



ADAPTATION FUND

AFB/PPRC.36/Inf.2
15 September 2025

Adaptation Fund Board
Project and Programme Review Committee
Thirty-sixth Meeting
Bonn, Germany, 7-8 October 2025

PROPOSAL FOR KIRIBATI



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular Size Full Proposal

Country/Region: Republic of Kiribati

Project Title: Enhancing the resilience of three outer islands of Makin, Aranuka and Tabiteuea South in Kiribati with improved water security

Thematic Focal Area: Coastal Management

Implementing Entity: Secretariat of the Pacific Regional Environment Programme (SPREP)

Executing Entities: Ministry of Infrastructure and Sustainable Energy (MISE)

AF Project ID: AF00000158

IE Project ID:

Requested Financing from Adaptation Fund (US Dollars): US10,000,000

Reviewer and contact person: Ahmad Ghosn

Co-reviewer(s): -

IE Contact Person:

Technical Summary

The project “Enhancing the resilience of three outer islands of Makin, Aranuka and Tabiteuea South in Kiribati with improved water security” aims to ensure that three selected communities have equitable and sustainable access to safe drinking water and clean water for other uses under expected climate change impacts. This will be done through the five components below:

Component 1: Rapid response for existing damaged and unused water supply systems in the targeted villages (USD 989,000)

Component 2: Strengthening Government of Kiribati’s capacity and capability in sustainable water resource management (USD 972,800).

Component 3: Strengthening coordination mechanisms and community participation in water resource management (USD 416,400)

Component 4: Construction of new water infrastructures to adapt to future climate impacts (USD 5,796,000).

Component 5: Education, awareness raising, and knowledge management (USD 247,000).

Requested financing overview:

Project/Programme Execution Cost: USD 800,000

Total Project/Programme Cost: USD 9,221,200

Implementing Fee: USD 778,800

Financing Requested: USD 10,000,000

The first/ initial technical review raised several issues, such as aligning document contents with AF template and adding/ revising some information; adding more details on project components activities and USPs; considering possible restructuring of component 4 and revising its title to reflect its scope; clarifying climate change aspects of outcome 1.2 on water borne diseases; revising project benefits discussion and providing quantification where possible; revising project cost effectiveness discussion as per AF requirements; clarifying consistency with related national plans and adding more national standards; providing more details on related completed/ ongoing projects; providing substantive details on project consultations; clarifying full cost adaptation reasoning; specifying project overall risk category and clarifying USPs E&S risks management as per AF requirements; revising the implementation arrangements discussion and chart; adding M&E plan and revised budget; providing numbers for some “Target” percentages in the result frame work and inclusion of dedicated tables for AF core indicators; specifying allocated amounts in the alignment with AF results framework table at outcome/ output levels; among other Clarification Requests (CRs) and Corrective Action Request (CARs) raised in the review.

The second review finds that most of the CARs and CRs raised in the first review have been addressed, except for few which include: adding components subtotals for some components in the financing table; providing details on the activities under each output;_and revising the project results framework, alignment with AF results framework, and AF core impacts tables as per related requirement; among few other notes as in indicated 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 prejudice 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: **15 August 2025**

Review Criteria	Questions	First Technical Review Comments 05 February 2025	Second Technical Review Comments 15 August 2025
Country Eligibility	1. Is the country party to the Kyoto Protocol and/or the Paris Agreement?	Yes.	-
	2. Is the country a developing country particularly	Yes. Kiribati is a small island developing state (SIDS)	-

	vulnerable to the adverse effects of climate change?	highly vulnerable to climate change risks, particularly sea-level rise which could adversely impact coastal areas and marine ecosystems.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. As per the Letter of Endorsement dated 21 January 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?	No. <u>However</u> , Part I, first page, does not include all required information. Also, Part IV as per the AF proposal document is missing. Moreover, several annexes should be part of the proposal main body, among other revisions/clarifications. CAR1: Add Part IV and revised first page of Part I of the AF template proposal document template and include required information on the first page of Part I and required documents in Part IV (endorsement letter, certification by the implementing entity). Also, include Annexes 1, 2, 3 and 4 at relevant sections in the main body of proposal, See	CAR1: Not Cleared. Please the name and position of the government official and indicate date of endorsement and implementing entity certification in Part IV. CR1: Cleared. See Part I, pp. 10-52.

		<p>the below link for the AF single country full proposal template: https://www.adaptation-fund.org/document/template-for-fully-developed-single-country-proposal/</p> <p>CR1: Please address the following:</p> <ol style="list-style-type: none"> 1. To meet alignment with AF template basic contents, consider revising the information provided in Part I (pp. 8-34) to a maximum of “say 10-12” pages (few other sections could also be reduced without compromising key issues) to enable addressing CAR1 and other review comments and maintain document page limit of 100. 2. Merge proposal and annexes in one document file. 3. Double check table of contents to ensure it include all document sections including annexes. 4. Spell out abbreviations when first used 5. Make sure that all figures and tables 	<p>However, it is recommended to conduct another round of editing/ proofreading improve the quality of the document (e.g.: revise table of content line spacing and reflect section “A” above Part under Part III in Part III and Add Part IV; revise section letter numbering under Part I; etc.).</p> <p>CR2: Cleared.</p>

		<p>include headings and numbers.</p> <ol style="list-style-type: none"> 6. Replace the term “AF ESS” by “AF ESP” or “AF E&S Policy”, across the document. 7. Another round of editing/ proof reading after addressing the review document is recommended. revision. <p>CR2: Consider revising the project objective to read “to ensure that three selected communities have equitable and sustainable access to safe drinking water and clean water for other uses under expected climate change impacts”.</p> <p>CR3: After “Project / Programme Objectives”, p. 34, add a brief paragraph to indicate what AF objectives/ outcomes the project activities will support.</p> <p>CR4: In Table 11, 36-37, add components subtotals and total of components costs. Also, in table 12, p. 38, change project calendar expected dates (some dates refer to 2024 and we are now in 2025).</p>	<p>CR3: Not Cleared. There is no need for Table 7, pp 22-24. Just mention AF outcomes supported by the project (i.e.: Outcomes 1, 2, 3, 4, and 7) in text.</p> <p>CR4: Not Cleared. In Table 8 include components subtotals for components 1, 2, and 3 (i.e., USD 989,000, USD 972,800, and USD 416,400 respectively).</p>
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	<p>3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?</p>	<p>Yes. Concrete activities include those under Component 1 “Rapid repair & replace response to existing water supply systems in the targeted villages” and Component 4 “Completion of new water infrastructure and water treatment systems designed to fill in the current supply gaps”. Other components include capacity building soft activities for sustainable water management. <u>However</u>, more details are needed to further define the concrete activities under components 1&4. Also, the activities under these components include USPs that need to be addressed as per AF requirements, among other issues indicated below.</p> <p>CAR2: Provide More details on the project components, particularly components 1 and 4. This is necessary to clarify the concrete actions and to substantiate related budget allocations. <u>Also</u>, specify the USPs, and clarify their nature, selection</p>	<p>CAR2: Not Cleared. Some revisions have been made in Part IIA (pp. 53-70). <u>However, more details on the activities under each output would be needed to substantiate allocated budgets.</u> Also, quantitative targets for the maintenance of the water supply systems in component 1 (tanks, wells, basic treatment systems, etc.) and the new infrastructure/s in component 4 (despite the USP nature of the activities) are lacking. The allocated budget for these components amounts up to \$6,785,000 (81% of total components cost of \$8,421,200) and warrant further details on associated activities. Moreover, added details should align with the project results framework and related allocated budget items.</p> <p><u>Also, the first paragraph under the Output 1.2.1 description refers to a baseline monitoring activity under 1.2.2. There is no such activity. Please clarify.</u></p>
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		<p>criteria, and management of their associated E&S aspects. <u>Refer to the below link for AF guidance on USPs: Updated guidance for IEs on the use of USPs.</u></p> <p>CR5: Clarify the climate change aspects of “Outcome 1.2 Incidence of water borne diseases on the three islands continues to decline”, as it reads “business as usual” environmental protection activity.</p> <p>CR6: In Table 11, pp. 36-37, Component 4 title refers to infrastructure “<u>repair</u>” which is addressed in component 1 (outcome 1.1). Revise</p>	<p>CR5: Cleared. Outcome 1.2 title has been revised to “<i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i>” and a paragraph has been to clarify its climate change aspects. See p. 45, p. 50, and p. 55.</p> <p>CR6: Cleared. Component 4 title has been revised. See p. 67, and p. 55.</p> <p>CR7: Cleared. See revisions on p. 56.</p>
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		<p>component 4 title and reflect and <u>remove “repair” from the title as it involves new installations.</u></p> <p>CR7: The 3rd paragraph under Output 1.2.1, p. 41, states: “The chosen technologies from the above-mentioned list will then be installed in villages and households as part of the rapid response efforts. <u>This will provide a short-term solution for improving the safety of current water sources</u>”. Why not long-term? Please clarify.</p>	
	<p>4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Yes. However additional information is required.</p> <p>The discussion provided in Part IIB, pp. 54-62, is mostly general and not project specific, among other issues indicated in the below comments.</p> <p>CAR3: Revise the discussion in Part IIB to include/ reflect the benefits related to this project related interventions, with particular reference to gender aspects and equitable distribution/</p>	<p>CAR3: Cleared. See Part IIB, pp. 71-77.</p> <p>CR8: Cleared. Reference is made to gender assessment and action plan (Annex 6 now) along with a discussion on</p>

		<p>access to vulnerable communities and provide supporting quantification where possible.</p> <p>CR8: Refer to the gender assessment and action plan (Annex 2) along with a brief paragraph to demonstrate the inclusion of aspects in project design and implementation.</p> <p>CR9: The discussion under “Project Compliance with the Environment and Social Policy of the Adaptation Fund“, pp. 59-62, is out of context in Part IIB. Delete or move to other relevant sections if/ as needed (e.g.: Part IIK, Part IIIC, etc.).</p>	<p>inclusion in project design and implementation. See pp. 73-74.</p> <p>CR9: Cleared. Discussion has been removed and a reference note to Part II.K has been added (see p. 76).</p>
	<p>5. Is the project / programme cost effective?</p>	<p>Unclear. See Part IIC, pp. 62-63. The discussion provided is not focussed and does not demonstrate the project specific cost effectiveness as per AF requirements.</p> <p>CAR4: Revise Part IIC to reflect a logical explanation of the project selected scope and approach. Cost effectiveness should be demonstrated from a sustainability point of view</p>	<p>CAR4: Cleared. See Part IIC, pp. 81-85.</p>

