODOLOGY

The methods used in collecting information involved physical site observations, marking project sites with GPS, taking measurements of the proposed climate change adaptation structures, focus group discussions (women, youth, disabled) and stakeholder consultations in different levels including community members, Shehas and sectors (Agriculture, Livestock, Forestry, Water, Irrigation, Fisheries, Local Government and CSOs) in different selected sites in Unguja and Pemba islands.

Plate 1: Stakeholder's consultation with different sectors
(Source: Site visit team 09th March, 2022)

Plate 2: Stakeholder's consultation meetings
(Source: Site visit team 05th March, 2022)

3.0 OBSERVATIONS/ FINDINGS

3.1 STAKEHOLDERS CONSULTATION RESULTS

For the purpose of ensuring stakeholders involvement and ownership of the project, the team convened meeting and held conversation with communities (women, youth, disabled), Shehas (community leaders) and sectors (Agriculture, Livestock, Forestry, Water, Irrigation, Fisheries) for them to give their views on the adaptation measures they prefer.

The focus group discussions and stakeholder's comments and opinions were guided by a questionnaire which required information stakeholders to give information about the details of the community member, economic activities, environmental challenges, proposed projects to be implemented, by women, disabled, youth, elderly and if there are any registered community groups in the area where the project will be implemented.

A detailed matrix of the proposed key livelihood activities and proposed adaptation measures is as indicated in **Appendix 1,** livelihood activities selection by different social groups is as indicated in **Appendix 2** and capacity building areas is as indicated in **Appendix 3**

3.2 PROPOSED SALTWATER INTRUSION STRUCTURES, RESERVOIR AND RAIN WATER HARVESTING SITES

Based on the results from Site visit, focus group discussions (women, youth, disabled) and stakeholder consultations in different levels including community members, Shehas and sectors (Agriculture, Livestock, Forestry, Water, Irrigation, Fisheries and Local Government in Unguja and Pemba islands, Kiongwe Kidogo, Mto wa Pwani, Gando

and Kangani Shehias proposed dykes construction as means to prevent saltwater intrusion to farmlands and reservoir construction and rainwater harvesting as a means of reducing scarcity of clean water for Gando and Kangani respectively.

Properly designed drainage system for Pete shehia was also recommended method of preventing floods from sea water and reservoir construction similar to what was recommended to Gando as alternative source of water for Mto wa Pwani however their specific location is yet to be concluded. The locations and lengths of the proposed structures are as shown in Figure1, 2,3, 4 and plate 4 below;