		<p>and should include a clear description and comparison with other alternative options to the proposed measures, with quantitative estimates where feasible and useful.</p>	
	<p>6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?</p>	<p>Not adequately addressed. See Part IID, pp. 64-66. The provided discussion only focusses overarching national relevant policies. It should however focus on project relevant sub-national sustainable development strategies/plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments (e.g.: NAP, NDC, NSDS/ SDGs Strategies/ plans, etc.).</p> <p>CAR5: Revise Part IID discussion to provide a bulleted list of relevant national/sub-national sustainable development strategies/plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments (e.g.: NAP, NDC, NSDS/ SDGs Strategies/ plans, etc.) and</p>	<p>CAR5: Cleared. See Part IID, pp. 85-87.</p>

		their alignment with the proposal.	
	<p>7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?</p>	<p>Not fully addressed. See Part IIE, pp. 67-69. Other standards may need to be added along with measures to ensure compliance.</p> <p>CAR6: Include more applicable national technical standards in the discussion and Table 9.(e.g.: water facilities/ infrastructure related building codes, water quality regulations, any other sector-specific regulations) and reflect on the measure to ensure compliance of project related activities with the listed standards.</p> <p>CR10: Under the subsection “Compliance with the Environmental and Social Policy of the Adaptation Fund”, p. 69, correct reference to table number “19” to “9” and revise Table 9 for added information requested in CAR8.</p>	<p>CAR6: Cleared. See Part IIE updated Table 15 (pp. 91-92).</p> <p>CR10: Cleared. Based on the revisions made in response to CAR6.</p>
	<p>8. Is there duplication of project / programme with</p>	<p>No. See Part IIF, pp. 69-71. <u>However</u>, the information</p>	

	<p>other funding sources?</p>	<p>provided only focus on ongoing projects.</p> <p>CAR7: Include similar/ related completed projects, if any, in Table 20, pp. 69-71, and indicate the implementing entities, status (completed, ongoing) and dates of the listed projects.</p>	<p>CAR7: Cleared. See Part IIF Table, pp. 95-96.</p>
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p>Yes. See Part IIG, pp. 71-72. Component 5 is dedicated for the purpose.</p>	<p>-</p>
	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Not cleared.</p> <p>A consultative proposal has taken place. However additional clarification is required. See Part II H, pp. 72-73. The section does not clearly reveal any recent project design specific consultations. The first paragraph of Part IIH, p. 72, that “An extensive consultation process was conducted from June until August 2022 in the targeted outer islands, supported by extensive outer island</p>	

		<p>consultations in 2019 and stakeholder consultations during the development of the concept note in 2017. <u>This was checked again through cross-referencing with project teams that targeted the islands into 2024</u>”.</p> <p>CAR8: Clarify whether recent project design consultations were conducted. Also provide a summary table (supported by a related specific annex) for consultations with the key stakeholders <u>and target local communities</u>. The table should include consultations dates, consulted entities/ local communities, participants number disaggregated by gender, topics discussed and outcomes, and how these outcomes are considered in project design. <u>Moreover</u>, clarify how the conducted consultations, which date back to 2017, 2019, and 2022, would still be valid in 2025.</p>	<p>CAR8: Cleared. See Part IIH, pp. 99-101.</p> <p>CR11: Cleared. See p. 99. Annex number has now changed to 6.</p>
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		<p>CR11: On page 72, Reference is made to Gender & Social Inclusion Strategy as Annex 4. It should be Annex 2.</p>	
	<p>11. Is the requested financing justified on the basis of full cost of adaptation reasoning?</p>	<p>Unclear.</p> <p>See Part II”I”, pp. 73-80. The provided materials are lengthy and not focused on what is required . Justification on the basis of full cost of adaptation reasoning should demonstrate how the project planned activities/ design would help achieve its adaptation objectives/ outcomes, solely based on the requested AF funding and without additional funding from other donors/ sources. If the project has co-financing, the Adaptation Fund project should be able to deliver its outcomes and outputs regardless of the success of other co-financed project(s).</p> <p>CAR9: Revise Part II”I” to explain/ demonstrate how the project planned activities/ design would achieve its adaptation</p>	<p>CAR9: Cleared. See Part II”I”, pp. 102-104.</p>

		objectives and realize its outcomes and outputs, solely based AF requested financing, and without additional funding/ cofinancing from other donors.	
	12. Is the project / program aligned with AF's results framework?	<p>Yes.</p> <p>(See related information and comments under item 9 of "Implementation Arrangements" in the review template).</p>	-
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p>Yes.</p> <p>However additional information is required.</p> <p>See Part IIJ, pp. 80-81. The discussion provided does not reflect AF requirements for demonstrating the sustainability aspects.</p> <p>CAR10: The discussion in Part IIJ should elaborate on how the project outcomes achieved could be sustained, replicated/ scaled up after its completion. All key areas of sustainability should be addressed under dedicated subheadings, including but not limited to economic, social,</p>	<p>CAR10: Cleared. See Part IIJ, pp. 111-112.</p>

		<p><u>environmental, institutional, and financial.</u> Arrangements through which sustainability would be achieved should be highlighted and should take into account the operation and maintenance of any infrastructure/ installations to be developed.</p>	
	<p>14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Yes. However additional information is required.</p> <p>See Part IIK, pp. 81 & Annex 1. Annex 1 Should be moved to Part IIK among other issues indicated below.</p> <p>CAR11: Move Annex 1 to Part IIK (include table number consistent with the tables sequence in the document). Part IIK discussion should include AF Principles Checklist, risks should be included in list (along with measures to ensure compliance with AF ESP) and could be further elaborated as needed under it. More importantly, include a brief paragraph to indicate the project overall risk</p>	<p>CAR11: Cleared. See Part IIK, pp. 113-119.</p> <p>CR12: Cleared. See p. 113 and CAR11 above.</p>

		category (A,B,C) as per AF classification. CR12: Clarify how to ensure that the USPs will be compliant with the AF ESP requirements.	
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 project/programme budget before the fee?	No. Implementing Entity fee is 8.4%. CAR12: Please revise to 8.5%. Please consider using the Fees Calculator [https://www.adaptation-fund.org/wp-content/uploads/2024/06/IE-and-EE-fees-Calculations-1.xlsx]	CAR12: Cleared. Implementing Entity Management Fee should be <u>at or below</u> 8.5%.
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes. Execution costs constitute 8.7%.	-
Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been	The “Secretariat of the Pacific Regional Environment Programme” is an AF accredited implementing entity.	-

	<p>accredited by the Board?</p>	<p><i>Accreditation status: In Re- accreditation Process Accreditation Expiration Date: 14 March 2024</i></p> <p><i>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.</i></p>	
<p>Implementation Arrangements</p>	<p>1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?</p>	<p>To a large extent. See Part IIIA, pp. 82-84. However, the roles of the implementing and executing entities, among others, if any, need to be discussed and included, and the implementation chart needs to be revised accordingly.</p>	<p>CAR13: Cleared. See revisions in Part IIIA, pp. 121-124.</p>

		<p>CAR13: Revise implementation arrangements discussion to provide details on the roles/ responsibilities of all key entities involved in project implementation, <u>including implementing and executing entities, among others, if any.</u></p> <p>CR13: Revise the project implementation chart in accordance with the above CAR13 and clearly indicate the reporting lines among involved entities. Also provide figure heading and number to this chart.</p>	<p>CR13: Cleared. See on p. 121. Please provide figure number and reflect in list and figures.</p>
	2. Are there measures for financial and project/programme risk management?	<p>To a large extent. See Part IIIB, pp. 84-87. Categorization of the risks and adding others, if any, is recommended.</p> <p>CR14: Revise Table 22, pp. 85-87, to reflect risks under specified categories, financial, institutional, social, environmental, etc., as applicable. Add other risks based on the above revision, if any.</p>	<p>CR14: Cleared. See Part IIIB, pp. 126-128.</p>
	3. Are there measures in place for the management of	<p>Yes. See Part IIIC, pp. 87-89 and Annex 1 (ESMP). <u>However,</u> few issues</p>	

	<p>environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>indicated below need to be addressed.</p> <p>CAR14: In Part IIIC include a dedicated discussion on how the USPs related E&S risks will be managed in compliance with related AF requirements.</p> <p>CR15: Ensure that the E&S risks listed are consistent with those in ESMP of Part IIK AF E&S check list, or vice-versa.</p> <p>CR16: For the project level Grieve Mechanism, please provide specific address coordinates where complaints can be submitted (no need to include the <u>GM process</u> in Part IIIC). Provide the same in the ESMP (Annex 1), along with the details on the GM process.</p> <p>CR17: Indicate the budget allocations for ESMP/ AF ESP implementation, monitoring, compliance and supervision.</p>	<p>CAR14: Cleared. See Part IIIC, p. 131.</p> <p>CR15: Cleared. See bottom of page 131.</p> <p>CR16: Cleared. See top of p. 132.</p> <p>CR17: Cleared. See second paragraph on p. 132.</p>
	<p>4. Is a budget on the Implementing Entity Management Fee use included?</p>	<p>Yes. See Annex 4 (to be moved to Part IIIG). However, further breakdown is recommended.</p>	

		<p>CAR15: Provide breakdown of the IE fee items, especially project implementation and supervision (USD 400,000). Fee may cover corporate activities related to engagement with donor (policy support, portfolio management, reporting, outreach/ knowledge sharing) and project cycle management/ oversight (financial, quality insurance, reports, project completion and evaluation).</p>	<p>CAR15: Cleared. See p. 172 on TC document version and Table 28, p. 112 in clean version.</p>
	5. Is an explanation and a breakdown of the execution costs included?	<p>Yes. As per Annex 4 (Budget) to be moved to Part III G.</p>	-
	6. Is a detailed budget including budget notes included?	<p>Yes. As per Annex 4 (Budget) to be moved to Part III G.</p> <p>CAR16: <u>Move Annex 4 to Part III G.</u></p>	<p>CAR16: Cleared. However, for more clarity and to save space to meet AF document length, remove the table that lists acronyms used in budget notes and corresponding column in budget table, as budget notes are included in the last column of budget table.</p>
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data,	<p>No. Only M&E approach is provided, along some related general information. Part III D, pp. 89-92, states in its first paragraph that “A <i>comprehensive Monitoring and Evaluation (M&E) Plan</i></p>	

	<p>targets and indicators, in compliance with the Gender Policy of the Fund?</p>	<p><i>based on the Results Framework will be developed during the inception phase upon approval of the project".</i> <u>Such plan should be provided at full project stage.</u></p> <p>CAR17: Please clearly define the M&E arrangements/ plan and revise the M&E budget accordingly.</p> <p>CR18: Please briefly discuss the M&E Plan arrangements for addressing the environmental and social risks identified and indicate/ clarify the budget provisions for AF ESP compliance and ESMP implementation and supervision. Also, add title number to the M&E Budget table.</p> <p>CR19: Table 24, pp. 90-91, refers to "delivery partners. Clarify/ specify these delivery partners.</p>	<p>CAR17: Not Cleared.</p> <ol style="list-style-type: none"> 1. Amendments made at See Part IIID, pp. 134-137. However, the proposed budget allocates a total of USD 80,000 for the Mid-Term Meeting and Final Evaluation. This represents 0.95 % of the total project cost. Kindly revise these figures in all relevant sections of the proposal to ensure that evaluation costs (i.e., baseline data report, MTR and Final Evaluation) are between 1 to 2% of the total project cost requested, which is the recommended range for projects of this size (see table 3 in https://www.adaptation-fund.org/wp-content/uploads/2023/10/AFB.EFC_.32.7_Evaluation-Policy-Budget-Implication_clean.pdf). 2. Reference to most mandatory reporting requirements are missing from Part III.D, namely project inception report, project performance reports, project completion summary, and audited financial statement (see https://www.adaptation-fund.org/projects-programmes/project-performance/). Please kindly include them in this section. 3. While the project has USPs and the proposal includes a project-wide ESMP, the development of site-specific ESMPs describing environmental and social risk management measures and a Grievance Redress Mechanism, the M&E plan does not include any reference to ESMP and GRM monitoring during implementation. Please revise the M&E plan to ensure that it addresses management of the environmental and social risks identified, and that dedicated budgetary provisions are made in the

			<p>detailed budget for development of side-specific ESMPs, and implementation of the ESMP and GRM.</p> <p>CR18: Cleared. See CAR17 above and p. 135.</p> <p>CR19: Cleared. See p. 136.</p> <p>The term “Delivery Partners” refers to organisations who may support technical delivery of project activities. These may include non-government organisations and agencies like the UN on WASH programmes, as well as relevant technical departments such as the Ministry of Health and Medical Services, and the Ministry of Women, Youth, Sports and Social Affairs.</p>
	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?	<p>No. See Part IIID, pp. 89-92.</p> <p>CAR18: Please revise the M&E budget to include further breakdown of IE fees for the supervision of M&E function.</p>	<p>CAR18: Cleared. See Table 21, p. 136.</p>
	9. Does the project/programme’s results framework align with the AF’s results framework? Does it include at	<p>Yes. See Annex 2 for project results framework, and Annex 3 for alignment with AF RF and AF Core indicators. However, these Annexes need to be moved</p>	

	<p>least one core outcome indicator from the Fund's results framework?</p>	<p>the body of the proposal, among other related issues indicated below.</p> <p>CAR19: Move Annex 2 to Part III E and give table heading and table number. Also provide numbers for the "Target" percentages as well as gender distribution, as applicable.</p> <p>CAR20: Move Annex 3 to Part III F and provide appropriate Table number that aligns with the numbering sequence in the main document. For outcome 3.1 distribute the amount of USD 416,400 at AF outcomes 2 and 3. Same applies for AF output level alignment (project output 3.1.1).</p> <p>CAR21: Include AF Core indicators (from Annex 3) under Part III E. Present each applicable indicator in a dedicated table and align these tables with the AF guidance provided by the below link. Methodologies for reporting Adaptation Fund core impact indicators (78 kB, DOC)</p>	<p>CAR19: Not Cleared.</p> <ol style="list-style-type: none"> 1. In Part III E, Table 24, please include estimated numbers for all percentages, and the total number based on which the percentage are calculated. 2. Please review the list of proposed indicators to ensure that they are Specific, Measurable, Achievable, Relevant and Time-Bound. For instance, "Type, and number of, repairs and/or replacement work to water supply systems identified by rapid assessments" measures difference dimensions (type and number of), and is therefore not specific enough. 3. Several indicators of the project results framework are measured using "number of households" as a unit. In line with the methodologies for reporting on indicators, all data should be reported in terms of number of people, not number of households. Please review and revise all relevant indicators and associated targets in the project results framework to ensure consistency with AF guidelines, specifically ensuring that all data are expressed in number of people. Remove any reference to "number of households" where applicable. <p>CR20:</p> <ol style="list-style-type: none"> 1. Please kindly check the correlation between the units used in the indicators, baseline and targets columns throughout the framework. For instance, although outcome 1 indicator refers to a "number
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		<p><u>Methodologies for reporting Adaptation Fund core impact indicators (152 kB, PDF)</u></p>	<p>of people", its associated target is expressed in percentage (50%).</p> <ol style="list-style-type: none"> 2. Please review the list of proposed indicators to ensure that they are Specific, Measurable, Achievable, Relevant and Time-Bound. For instance, "Type, and number of, repairs and/or replacement work to water supply systems identified by rapid assessments" measures difference dimensions (type and number of), and is therefore not specific enough. 3. Ensure that baseline and target values are provided for each indicator listed. For instance, only two baseline values are provided for three different indicators under outcome 1.2., and there is no baseline value for some indicators under outcome 2.1. <p>CAR20: Not Cleared.</p> <p>Part III Section F:</p> <ol style="list-style-type: none"> 1. 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). The template currently used in the funding proposal differs from the one included in Annex 5. Please revert to the correct template, ensuring that the original headings remain unchanged. More specifically: <ol style="list-style-type: none"> a. Upper section of the table: i) enter the Project Objective (labelled "Impact in the project results framework) in the "Project Objective(s)" column; ii) add the four

			<p>corresponding Project Objective Indicators listed in the project results framework in the "Project Objective Indicator(s)" column (one is currently missing); iii) for each Project Objective indicator, select only the most appropriate Fund Outcome and enter it in the "Fund Outcome" column; iv) select only the most relevant Fund Outcome Indicator for each Fund Outcome and enter it in the "Fund Outcome Indicator" column; and v) input the grant amount for each Fund Outcome selected in the column "Grant Amount (USD)", ensuring that the total equals the project activity cost, i.e. USD 8,421,200;</p> <p>b. Lower section of the table: i) for each of the eight Project Outcome listed in the project results framework, please enter all corresponding indicators in the "Project Outcome Indicator(s)" column; ii) for each Project Outcome Indicator entered, select only the most relevant corresponding Fund Output and enter it in the "Fund Output" column; iii) choose only the most relevant 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 Fund Output in the "Grant Amount (USD)" column, again ensuring that the total equals the project activity cost of USD 8,421,200.</p> <p>c. Lastly, for consistency, please ensure that the all Fund Outcomes associated with the listed</p>
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			<p>Fund outputs in the lower section of the table are reflected in the upper section of the table.</p> <p>CAR21: Not Cleared.</p> <p>Please replace the table included in the "AF Core Indicator: Number of Direct Beneficiaries" section (part III.E) by the template available on p.10 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. More importantly, ensure that the baseline figures and targets in these tables align with those in the project results framework.</p>
	<p>10. Is a disbursement schedule with time-bound milestones included?</p>	<p>Yes. However, the disbursement schedule needs to be aligned with AF format</p> <p>CR20: Align disbursement schedule (p. 96) with AF format as provided by the following link</p> <p>Disbursement Schedule Template (For fully-developed proposals) (18 kB, XLS)</p>	<p>CR21: Cleared. See Part IIIH, p. 173.</p>



PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category: Regular Project

Country: Republic of Kiribati

Title of Project/Programme: Enhancing the resilience of three outer islands of Makin, Aranuka and Tabiteuea South in Kiribati with improved water security.

Type of Implementing Entity: Regional Implementing Entity

Implementing Entity: Secretariat of the Pacific Regional Environment Programme (SPREP)

Executing Entity: Ministry of Infrastructure and Sustainable Energy (MISE)

Amount of Financing Requested: US\$ 10,000,000

Letter of Endorsement (LOE) signed: Yes No

NOTE: The LOE 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 proposal has been submitted before including at a different stage (concept, fully-developed proposal)

This is the first submission ever of the proposal at any stage

In case of a resubmission, please indicate the last submission date: 1/20/2025

Please note that fully-developed proposal documents should not exceed 100 pages for the main document, and 100 pages for the annexes.

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Acronyms

ADB	Asian Development Bank
AF	Adaptation Fund
BOM	Australian Bureau of Meteorology
CFD	Climate Finance Division, Ministry of Finance
CLTS	community-led total sanitation
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DRP	drought response plan
ENSO	El Niño–Southern Oscillation
ESMP	environmental and social management plan
ESS	environmental and social safeguards
FWSWI	freshwater-saltwater interface
GCF	Green Climate Fund
GDP	gross domestic product
GEDSI	Gender Strategy and Action Plan
GHG	greenhouse gas
GIS	geographic information system
GRM	grievance redress mechanism
ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
KDP	Kiribati Development Plan
KILGA	Kiribati Local Government Association
KIRIWATSAN	Kiribati Water and Sanitation Project
KM	knowledge management
KMS	Kiribati Meteorological Service
KV20	Kiribati Vision 2020
LDC	least developed country
LiDAR	light detection and ranging

M&E	monitoring and evaluation
MDG	Millennium Development Goal
MFAT	New Zealand Ministry of Foreign Affairs and Trade
MIA	Ministry of Internal Affairs
MISE	Ministry of Infrastructure and Sustainable Energy
MELAD	Ministry of Environment, Lands and Agricultural Development
MoH	Ministry of Health
MWYSA	Ministry of Women, Youth and Social Affairs
NGO	nongovernmental organisation
OB	Office of the President
OD	open defecation
ODF	open defecation free
OIWFP	Outer Islands Food and Water Project
PACCSAP	Pacific-Australia Climate Change Science Adaptation Planning project
PIC	Pacific Island country
PMU	Project Management Unit
PPR	project performance report
PSC	Project Steering Committee
RERF	Kiribati Revenue Equalization Reserve Fund
SDG	sustainable development goal
SLR	sea level rise
SPCZ	South Pacific Convergence Zone
SPREP	Secretariat of the Pacific Regional Environment Programme
SST	sea surface temperature
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UV	ultraviolet
WASH	Water, sanitation, and hygiene
WHO	World Health Organisation

Project / Programme Background and Context:

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

Located in the Central Pacific, the Republic of Kiribati is one of the smallest, most remote, geographically dispersed and climate vulnerable Least Developed Countries (LDCs). Comprised of 33 low-lying atolls and reef islands grouped into the Gilbert, Phoenix, and Line Islands, These far-flung atolls are mostly less than two metres above sea level, lack surface water and fertile soil, and have fragile groundwater systems.