Figure 1: Kiongwe kidogo dyke construction site

Figure 2:Mto wa Pwani dyke construction site

Figure 3(a): Kangani (Maweni Valley) proposed dyke site

Figure 3 (b): Kangani (Maotwe Valley) proposed dyke construction site

Figure 4(a): Gando (Mpanje Valley) dyke and Reservoir construction sites

Figure 5: Gando (Majomani and Mwanamakuku Valleys) dykes proposed sites

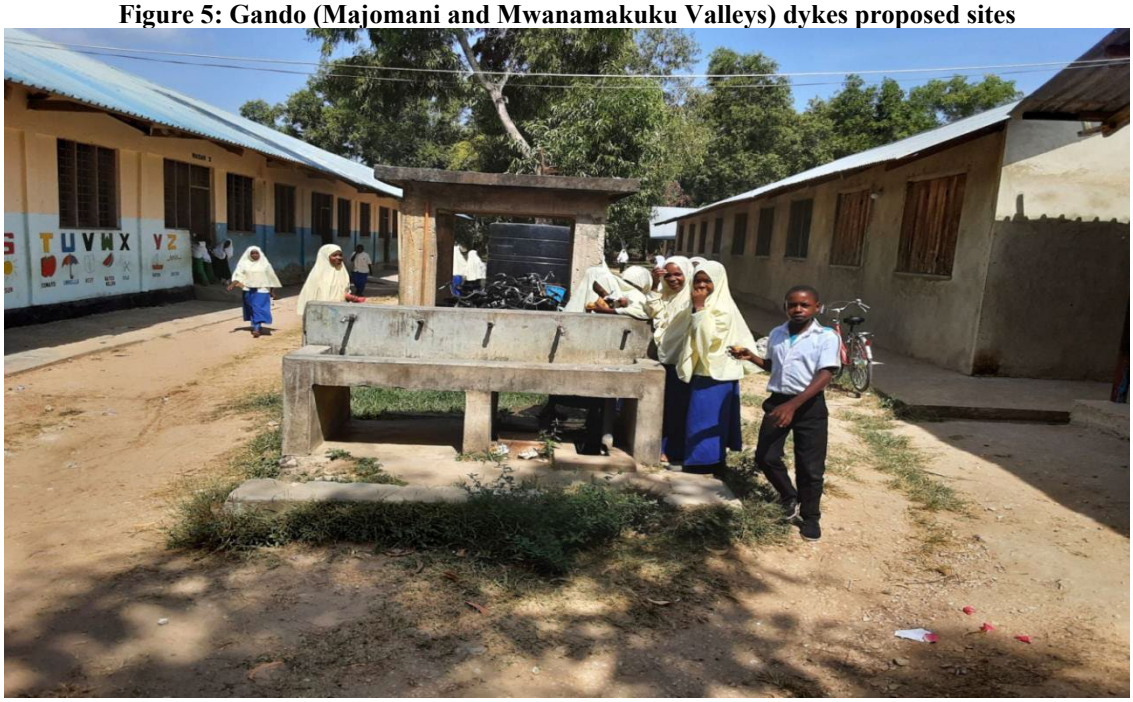

Plate 4: Proposed school for water harvest; *(Source: Site visit team 15th March, 2022)*

4.0 CONCLUSION

With the exceptional of Pete and Mto wa Pwani who have confirmation issues on identifying areas to construct the dyke/drainage system and reservoir respectively the preliminary assessment made on the visited proposed project sites concludes that, the proposed adaptation measures are welcomed in the visited areas and that they can be solution to the existing problems.

6.0 APPENDICES

Appendix 1: Livelihood activities and proposed measures

Location	Key Livelihood activities	Proposed Salt water adaptation measures
Kiongwe Kidogo	Agriculture, beekeeping, livestock, fisheries, sewing	Construction of dike 1000 m
		Mangrove planting
MtowaPwani	Agriculture, fisheries, livestock	Construction of dike 600m
		Reservoir? (Subject to availability of location)
Pete	Agriculture, livestock, fisheries	Drainage canal (subject to confirmation that the proposed area for construction of drainage canal is outside the forest reserve). Need consultation with the Road Authority and JCBNP Mangrove planting
Gando	Agriculture, livestock, fisheries, beekeeping	Construction of the dike: a. Mpanja: 350 m b. Mwanamakuku: 150m c. Majomani: 150m
		Construction of reservoir: circumference 250m (diameter 70m) approximate volume 7,000m^3
Kangani	Agriculture, livestock, fisheries	Construction of dikes; a. Maweni (24.2 acres)– 850m b. Maotwe (62.6 acres) – 250m
		Rainwater harvesting Kangani school
		Mangrove planting

Appendix 2: Livelihood activities and proposed measures

Location/	Proposed livelihood activities			
	Old	Youth	Women	Special needs
Kiongwe Kidogo	• Dairy cows • Boat	• Vegetables (drip irrigation and greenhouse)	• Bee keeping • Sewing • Vegetables • Rice mills	• Aquaculture
Mto wa Pwani	• Vegetables • Fisheries (small fish) • Poultry	• Vegetables • Fisheries (small fish)	• Entrepreneurship • Poultry • Vegetables	• Poultry • Handicraft
Pete	• Beekeeping • Drip irrigation • Vegetables	• Crabs • Tourism promotion	• Seaweed production • Oyster farming • Mangrove • Beekeeping	• Handicraft • Poultry • Activity that will allow them to work at home

Location/	Proposed livelihood activities			
	Old	Youth	Women	Special needs
Gando	• Vegetables	• Vegetables	• Vegetables • Seaweed production	• Entrepreneurship • Aquaculture • Small scale: fried fish, mandazi • Poultry
Kangani	• Mangroves • Vegetables	• Mangroves • Crab breeding • Vegetables • Cockroaches farming Reservoir	• Mangrove • Vegetables • Seaweed and spices	• Entrepreneurship

Appendix 3: Proposed areas for capacity building

Location/	Proposed capacity building areas
Kiongwe Kidogo	• Beekeeping • Climate smart production • Aquaculture • Entrepreneurship skills
Mto wa Pwani	• Climate smart practices • Environment • Fisheries
Pete	• Agriculture • Entrepreneurship • Beekeeping • Climate smart practices • Crab breeding • Youth tourist • Seaweed production • Environmental issues (school children)
Gando	• Climate smart agriculture • Aquaculture • Mangroves • Beekeeping
Kangani	• Environmental issues (schoolchildren • Seaweed production • Climate smart agriculture • Poultry • Spice farming

Annex 5. Timeline for consultation processes during the project preparation, including engagement with communities and Institutions

Date and Event	Persons involved	Gender		Topics discussed
		M	F	
1. Preparatory meetings				
5 July, 2021	Director of Environment, DG ZEMA, District Env. Officers (DEMO)	3	2	• Meeting with Department of Env./ZEMA to discuss about possible locations of locations for the proposed AF project.
6 – 9 July, 2021	DE, ZEMA, District Env. Officers, Sheha and Village committee members			• Visit locations to meet Shehas/village committee to introduce the concept and obtain basic demographic and socio-economic data through structured questionnaires • Proposed locations: Kizingo, Kiongwe kidogo, Mto wa Pwani
17 – 20 Aug., 2021	3 women from each Shehia	-	18	• Interviews using structured questionnaires
2. **Shehia level meetings**				
2 – 3 March, 2022 Kiongwe kidogo/ Muwanda	NEMC, DoE, ZEMA, District Env. Officers	15	19	• Village meetings • Identify areas where dikes or reservoirs will be constructed and take GPS readings • Visit to Kilombero to observe the drip irrigation farmers (members of the Horticultural Association)
6 March, 2022 Mto wa Pwani		31	57	
7 – 8 March, 2022 Pete and Kitogani		33	32	
12 – 13 March, 2022 Gando (Nduuni)	DE, ZEMA, NEMC, District Env. Officers, Irrigation Officer	32	24	• Village meetings (similar to Unguja) • Visits to locations where they were constructing dikes (Tovuni), plus community upgraded reservoirs at Kangagani (funded by TASAF)
14 March, 2022 Kangani: school visit and village meeting		43	66	
1 April, 2022 Zanzibar Climate Change Association (ZACCA)-NGO	Manager, staff	3	1	• Discuss about their climate change activities they are involved with
14 May, 2025 Makombeni/ Ng'ombeni	NEMC, DoE, ZEMA, District Env. Officers, Irrigation Officer	4	16	• Village meeting (similar to the above)
16 May, 2025 Practical Permaculture Institute Zanzibar (PPIZ)	Manager, staff	2	3	• To discuss about their activities in relation to horticultural production and value addition of horticultural crops
May (2025)	Fahima M. Issa		F	• Consulted about available statistical information on various occasions
5 Nov. - 10 Nov, 2025	Selected women from Shehias		10	• Update information and consultations with women and other key institutions to gather more information on gender-related issues

Date and Event	Persons involved	Gender		Topics discussed
		M	F	
Daima Mkalimoto	Director of Planning, Mo’’’’’’’’’’’’’’’’’’’’ ’		F	• To discuss about roles and responsibilities of Social Welfare and Community Development Officers and their linkage with the Sector Ministries
3. Meetings with Implementing Institutions				
9 March, 2022 Stakeholders’ meeting (Unguja)	Participants from Environment, Agriculture, Forestry, Fisheries, Water, Agric. Research, Irrigation, NGO	21	12	• To present key findings of the proposed project and discuss how respective sectors will participate in its implementation
15 March, 2022 Stakeholder’s meeting (Pemba)		13	12	