As an LDC, Kiribati experiences widespread inequality, hardship, and incidences of extreme poverty. With high population growth and increasing urbanisation, additional pressures on water, sanitation, and housing are intensifying. Kiribati has the lowest access to clean water and sanitation in the Pacific region ¹. It's small economy is highly exposed to external shocks and debt stress, and is strongly reliant on development assistance, fishing licence revenues

¹ ADB, 2021. Pacific Urban Update – Kiribati Profile; UNICEF & WHO, 2023. Joint Monitoring Programme (JMP) Report

and overseas remittances. Kiribati is particularly vulnerable to the impacts of climate change and rising sea levels².

Water supply issues in Kiribati are among the most complex in the world, and are prioritised in the Government’s Kiribati Vision 2020 (KV20)³. Water resources are limited, not properly mapped, vulnerable, and scattered, and must be carefully managed. Households in the outer islands depend heavily on limited fresh groundwater lens and rainwater harvesting for daily

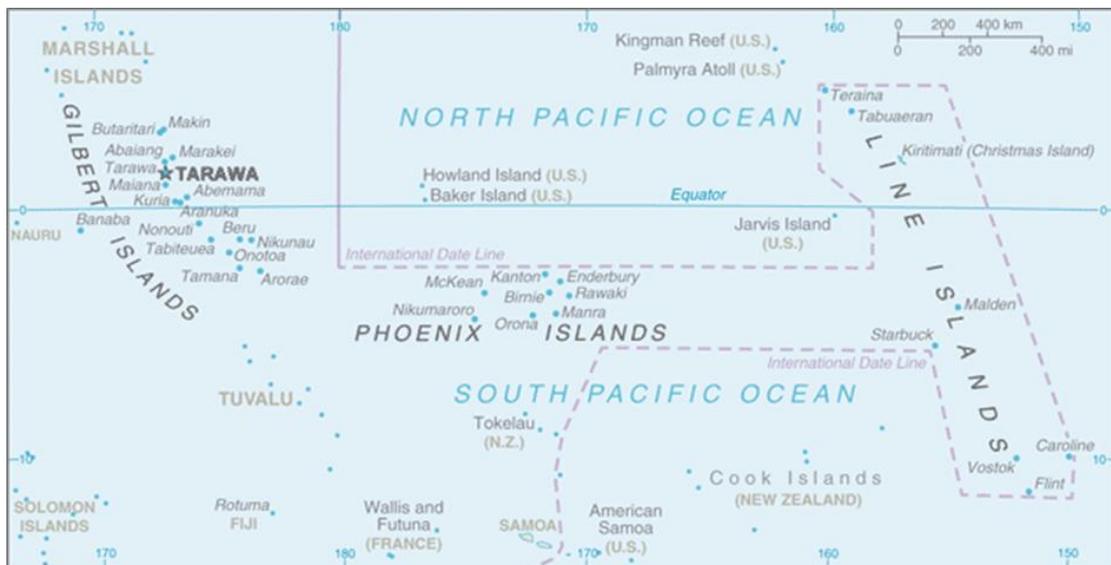


Figure 1. Map of Republic of Kiribati

water needs—including drinking, cooking, and washing. However, both sources are critically affected by weather variability and extreme sea-level events, which impact water quality and increase health risks.

Kiribati is among the Pacific Island countries (PICs) that did not attain the MDG sanitation target to “halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation”. According to UNICEF’s Joint Monitoring Programme (JMP), in 2022, only ~15% of the population had access to safely managed drinking water, showing only a slight improvement from 14.7% in 2020. The proportion using at least basic water services rose to approximately 78%, up from 59.87% in 2000. Sanitation remains a pressing issue: UNICEF reports that only ~45% of households currently have access to improved sanitation services. The under-5 mortality rate remains elevated at 56.4 per 1,000 live births as of 2022, still among the highest in the Pacific region and more than double the regional average⁴ with high level of stunting

The World Health Organisation’s (WHO) most recent analysis highlights the need for water and sanitation solutions in the Pacific that are sustainable, safe, and non-damaging to fragile water resources. It also stresses the importance of empowering small, isolated communities

² UNSDG, <https://unsdg.un.org/un-in-action/kiribati>, Accessed 10 November 2022

³ <https://www.mfed.gov.ki/sites/default/files/KV20%20VISION.pdf>

⁴ UNICEF JMP 2023; WHO Child Mortality Data 2022

and strengthening the capacity of Pacific Island governments, utilities, and communities to manage services sustainably⁵.

Although contributing very little to global climate change, Kiribati remains highly vulnerable. Under a low emissions pathway, Kiribati may experience a temperature increase of 0.9°C, while a high emissions scenario may bring a 1.5°C rise by 2050. Sea level rise could reach between 0.55 and 1.0 metres by 2090, presenting severe risks to coastal populations living only marginally above sea level.

With these challenges in mind the proposal focuses on (i) repair and rehabilitation of existing damaged/unused water systems; (ii) construction and installation of new infrastructure to adapt to future climate impacts; (iii) strengthening government capacity and capability in water resource management and use; (iv) strengthening coordination mechanisms and community participation in water resource management; and (v) undertaking outreach, capacity building and knowledge management.

Project - focus islands

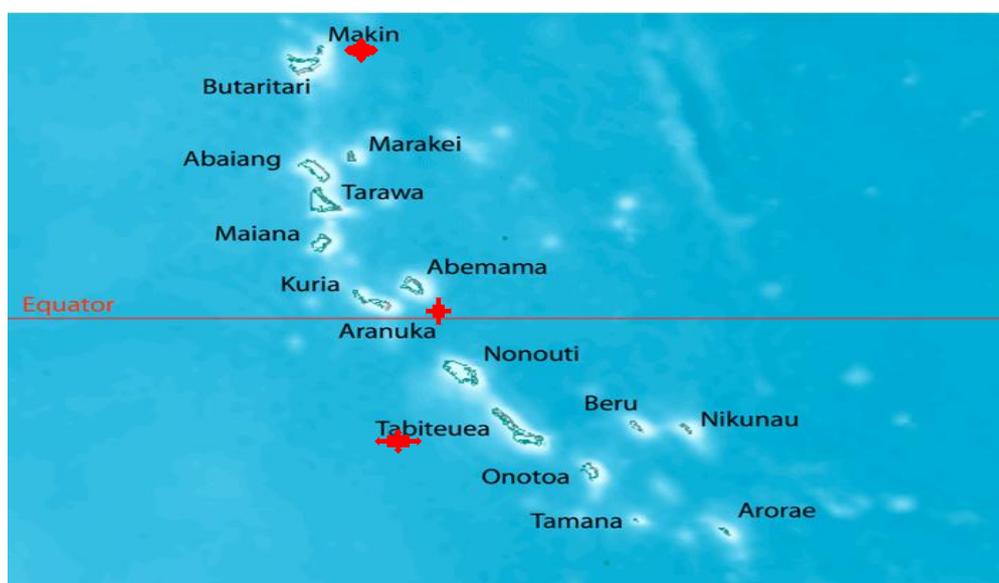


Figure 2. Map of the target islands of Makin, Aranuka and Tabiteuea South

This project focuses on three outer islands – **Makin, Aranuka and Tabiteuea South** (Tab South) as endorsed by the Government of Kiribati Cabinet in November 2021. The project will focus on all communities in each of the islands which have been prioritised for water security measures.

Table 1 indicates the population and number of households to benefit in each of the three target islands for water security interventions under the project. While coverage aims to be inclusive across the islands, implementation will be phased and tailored to each community's

⁵ Source: WHO, UNICEF, SPC and UN Habitat. 2015. Sanitation, drinking water and health in Pacific Island countries: 2015 update and future outlook.

https://iris.wpro.who.int/bitstream/handle/10665.1/13130/9789290617471_eng.pdf

needs and capacities. The project will ensure equitable access to improved water supply systems and related capacity-building activities across all listed communities

Table 1. Target islands population and number of households

Island	Total HH	HH size	Population			Population by Age Group			Median Age
			Male	Female	Total	0-14 years	15-64 years	65+ years	
Makin	371	5	968	946	1,914	827	997	90	15.4
Aranuka	259	4	624	597	1,221	475	692	54	19
South Tabiteuea	279	5	674	682	1,356	523	763	70	18.9
TOTAL	909	5	2266	2225	4,491	1825	2452	214	18.9

Data Source: SPC, Kiribati Census Atlas 2022

Makin

Makin is the second smallest inhabited island in the Gilbert Group, situated approximately 190 kilometres north of Tarawa (Latitude 3° 20' N / Longitude 172° 59' E). It consists of five main islets arranged in a north-south line, with Makin and Kiebu being the largest and inhabited. The total land area is 7.89 km², with Makin Islet alone covering 6.7 km². Like other atolls, it features sandy, porous soils and is on average two metres above sea level.

The island formerly had a small lagoon, now largely filled due to the construction of a causeway and a bridge in the late 1990s, affecting water circulation.

Makin experiences a humid equatorial climate with high temperatures year-round (28–31°C) and consistent ocean breezes. Rainfall is relatively abundant compared to southern islands, though increasingly affected by climatic variability. Kiebu village of Makin ranked as 'High vulnerability' rating score of 4, whereas Makin village of Makin Island ranked as 2, i.e., medium vulnerability as per the National Drought Map.