Annex 6. List of stakeholders consulted

Stakeholders name	Gender	Location/Institution	Mobile number
Shaibu Kaimu Manguja	M	Sheha, Gando	0777132579
Afadhali Juma Afadhali	M	Sheha, Kangani	0777768752
Amur Mbarouk Juma	M	Sheha, Kiongwe kidogo	0772525977
Mwanshumu Makame Haji	F	Sheha, Makombeni	0772252987
Zakia Mbaraka Haji	F	Sheha, Pete	0773925710
Mohammed Ali Ali	M	Sheha, Mto wa Pwani	0773175631
Women respondents:			
Johari Omar Juma	F	Kiongwe	0772110505
Tano Jaffar Ali	F	Kiongwe	0772282042
Bahati Khamis Juma	F	Kiongwe	0772109576
Asia Masoud	F	Gando	0773758264
Shangi Khamis	F	Gando	0776182283
Time Kombo Mjaja	F	Gando	0774666540
Sada Abdulla Bakari	F	Kangani	0772272706
Mchanga Afadhali	F	Kangani	0776346843
Salma Zaharan Khamis	F	Kangani	0776416677
Aziza Said Suleman	F	Kizingo	0776504555
Asha Ali Ali	F	Kizingo	0773517282
Farida Ali Hamadi	F	Kizingo	0776948393
Hadia Ali Makame	F	Mto wa Pwani	0776513612
Mchanga Salim Kombo	F	Mto wa Pwani	0777159531
Mwanajuma Rajab Ismail	F	Mto wa Pwani	-
Fatma Rashid	F	Pete	0772816906
Maiba Musa	F	Makombeni	0778829552
Faida Faki Kombo	F	Makombeni (Mwenyekiti wa Bonde)	0778354478
Asha Nyange	F	Makombeni (Katibu wa Bonde)	0772390173
Chum Makame Haji	F	Makombeni	
Mohammed M. Mmanga	M	Makombeni	
Sharif Machano Mmanga	M	Makombeni	
Miza Kona Mohammed	F	Makombeni	
Asha Nyange Machano	F	Makombeni	
Sada Haji	F	Makombeni	
Mwanahija Makame Haji	F	Makombeni	
Nawaje Musa Makame	F	Makombeni	
Mtumwa Abdulla Ali	F	Makombeni	
Asha Makame Sefu	F	Makombeni	
Mafunda Said Mohammed	F	Makombeni	
Supia Shoka	F	Makombeni	
Asha Juma Othman	F	Makombeni	
Zainab Abasi `Hamadi	F	Makombeni	
Bishara Fadhil Shaka	F	Makombeni	
Asha Nassor Makame	F	Makombeni	
Key Implementing Institutions			
Farhat Mbarouk	F	Director of Environment	0654300404
Sheha Mjaja	M	Director General - ZEMA	0777420801
Mgau	M	Irrigation, Pemba	0773711214
Kitwana	M	Irrigation, Pemba	
Maiba Musa	F	Irrigation, Pemba	0778829552
Dr. Masoud S. Said	M	Researcher, Kizimbani ARI	0777423919
Dr, Mohammed Abdulla	M	Irrigation Engineer, Zanzibar	0779131368
Rashid Abdulla Salim	M	ZEMA, Pemba	0773288985

Stakeholders name	Gender	Location/Institution	Mobile number
Ali Abdi Mohammed	M	DoE, Pemba	0778901055
Issa Mohammed Maalim	M	IMM, Pemba	0773805184
Nassor M Nassor	M	Zanzibar Fisheries Research I ZAFIRI	0777436690
Amini Rashid Mdowe	M	DoE, Pemba	0773875937
Salim Zubeir Masiko	M	ZEMA, Pemba	0773047983
Salim Mohammed Abdulla	M	DoE, Pemba	0773673073
Rashid Abdulla Salim	M	ZEMA, Pemba	0773288985
Ayoub Masoud Ali	M	DoE, Pemba	0774340264
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Annex 7. Restoration of saltwater affected farm lands and degraded coastline

1. Introduction

Historically, the Zanzibar Islands had sufficient drinking water, primarily sourced from shallow wells through pumping and manual collection [1, 2, 3]. Additionally, several free water outlets (*chemchem*) served as low-cost sources across the islands [4, 5, 6]. Water quality and availability were generally considered good, with minimal dependence on weather patterns or seasonal changes. Over time, however, both water availability and quality have declined. The demand for freshwater and the expansion of water distribution networks have grown steadily, driven by population increase, irrigation needs, new settlements, tourism development, and changing lifestyles [7, 8, 9]. The 2022 Tanzania National Population and Housing Census reported Zanzibar's population at 1,889,773. Population growth, combined with tourism expansion, has driven increased settlement development, greater demand for freshwater distribution, and a marked rise in water consumption.

A study conducted around 2020 estimated groundwater abstraction at approximately 2.49×10^6 m³/year—well above the sustainable recharge rate of about 1.79×10^6 m³/year. Earlier data are more limited; for example, a 2010 estimate reported total water withdrawals (domestic and irrigation) of roughly 42 million m³/year—about 33 million m³ on Unguja and 9 million m³ on Pemba islands, respectively. Thus, while circa 2010 total withdrawals reached 42 million m³/year, by around 2020 groundwater abstraction alone will exceed sustainable limits [10]. Furthermore, a study on groundwater quality degradation in Zanzibar Municipality found that shallow wells located up to ~3 km inland have experienced progressively elevated salinity due to over-pumping and seawater intrusion [11]. Research in the low-elevation Jozani groundwater forest—an area used for both agriculture and forestry—recorded total dissolved solid (TDS) levels of 25–34 g/L during dry seasons, indicating inland seawater penetration far beyond immediate coastal zones [12]. Rising sea levels and shifts in the freshwater–seawater interface highlight increasing saltwater intrusion, now affecting not only coastal and low-lying areas but also inland agricultural lands, such as Makombeni in Pemba [12].

Saltwater intrusion in Zanzibar underscores the impacts of global warming and climate change. Rising sea levels and shifts in the freshwater–seawater interface are compelling the growing population to seek additional and alternative water sources, leading to increased abstraction from both existing and newly developed shallow and deep wells. Seasonal variations in water quality in low-lying and coastal areas further indicate a progressive inland shift of the freshwater–seawater boundary [12]. This intrusion adversely affects ecosystems, agricultural land, and wildlife habitats, while also imposing direct and indirect stresses on human livelihoods [12, 13].

2. Problem Statement

There is a growing concern about the salinization and reduction of available drinking water in the Zanzibar Islands, particularly among communities living in coastal areas. Many residents rely on nearby shallow wells for their water supply. Increasingly, however, they seek water from sources located farther inland, especially during the dry season. While there are indications that water extraction from randomly scattered deep wells in the nearby uplands is on the rise, there is still no clear information on the quality of this water. In addition, several free water outlets (chemchem) have become seasonal or now discharge less water than in the past.

These concerns, though widely shared, have not been empirically measured or systematically studied. Likewise, the potential impacts on the environment, human health, and wildlife—both now and in the near future—remain unidentified and without precautionary measures. Moreover, despite seawater intrusion into low-lying land habitats being recognized as one of the main impacts of global warming and climate change in Zanzibar, there are few, if any, sustainable measures in place to address the situation. Above all, the level of adaptation of local communities to these changes has yet to be assessed in the Zanzibar context.

3. Rationale

Based on data from the Zanzibar Water Authority (ZAWA), water consumption in Zanzibar has shown a significant upward trend. Reports indicate that in Zanzibar Town, daily water demand increased from approximately 30,000 m³ in 1995 to about 90,000 m³ in 2015, driven by urban expansion, population growth, and the establishment of new settlements. Over the same period, the reliability and quality of piped water supplies have declined. Claims of seasonal changes in water quality and availability further highlight the need for scientifically driven programmes to assess and address these challenges.

This programme will be designed to conduct systematic analyses of the situation and to develop environmentally and socially sustainable mitigation measures. Implementing such measures will also align with broader strategic

plans to strengthen community adaptation to saltwater intrusion in Zanzibar. The programme will incorporate interventions targeting human activities, including land and water management, sustainable utilization, and conservation practices.

Failure to implement the proposed programme—or similar initiatives—could exacerbate the frequency and severity of saltwater intrusion, leading to long-term negative impacts on the socio-economic wellbeing of the population, individual livelihoods, agriculture, forestry, and biodiversity.