Population: The 2020 census recorded a population of 1,914, with 1,530 residing on Makin Islet and 384 on Kiebu Islet, together representing approximately 1.6% of the national population. Although the 2005 census showed a temporary spike to 2,385 due to celebratory returns, the population has otherwise remained stable—from 1,798 in 2010 to 1,914 in 2020. Makin has 388 households, with an average household size of five persons⁶

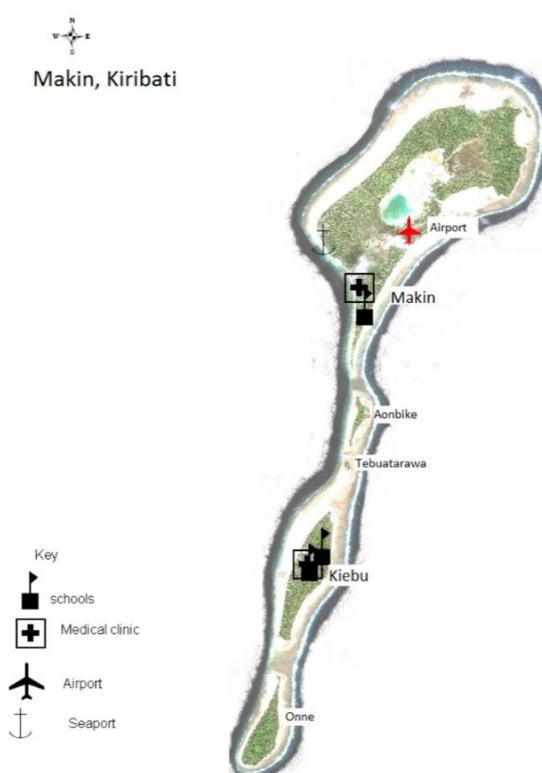


Figure 3. Map of Makin Island

⁶ Kiribati Census Atlas 2022, NSO.gov.ki

Aranuka

Aranuka is a lagoonal atoll located just north of the equator (Latitude 0°09' N; Longitude 173°35' E) in the Central Gilbert Islands. It comprises four villages on the mainland—Buariki Meang, Buariki Maiaki, Kauake, and Baurua—and one village on the islet of Takaeang. The total land area of Aranuka is 11.6 km².

Aranuka has two primary seasons: a dry season from March to August, and a wet season from September to February. Recent anecdotal evidence from community consultations indicates changing climate patterns, particularly in rainfall distribution and timing. According to the National Drought Plan, in Aranuka, Takaeang village ranked 4 – high high vulnerability, Buariki village 2- medium vulnerability and Baurua village 1- low vulnerability.

Population: The 2020 Census recorded a total population of 1,221, or approximately 1% of the national population (Table 2). The island had 250 households, averaging 4.9 persons per household.

Over half the population resides in Buariki village, with the remainder spread across Takaeang and Baurua⁷. Aranuka also has a youthful population, with approximately 39% under the age of 15. Over the longer-term since 1985, the population has been relatively stable (refer Figure 5). Household numbers in Aranuka total 250 with an average of 4 people per household. Over half of the population reside in Buariki with the remaining residents distributed across the islet of Takaeang and Baurua.

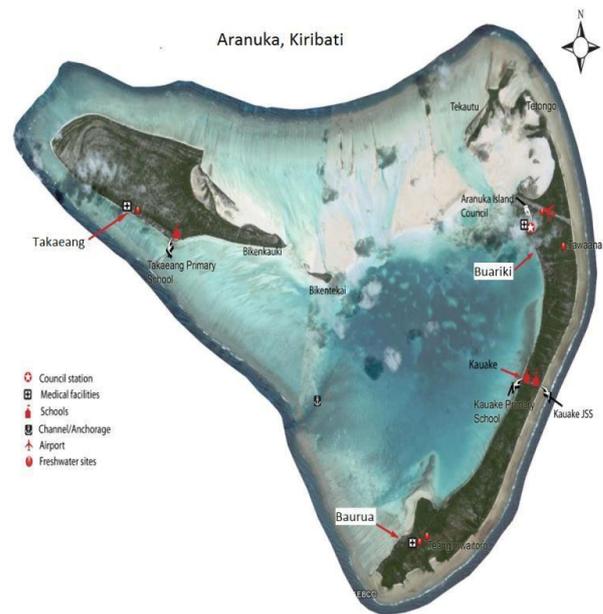


Figure 4. Map of Aranuka island

⁷ 2022 Census data

Tabiteuea South

Tabiteuea is divided into North and South (figure 6), with the southern portion encompassing the villages of Tewai, Taungaeaka, Buariki, Nikutoru, Katabanga, and the islet of Takuu—the southernmost settlement. These islets are connected by seven causeways stretching from Tewai to Takuu. Uninhabited islets are used for copra production.

Located in the southern Gilbert Islands, Tabiteuea South is among the driest parts of Kiribati and regularly experiences droughts. Freshwater is typically located inland, and like other coral atolls, the terrain is sandy, porous, and averages two metres above sea level. In Tab South, Taku village ranked as 4 - high vulnerability; whereas, In Tab South, Tewai, Taungaeaka, Buariki, Nikutoru and Katabanga villagers ranked as 3- “medium to high vulnerability”.

Reliable rainfall data is limited due to the lack of monitoring equipment on outer islands. However, climate observations show that Tabiteuea South, influenced by El Niño and La Niña cycles, tends to receive low and variable rainfall year-round, with dry conditions intensifying during El Niño events. Rain and wind usually increase between October and March.

Population: As of the 2020 Census, Tabiteuea South had a total population of 1,356, with 279 households and an average household size of 5. Children under 15 years make up approximately 43% of the population

Economic Context

Kiribati faces significant economic and service delivery challenges, amplified by its extreme vulnerability to climate change and geographic isolation. Its highly dispersed population, limited arable land, narrow economic base, and the dual challenge of outer island sparsity and urban overcrowding (particularly in South Tarawa), place immense strain on public service delivery and sustainable development⁸.

Kiribati relies heavily on fishing revenue and remittances from citizens employed abroad, mainly seafarers⁹. Fisheries account for approximately 26.1% of GDP, followed by government consumption (25.7%) and construction (20.7%), with the latter two primarily funded by fisheries revenue and donor support. The public sector remains the dominant economic driver, accounting for more than half of Kiribati’s estimated GDP¹⁰



Figure 5. Map of Tabiteuea South

⁸ Webb, J., 2019, *Kiribati: 2019 economic survey*

⁹ The sale of fishing licenses with revenue from access fees increased from US\$29.1 million in 2011 or 17 percent of GDP to US\$197.8 million in 2015 or 88 percent of GDP (Webb, J., 2019, *Kiribati: 2019 economic survey*)

¹⁰ MFED National Accounts Report

A UNDP poverty study reported the highest incidence of basic needs poverty in South Tarawa—affecting 18.3% of households and 24.2% of the population—the highest rate in the Pacific. Up to 66% of the national population remains at risk of falling into extreme poverty, a risk worsened by climate change impacts on freshwater, sanitation, health, and infrastructure.

With a Gini coefficient of 0.39, income inequality is moderate, but women are disproportionately affected. Women head nearly one in five households and represent 49% of those living below the poverty line¹¹. This is contributing to increased hardship in the community and inability to meet higher health service costs, which are borne by women.

Subsistence activity remains one of the most important economic pillars in the project's three target outer islands. In Makin, the equivalent cash value of subsistence food, materials and rent accounts for 46% of total household income¹², whilst only 39 percent of households on Tabiteuea South receive any money from wages or salaries.

Common subsistence activities across Makin, Aranuka and Tabiteuea South include fishing, toddy cutting, cultivation of coconut, pandanus, breadfruit and giant swamp taro (bwabwai), mat weaving, thatching, firewood gathering, and house construction. Surpluses are typically shared with extended family or sold, though income-generating opportunities are often constrained by poor infrastructure and limited access to markets.

Despite growing reliance on imported goods and the increasing importance of cash, few households have the means or networks to consistently monetise surplus production.

Gender roles further shape income participation. In this predominantly patriarchal society, women shoulder the majority of unpaid reproductive and domestic labour, including childcare and elder care. Paid employment or income generation is often layered on top of these responsibilities¹³.

Commercial activity is minimal. Aranuka has seen limited economic stimulus through copra and seaweed production. Copra output declined from 450 metric tons in 1992 to just 89 metric tons in 2010, largely due to the 2010 drought that severely impacted coconut.

Formal employment is largely limited to Island Councils. In 2020, Makin's Council employed 115 staff and Aranuka's employed 30. However, the 2020 Census shows urban labour force participation (15.1%) significantly outweighs rural participation (6.3%), underscoring a scarcity of job opportunities outside South Tarawa¹⁴. As shown in Figure 7, there are more people in the urban areas (15.1%) compared to the rural areas (6.3%) seeking a limited number of jobs.

¹¹ GCF, 2019. FP091: South Tarawa Water Supply Project, GCF.

¹² Household Expenditure and Income Survey, 2006.

¹³ Secretariat of the Pacific Community, 2022. Island Diagnostic Analysis Report for Kiribati. GEF International Waters Ridge to Reef Program. Secretariat of the Pacific Community.

¹⁴ 2010 Census data

LABOUR FORCE INDICATORS*	DIVISION							
	URBAN	RURAL	SOUTH TARAWA	NORTHERN	CENTRAL	SOUTHERN	LINE IS. & PHOENIX	TOTAL
Population aged 15+	44,256	27,748	39,908	11,457	4,709	9,505	6,425	72,004
Labour force status								
Employed	16,600	13,510	14,668	4,789	2,486	4,991	3,176	30,110
Unemployed	2,954	901	2,659	476	118	274	328	3,855
<i>Unemployment rate</i>	<i>15.1</i>	<i>6.3</i>	<i>15.3</i>	<i>9.0</i>	<i>4.5</i>	<i>5.2</i>	<i>9.4</i>	<i>11.3</i>
Outside labour force	24,702	13,337	22,581	6,192	2,105	4,240	2,921	38,039
Youth (15–24 years) not in education, employment or training	5,813	3,094	5,300	1,575	425	946	661	8,907

* ILO derived calculations based on persons aged 15+ living in private HHs.

Figure 6. Labour Force Indicators in Kiribati (extracted from SPC Kiribati Census Atlas 2022)

To respond to these challenges, the Government of Kiribati is pursuing a whole-of-island approach to climate resilience and sustainable development. This strategy seeks to strengthen environmental, social, and economic sustainability across all levels. Given the country's limited domestic revenue, external donor support remains critical to financing adaptation responses.

The estimated economic cost of climate risks—focused only on impacts to the coastal zone and water resources—equates to approximately 35% of GDP. This includes an estimated US\$7–13 million per year in coastal impacts and US\$1–3 million annually in water-related losses¹⁵

Climate Change Context

*Current climate*¹⁶

Kiribati has a hot, humid tropical climate, with temperatures closely tied to surrounding ocean conditions. Average annual temperatures are stable year-round, typically fluctuating no more than 1°C across seasons. At Tarawa, maximum temperatures have risen at a rate of 0.13°C per decade since the 1950s (BOM and CSIRO, 2014).

Rainfall patterns vary significantly across islands. At Tarawa, the driest period is from June to October, while at Kiritimati (2,000 km east), the wet season extends from January to June. Rainfall is influenced by the South Pacific and Intertropical Convergence Zones.

Rainfall data shows a high degree of variability across Kiribati, with a clear increasing trend in wet season rainfall in Kiritimati, but no consistent trend in Tarawa. Variation has been substantial year-to-year at both sites since the 1940s. ENSO-related disruption to Pacific rainfall has already intensified and is projected to worsen this century, even with warming limited to 2°C (Cai et al., 2015; Power et al., 2017; Wang et al., 2017).

ENSO is a key driver of climate variability, influencing both temperature and rainfall extremes. El Niño years typically bring warmer, wetter conditions, while La Niña events are associated with drought. In the wettest years, Tarawa has received over 4,000 mm of rainfall; in the driest, as little as 150 mm.

¹⁵ Webb, J., 2019, Kiribati: 2019 economic survey

¹⁶ PACCSAP 2015

According to Liu et al. (2017), climate change is driving increased variability in the Central Pacific ENSO, which may result in more frequent and intense extremes.

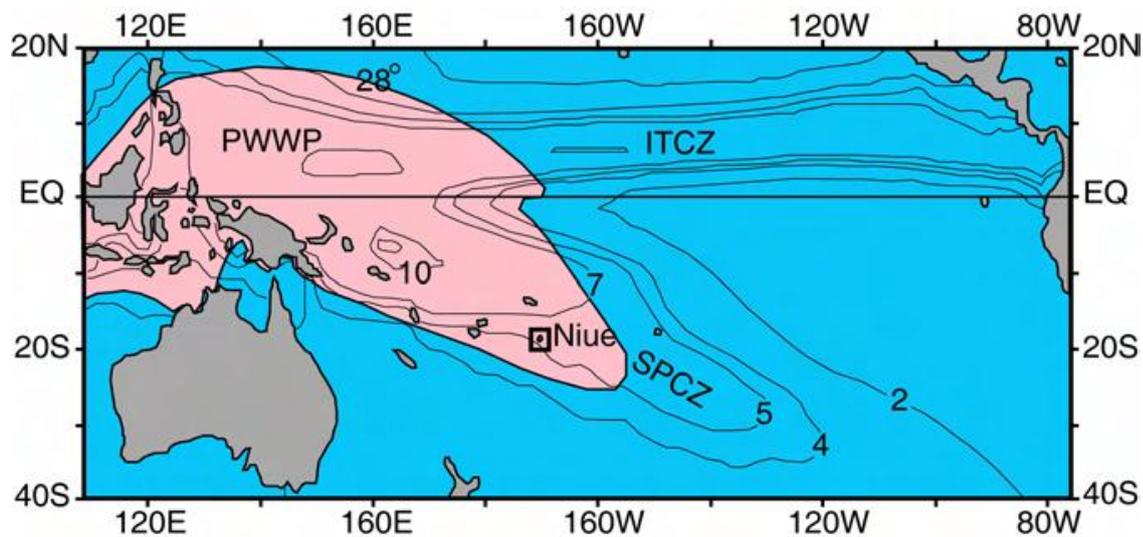
Temperature

Kiribati has a hot, humid tropical climate, with air temperatures very closely related to the temperature of the oceans surrounding the small islands and atolls. Across Kiribati, the average temperature is relatively constant year-round. Changes in the temperature from season to season are no more than about 1°C.

Rainfall

Rainfall patterns are highly variable across the islands. At Tarawa, the driest six-month period typically starts in June, with the lowest rainfall in October, while the wet season spans November to April. Kiritimati Island, located 2,000 km east, has its wet season from January to June and generally receives less rainfall than Tarawa. These variations are driven largely by the positioning and behaviour of the South Pacific Convergence Zone and the Intertropical Convergence Zone – see figure 7

Figure 7. South Pacific Convergence Zone and the Intertropical Convergence Zone



Year-to-year variability

Notable drought periods include 1971, 1985, 1998–1999, 2007–2009, and most recently, from late 2021 to mid-2022. The 2021–2022 drought, driven by persistent La Niña conditions, led the Government of Kiribati to declare a State of Disaster in June 2022 due to prolonged low rainfall, brackish groundwater, and widespread water contamination ¹⁷

Historical droughts have had far-reaching impacts, including loss of food crops, salinisation of water lenses, widespread yellowing and die-off of vegetation, and dramatic drops in copra production. For example, during the 2007–2009 drought, outer island economies heavily reliant on copra experienced major economic losses. In Abemama, the 1970–71 drought led to complete loss of coconut palms in Kenna village.

¹⁷ [Pacific: Drought - May 2022 | ReliefWeb](#)

Climate change is amplifying these extremes. Long-term meteorological records show that annual and seasonal maximum and minimum temperatures have increased steadily in Tarawa since the 1950s, with maximum temperatures rising at 0.13°C per decade. These trends are consistent with global climate patterns

*Changing climate*¹⁸

Annual and seasonal maximum and minimum temperatures have increased steadily in Tarawa since the 1950s, with maximum temperatures having increased at a rate of 0.13°C per decade. These temperature increases are consistent with the global pattern of warming.

Rainfall trends remain uncertain. Kiritimati has shown an increasing trend in wet season rainfall, but no consistent pattern is evident in Tarawa. Overall, rainfall remains highly variable from year to year at both sites since the 1940s. The risk of major ENSO-driven rainfall disruption is increasing, and even if global warming is kept to 2°C, more intense ENSO events are expected (Cai et al., 2015; Power et al. 2017; Wang et al. 2017). Climate change will thus bring a more extreme and unpredictable climate to the communities in Kiribati.

Ocean acidification and sea-level rise further increase vulnerability. Since 1993, satellite data shows sea levels have risen across Kiribati by 1–4 mm per year, exceeding the global average of 2.8–3.6 mm. These rates are expected to continue or accelerate. Sea-level rise is compounded by short-term ENSO-driven variability, storm surges, and tidal anomalies.

Ocean acidification, caused by increased CO₂ absorption, reduces the availability of carbonate ions essential for coral growth and shellfish development. This degrades reef structures critical to biodiversity, coastal protection, and livelihoods, particularly as coral bleaching becomes more frequent

Taken together, these trends indicate that Kiribati’s communities face an increasingly volatile, extreme, and unpredictable climate — making urgent adaptation measures essential.

Future climate¹⁹

Projections for all GHG emissions scenarios indicate that the annual average air temperature and sea-surface temperature will increase in the future in Kiribati. By 2030, under a very high emissions scenario (so-called ‘business as usual’), this increase in temperature is projected to be in the range of 0.6–1.2°C (median 0.8°C), relative to the 1986-2005 average. Later in the century the range of projected temperature increase under the different scenarios broadens. By 2050, median level increases are 0.9°C to 1.5°C and 0.9°C to 2.3°C by 2070. Increases in average temperatures will also result in a rise in the number of temperature extremes, hot days and warm nights, and a decline in cooler weather (see Table 3 for the Gilbert Islands).

¹⁸ PACCSAP, 2015

¹⁹ PACCSAP, 2015 and CSIRO, 2021 – “NextGen” Projections for the Western Tropical Pacific: Current and Future Climate for Kiribati

Table 2. Projected changes in the annual average surface air temperature for Gilbert Islands

Scenarios	2020 (°C)	2050 (°C)	2070 (°C)	2090 (°C)
Very low emissions scenario	0.4 – 1.0	0.6 – 1.5	0.5 – 1.4	0.6 – 1.5
Low emissions scenario	0.4 – 1.2	0.6 – 1.7	0.8 – 2.1	1.1 – 2.5
Medium emissions scenario	0.4 – 1.0	0.7 – 1.6	0.9 – 2.3	1.1 – 2.9
Very high emissions scenario	0.6 – 1.2	1.0 – 2.2	1.5 – 3.5	2.1 – 4.5

Note: Values represent 5-95% of the range of the models and are relative to the period 1986-2005

Rainfall is projected to increase across Kiribati throughout the 21st century, with greater increases in the Gilbert Islands. Extreme rainfall days are likely to occur more often and more intense. Droughts are projected to become less frequent throughout this century. However, significant uncertainty remains, and not all models agree. The outcome will depend in part on the strength of equatorial warming.

Sea level is expected to continue to rise in Kiribati. By 2050, under a very high emissions scenario, this rise in sea level is projected to be in the range of 16–33 cm (see Table 4 for the Gilbert Islands). The sea-level rise combined with natural year-to-year changes will accentuate the impact of storm surges and coastal flooding. As there is still much to learn, particularly how large, melting ice sheets such as Antarctica and Greenland contribute to sea-level rise, scientists warn larger rises than currently predicted could be possible. As the Antarctic ice sheet is now projected to contribute more sea level rise than previously thought, updated projections by 2090 under high emissions are 55-100 cm, with not much lower levels for low emission pathways.