The proposed programme is consistent with both the short- and long-term priorities of the Revolutionary Government of Zanzibar (RoGZ), which is committed to safeguarding and improving the living conditions of all citizens, enhancing climate change resilience, and promoting the sustainable use and conservation of water, land, and marine resources across the Zanzibar Islands.

4. Objectives and Outputs

The primary objective of this program is to assess the extent and impacts of saltwater intrusion and to develop sustainable mitigation and adaptation measures to reduce the intrusion and its associated effects in Zanzibar.

Specific objectives

1. To map out scale of the saltwater intrusion on the selected project sites of Unguja and Pemba islands.
2. To characterize impacts and associated stresses of saltwater intrusion in Zanzibar.
3. To provide appropriate recommendations that will promote sustainable conservation practices.
4. To monitor water quality and other environmental qualities during the project lifecycle and beyond.

Expected outputs

The following outputs are expected to contribute to the achievement of the project **Output 2.3** (Best adaptation practices adopted by farmers) through restored land that will be used for agriculture and other income generating activities. Individual outputs are as follows:

- A report detailing the extent of water intrusion in project sites.
- Monitoring reports on water, soil and other environmental qualities on project sites.

5. Methodology

The programme shall have three Phases:

PHASE I: Saltwater Intrusion Situation Analysis (SISA): At this phase table works, sites visits, interviews and surveying will be done to map and scale saltwater intrusion level, characterize special trend and magnitude of intrusion in relation to climate change and population activities, water availability and use on the selected sites.

PHASE II: Evaluate impacts and associated stresses of the saltwater intrusion to the water, land, human and wild habitats in Zanzibar.

PHASE III: Application of recommended mitigation measures in collaboration with affected communities. Specific strategies, environmental and social management plans will be developed and implemented through adaptation mode to meet the goal. It will also constitute training of communities on the best practices that will promote conservation and sustainable agricultural practices.

a) Data collection

There will be primary and secondary data collection, analysis, interpretation and suggestion and recommendations will be done accordingly. Secondary data collection will focus on historical and current conditions drawn from literature reviews, field visits and interviews with key stakeholders. These will include central and local government representatives, officials from the MDAs (ZAWA, ZEMA, TMA, NGOs and Shehas and community members).

Primary data collection will involve water sampling to measure total dissolved solids (TDS) (salinity), water depth, and the distance and elevation of wells relative to seawater. Field observations will record visual indicators in both salt-affected and unaffected areas, including plant appearance, growth, and yield parameters. Information will also be gathered on existing seawater barriers (if any) along the coastline, land and landscape characteristics, and soil depth to the water table.

All data points will be geo-referenced, capturing site locations, areas reached by seawater, spatial distances, and elevation data. These datasets will inform the Terms of Reference (ToR), deliverables, and related documentation for the construction of the proposed dikes and will guide the development of site-specific mitigation strategies

b) Materials and tools

Material and tools include GPS, maps and mapping tools, water samplers and storage bottles, measuring tapes, water depth indicators, portable and laboratory TDS meters and accessories. Computer and computer soft ware's and skilled personnel to run spatial data analysis and develop questionnaires by ODK-ONA or related ones for data collection and then analyzed imperially and socially. Data for engineering and dikes constructions and related issues shall be collected through specific needs.

c) Trials and demo tools

Based on the outcomes of the above sections there will be strategic tools and methods designed/ established/developed for saltwater intrusion mitigation and adaptation measures. These will be identified at a later stage and will be site-specific.