Table 3. Sea-level rise projections for Gilbert Islands²⁰

Scenarios	2020 (cm)	2050 (cm)	2070 (cm)	2090 (cm)
Very low emissions scenario	7 - 17	13 - 29	18 - 44	23 - 59
Low emissions scenario	7 - 16	13 - 30	20 - 47	27 - 66
Medium emissions scenario	7 - 16	13 - 29	19 - 46	28 - 67
Very high emissions scenario	7 - 17	16 - 33	26 - 56	38 - 87

Under all four emissions scenarios, the acidity level of sea water in the Kiribati region will also continue to increase over the 21st century, with the greatest change under the very high emissions scenario. The impact of increased acidification on the health of reef ecosystems is likely to be compounded by other stressors including coral bleaching, storm damage and fishing pressure.

To summarise, Figure 8 illustrates future climate conditions in Kiribati depending not only on global GHG emissions, but also on the possibility of stronger equatorial warming. The warm

²⁰ Note: Values represent 5-95% of the range of the model results and changes are relative to the average of the period 1986-2005

dry and hot wet scenarios, or anywhere in between, are possible. Planning responses should accept that both scenarios are plausible, pending further research.

	Scenario 1 Weaker equatorial warming	Scenario 2 Stronger equatorial warming
Low emissions (RCP2.6)	<p>Warmer & drier</p> <ul style="list-style-type: none"> • Annual temperature: +0.8°C • Annual rainfall: 0 to -5% • More heatwaves • Less humidity • More solar radiation • Heavier rainfall events • Sea level rise: 17-29 cm 	<p>Much warmer & wetter</p> <ul style="list-style-type: none"> • Annual temperature: +1.0-2.0°C • Annual rainfall: +30% • More heatwaves • More humidity • Less solar radiation • Much heavier rainfall events • Sea level rise: 17-29 cm
High emissions (RCP8.5)	<p>Much warmer & drier</p> <ul style="list-style-type: none"> • Annual temperature: +1.0°C • Annual rainfall: 0 to -5% • More heatwaves • Less humidity • More solar radiation • Heavier rainfall events • Greater tropical cyclone impacts • Sea level rise: 20-36 cm 	<p>Hotter & much wetter</p> <ul style="list-style-type: none"> • Annual temperature: +2.1°C • Annual rainfall: +60% • Many more heatwaves • More humidity • Less solar radiation • Much heavier rainfall events • Greater tropical cyclone impacts • Sea level rise: 20-36 cm

Figure 8. Climate Projections for Kiribati according to plausible scenarios

Climate change impacts and habitability of low-lying atolls²¹

Kiribati’s long-term habitability is increasingly at risk from a convergence of climate-related hazards impacting its environment, economy, and communities. These risks stem from multiple interrelated climate stressors:

- Increasingly extreme ENSO events and potential shifts in the South Pacific Convergence Zone (SPCZ) are intensifying rainfall variability, increasing drought frequency, and worsening extreme weather (CSIRO et al. 2015).
- Rising sea surface temperatures (SSTs) and ocean acidification are degrading coral reef ecosystems vital for shoreline protection and food security (Lenton et al. 2018; Evenhuis et al. 2015)
- More extreme temperature events are placing pressure on food production, water supply, and public health (BOM and CSIRO 2014; WHO 2015).
- Interactions between sea-level rise and wave dynamics, including swells from distant storms, are causing more frequent and severe over-wash and inundation, threatening low-lying settlements (Storlazzi et al. 2018).

²¹ PACCSAP, 2015

The IPCC finds that “extreme events superimposed on a rising sea level baseline are the main drivers that threaten the habitability of low-lying islands as sea levels continue to rise” (Nurse et al. 2014). Up-to-date research points to damaging annual wave-driven over-wash events by 2050, particularly under higher sea level rise scenarios (Storlazzi et al. 2018). This has urgency for low lying Pacific atolls such as Kiribati as their population is entirely coastal, and inland retreat to higher areas is not an option.

Damage from over-wash and inundation will affect infrastructure, crops, gardens, and fresh groundwater, and will be too frequent for groundwater lens recovery. Where human activities have significantly stressed the coral reef ecosystems or the resources that underpin food and water security, environmental thresholds for habitability may be passed earlier due to the effects of climate change.

Rising temperatures increase water demand, while erratic rainfall and storm surges damage water infrastructure. Rising sea levels and saltwater intrusion threaten groundwater quality (White and Falkland 2010; Kinrade 2014). Storm-surge or wave-driven over-wash is now recognised as a growing risk to groundwater lenses with rising sea levels, and research shows that lens recovery may take many months or years (Terry and Falkland 2010). . A PACCSAP study found that Bonriki’s freshwater lens would take 2–5 years to recover after inundation, depending on rainfall. Overuse and drought further delay recharge (Mack 2015).

Even where landmass persists or expands due to sediment movement, intensified erosion, shoreline instability, and infrastructure damage continue to undermine resilience.

Adaptation efforts remain limited. Urgent action is needed to build local capacity, improve governance, and implement integrated, long-term responses. Delays will compound risks and costs for vulnerable communities.

Water Resources

Water supply issues in Kiribati are amongst the most complex in the world. The vulnerable, limited, and scattered water resources supply more than 160 villages and two densely populated and growing urban areas²². In most islands, freshwater is limited, demand is increasing, and the quality is deteriorating under the pressure of human activities, and the uncontrolled presence of animals. Droughts are common and freshwater is often scarce, so water resources must be protected and used carefully²³.

The absence of lakes and rivers makes Kiribati dependent on rainfall to maintain supplies of freshwater for the health and well-being of its citizens. Freshwater supplies to outer island households are already a growing cause for concern that the Government is eager to address²⁴. Households rely on groundwater and rainwater harvesting to provide for their daily water needs including drinking, cooking, and washing²⁵.

²² National Water Resources Policy 2008, Government of Kiribati

²³ Ibid

²⁴ Kiribati has one of the highest rates of under-five mortality and diarrhoea in the region, mostly affecting children. Water-borne diseases are increasingly common, especially among the elderly, the young and other susceptible population groups. Diarrhoeal diseases are endemic, and outbreaks of typhoid occur annually (National Sanitation Policy 2010).

²⁵ Of 11 outer islands in the Gilbert Island chain, 3,466 households rely on wells or groundwater and 950 households rely on rainwater for their main source of drinking water (2015 Census).

Thin lenses of fresh groundwater floating over seawater comprise the major source of fresh water in Kiribati. Groundwater is extremely vulnerable to frequent ENSO related droughts, and salinization due to storm surges and sea-level rise²⁶. The quality of the groundwater lens with respect to salinity mainly depends on precipitation and the width of the land. Climate change will affect precipitation and the width of the land through erosion and accretion and these, in turn, will determine the availability of the lens. The northern atolls have higher rainfall than those in the south, but the more southerly islands tend to be wider. Additional characteristics of atolls that affect the quality of the groundwater lens include geophysical and biological aspects of land formation which vary from site to site.

Some villages are located on sites that do not have groundwater lenses, either because the land is too narrow, or the water lens is very polluted as is the case on South Tarawa. On outer islands various water systems have been tried in the past. The most common water supply technology is currently solar pumps and overhead tanks near the villages. The costs of installing and maintaining such systems may limit their application to certain villages and atolls. Furthermore, many i-Kiribati in the outer islands live predominantly in traditional houses with thatched roofs, so that they are not used to collecting rainwater for their domestic water supply, and rainwater harvesting, and storage remains an underutilized option to provide access to safe drinking water²⁷.

Universal access to safe drinking water is a fundamental need and human right. The World Health Organization (WHO) states between 50 and 100 litres of water per person per day are needed to ensure that most basic needs are met, and few health concerns arise. Whilst data are not available to ascertain overall water access based on litres per day per person, UNICEF data highlights the continued gaps in accessing clean, safe drinking water. For Kiribati, the proportion of the population using basic drinking water services was 62 percent in 2019, with only 14 percent using improved drinking water sources free from faecal and priority chemical contamination, equating to 14 percent of the proportion of the population using safely managed drinking water services (Tables 5 and 6).

²⁶ UNICEF 2014, 'Harvesting Rainwater to Improve Access to Safe Drinking Water and Adapt to Climate Change: Spotlight on Kiribati'.

²⁷ UNICEF 2014, 'Harvesting Rainwater to Improve Access to Safe Drinking Water and Adapt to Climate Change: Spotlight on Kiribati'.

Table 4. Proportion of population with access to water services (extracted from SPC Kiribati Census Atlas 2022)

SOURCE OF DRINKING WATER	SOUTH TARAWA	ALL OTHER IS.	URBAN*	RURAL	NUMBER OF HHS
Piped into dwelling	65%	35%	84%	16%	788
Piped into compound, yard or plot	71%	29%	80%	20%	5,652
Public tap/standpipe	63%	37%	65%	35%	2,500
Piped to neighbour	58%	42%	63%	37%	1,257
Protected well	24%	76%	31%	69%	4,039
Unprotected well	24%	76%	27%	73%	7,000
Rain water with tank with tap inside	86%	14%	90%	10%	556
Rain water with tank with tap outside	82%	18%	84%	16%	2,731
Communal tank	21%	79%	26%	74%	2,478
Tanker truck	73%	27%	96%	4%	158
Bottled water	94%	6%	94%	6%	412
Desalinated water	56%	44%	56%	44%	34
Public Utilities Board water	89%	11%	96%	4%	449
Rainwater from neighbour	57%	43%	74%	26%	99
Other sources of drinking water	44%	56%	53%	47%	107
Total HHs in private dwellings					20,354

Table

5.