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Annex 8. List of Tables

Annex 9. List of figures

Annex 10. List of Plates

Annex 11. List of Abbreviations

AF	-	Adaptation Fund
AIDS	-	Acquired Immune Deficiency Syndrome
AU	-	African Union
BAU	-	Business As Usual
CEDAW	-	Convention on Elimination of All Forms of Discrimination Against Women
CFP	-	Community Forests Pemba
CLO	-	Community Livelihoods Officer
CNA	-	Capacity Needs Assessment
CP	-	Communication Plan
CRC	-	Convention on the Rights of the Child
CSA	-	Climate Smart Agriculture
DFID	-	Department For International Development
DNA	-	Designated National Authority
DoE	-	Department of Environment
EAC	-	East African Community
EC	-	Electrical Conductivity
EIA	-	Environmental Impact Assessment
ERP	-	Emergency Response Plan
ESMP	-	Environmental and Social Management Plan
FAO	-	Food and Agriculture Organisation
FCA	-	Full Cost of Adaptation
FCDO	-	Foreign, Commonwealth and Development Office
FPIC	-	Free, Prior and Informed Consent
GAAP	-	Generally Acceptable Accounting Principles
GAP	-	Gender Action Plan
GBV	-	Gender Based Violence
GDP	-	Gross Domestic Product
GEF	-	Global Environmental Facility
GFP	-	Gender Focal Point
GHG	-	Greenhouse Gases
HBS	-	Household Budget Survey
HDPE	-	High Density Polyethylene
IAS	-	International Accounting Standards
IMS	-	Institute of Marine Sciences

IPCC	-	Inter-governmental Panel on Climate Change
IPM	-	Integrated Pest Management
IAC	-	International Accounting Standards
IUCN	-	International Union for Conservation of Nature
JCBNP	-	Jozani Chwaka Bay National Park
JDF	-	Jongoo Development Fund
JECA	-	Jozani Environmental Conservation Association
LDCF	-	Least Developed Countries Fund
LCDI	-	Low Cost Drip Irrigation
LGA	-	Local Government Authority
MAINRL	-	Ministry of Agriculture, Irrigation, Natural Resources and Livestock
MAM	-	March-April-May
MDA	-	Ministries, Departments and Agencies
M & EL	-	Monitoring, Evaluation and Learning
MKUZA	-	Zanzibar Strategy for Growth and Reduction of Poverty (Mpango wa Kukuza Uchumi na Kupunguza Umaskini Zanzibar)
MoBEF	-	Ministry of Blue Economy and Fisheries
MoCDGEC	-	Ministry of Community Development, Gender, Elderly and Children
MTR	-	Medium Term Review
NAPA	-	National Adaptation Programme of Action
NBS	-	Nature Based Solutions
NCCRS	-	National Climate Change Response Strategy
NDC	-	Nationally Determined Contribution
NDF	-	Nordic Development Fund
NEAP	-	National Environmental Action Plan
NEMC	-	National Environment Management Council
NGO	-	Non-Government Organizations
NIE	-	National Implementing Entities
O & M	-	Operation and Maintenance
OND	-	October-November-December
OPEC	-	Ornganization of the Petroleum Exporting Countries
PC	-	Project Coordinator
PWD	-	Persons With Disability
PIU	-	Project Implementation Unit
PFP	-	Project Focal Person
PHC	-	Population and Housing Census
PPE	-	Personal Protective Equipment
PPIZ	-	Practical Permaculture Institute Zanzibar
PORALGSD	-	President's Office-Regional Administration, Local Governments and Special Departments
RoGZ	-	Revolutionary Government of Zanzibar
SADC	-	Southern African Development Community
SC	-	Steering Committee
SDG	-	Sustainable Development Goal
SGC	-	Shehia Grievance Committee
SIDA	-	Swedish International Development Cooperation Agency
SIDS	-	Small Islands Development States
SNC	-	Second National Communication
SWUC	-	Shehia Water Users Committee
TAHA	-	Tanzania Horticulture Association
TAMWA	-	Tanzania Media Women Association
TASAF	-	Tanzania Social Action Fund

TDS	-	Total Dissolved Solids
TNC	-	The Nature Conservancy
TURP	-	Tanzania Urban Resilience Program
TZS	-	Tanzania Shillings
1stVPO	-	First Vice President's Office
UNDP	-	United Nations Development Programme
UNFCCC	-	United Nation Framework Convention on Climate Change
UNICEF	-	United Nations Children Fund
USAID	-	United States Agency for International Development
USD	-	United States Dollar
VAWC	-	Violence Against Women and Children
VSLA	-	Village Savings and Loan Association
WBG	-	World Bank Group
WCF	-	Workers' Compensation Fund
WCS	-	Wildlife Conservation Society
WWF	-	World Wildlife Fund
WIOMSA	-	Western Indian Ocean Marine Science Association
WUA	-	Water Users Association
ZABA	-	Zanzibar Beekeeping Association
ZACCA	-	Zanzibar Climate Change Alliance