National Trends in Population Access to Water and Sanitation Services (2016–2019)

Indicator	Percentage of Population by Year			
	2016	2017	2018	2019
Proportion of health care facilities with basic water services	65.48	65.48	65.48	65.48
Proportion of health care facilities with limited water services	0.65	0.65	0.65	0.65
Proportion of health care facilities with no water service	33.87	33.87	33.87	33.87
Proportion of population using at least basic drinking water services	74.70	75.54	76.36	77.17
Proportion of population using improved drinking water sources available when needed	48.64	49.20	49.76	50.32
Proportion of population using basic drinking water services	61.10	61.67	62.22	62.76
Proportion of population using improved drinking water sources	77.36	78.53	79.70	80.88
Proportion of population using limited drinking water services	2.66	2.99	3.34	3.70
Proportion of population using non-piped improved drinking water sources	41.36	41.85	42.31	42.77
Proportion of population using piped drinking water sources	35.99	36.68	37.39	38.10
Proportion of population using improved drinking water sources located on premises	57.67	57.27	56.84	56.37
Proportion of population using of improved drinking water sources free from faecal and priority chemical contamination	13.60	13.87	14.14	14.42
Proportion of population using safely managed drinking water services	13.60	13.87	14.14	14.42
Proportion of population using surface water	0.00	0.00	0.00	0.00
Proportion of population using unimproved drinking water sources	22.64	21.47	20.30	19.12
Proportion of schools with basic drinking water services	74.14	74.14	74.14	74.14
Proportion of schools with limited drinking water services	0.00	0.00	0.00	0.00
Proportion of schools with no drinking water service	25.86	25.86	25.86	25.86

Data Source: UNCEF, https://data.unicef.org/resources/data_explorer/unicef

Project Beneficiaries

The project will directly and indirectly benefit communities and households across Makin, Aranuka, and Tabiteuea South. Direct beneficiaries include men, women, youth, and

children who will gain improved water access, access to clean safe water and capacity for managing and sustaining the improved water supply and sanitation services.

Island Councils and traditional leaders (unimwane/unaine) will serve as key decision-making and coordination partners. All activities will respect local governance structures and cultural protocols.

Women and women's groups will be actively engaged in water system assessments, infrastructure design, health and hygiene awareness, and community trainings. This includes participation in prioritising repairs (Component 1), selecting technologies (Component 4), supporting WASH education (Component 5), and gaining skills in system maintenance.

Men will participate in decision-making, community works, and technical trainings. Their engagement will support system repairs, household education, and improved water use practices.

Youth, particularly those aged 18–24, will be reached through inclusive messaging and interactive activities. As many young people are disengaged from water-related issues, village leaders and facilitators will help build youth participation in citizen science, monitoring, and awareness programmes.

Island Councils will provide oversight and facilitate community buy-in. Councils are established under the Local Government Act 1984 and represent all village wards, with rotation seats for women or youth. Coordination with the Ministry of Internal Affairs will ensure alignment with governance systems.

Churches will participate in decisions around water systems located on church grounds and serve as key partners in WASH awareness. As many rainwater tanks are hosted by churches, they are instrumental in water safety and equity efforts.

Schools will engage through WASH curriculum activities delivered in partnership with UNICEF, including competitions and hygiene campaigns. These will reinforce home practices and strengthen resilience through school-community linkages.

Health clinics will contribute to tracking water-borne diseases and promoting hygiene. Their data will support monitoring outcomes and strengthen health messaging under Component 5.

The Water and Sanitation Engineering Department (WSED) under MISE will support the project by revising national water and sanitation policies, aligning with national standards, and delivering related training. WSED will lead groundwater assessments, asset registration and GPS mapping, and conduct demand mapping. It will also engage and supervise local contractors and NGOs, with oversight provided by MISE HQ or Outer Island Assistance Infrastructure Technicians (OIAITs). As such WSED will also benefit from project-funded technical assistance to strengthen its water and sanitation framework, sustain service improvements, and advance policy development in line with its expanding mandate.

National and regional stakeholders, including civil society, technical partners, and government agencies, will indirectly benefit through knowledge sharing and capacity building. The Ministry of Internal Affairs and Ministry of Health and Medical Services will

support implementation and uptake of outcomes across government systems. WSED/MISE will utilise other existing partnerships where relevant, for example with Kiribati Institution Technology for courses related to water resource management.

The project will apply a gender and social inclusion strategy to ensure benefits reach all groups. At least 50% of women in target villages will be engaged in decision-making, training, and awareness. Youth inclusion will be actively pursued. Project staff and service providers will receive gender training, and materials will be designed for all literacy levels.

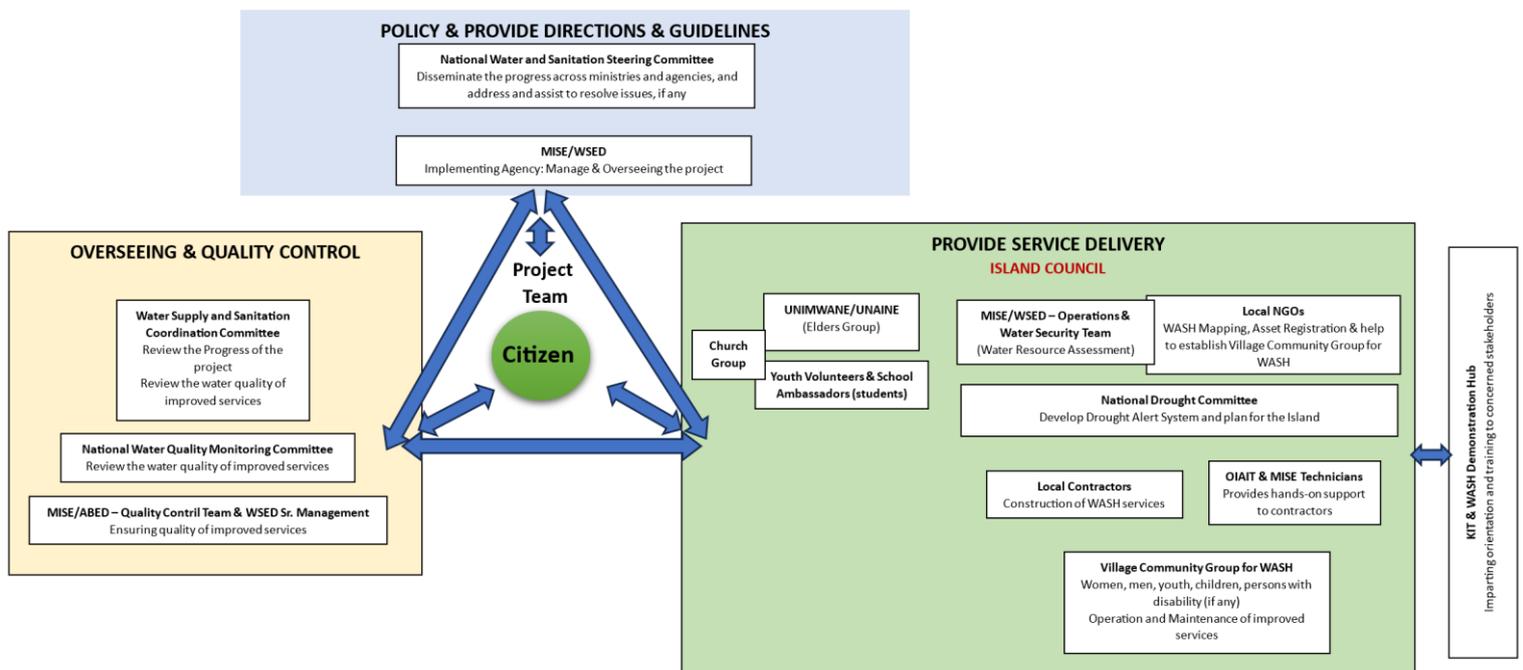


Figure 9. Project coordination mechanisms at the national and outer island level

B. Project / Programme Objectives:

The project's objective is to enhance the climate resilience of three outer island communities in Kiribati through reliable, equitable, and sustainable access to safe drinking water and clean water is available for other uses, under expected climate change impacts.

The associate project outcomes are aligned to the AF results framework (AFRF) as presented below.

Table 6. Project outcomes alignment to AFRF

Project Outcome(s)²⁸	Project Outcome Indicator(s)	Fund Outcome	Fund Outcome Indicator
Outcome 1.1 The selected three island communities have repaired water supplies for safe drinking water and clean freshwater for other water uses	Number and volume of water supply infrastructure improved and sustainably managed to withstand climate change and variability-induced stresses, such as droughts.	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress
Outcome 1.2 <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i>	Number of direct beneficiaries in the three islands with sustained access to climate-resilient, safe drinking water year-round.		
Outcome 2.1 Strengthened WSED/MISE/GoK capacity and capability to provide comprehensive water assessments, analyses, and reports at regional and international standards.	Strengthened water services within MISE for maintenance of water resources under climate change and variability induced stress. Completed and updated island water assessments for the target islands.		4.1. Responsiveness of development sector services to evolving needs from changing and variable climate
		Outcome 1: Reduced exposure to climate-related hazards and threats	1.1 Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis
Outcome 2.2 Strengthened planning processes for long-term sustainable supplies of safe drinking water, clean freshwater for other water uses and effective, affordable maintenance arrangements	Endorsed updated National Water Resources Policy and National Sanitation Policy. Strengthened water services within MISE for maintenance of water resources under climate change and variability induced stress.	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased

²⁸ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

<p>Outcome 2.3 Commenced strengthening of policy and legal framework for sustainable management of water resources and capacity development</p>	<p>Completion of desk review and consultations</p> <p>Updated endorsed national water and sanitation policies.</p>	<p>Outcome 7: Improved policies and regulations that promote and enforce resilience measures</p>	<p>7. Climate change priorities are integrated into national development strategy</p>
<p>Outcome 3.1 Equitable access to safe drinking water and clean freshwater for other water uses is in place in the selected island communities</p>	<p>Number of island communities /groups /institutions with increased capacity to maintain water supply.</p> <p>Number of people with reduced risk of inaccessibility to safe water during extreme weather events.</p>	<p>Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses</p>	<p>2.1. Number and type of targeted institutions with increased capacity to minimise exposure to climate</p> <p>2.2. Number of people with reduced risk to extreme weather events</p>
		<p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level</p>	<p>3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses</p> <p>3.2. Modification in behaviour of targeted population</p>
<p>Outcome 4.1 Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements are in place in the three targeted island communities</p>	<p>Number of physical water infrastructures improved to withstand climate change and variability induced stress.</p> <p>Number of new physical water infrastructure installed to fill gaps in water supply.</p>	<p>Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors</p>	<p>4.2. Physical infrastructure improved to withstand climate change and variability-induced stress</p>
<p>Outcome 5.1 Practices of the target outer island communities are consistent with the protection and</p>	<p>Percentage of targeted beneficiaries aware and practicing measures for improved safe and sustainable water use.</p> <p>Changes in behaviour of target communities.</p>	<p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction</p>	<p>3.1. Percentage of targeted population aware of predicted adverse impacts of climate change,</p>

sustainable and equitable use of water		processes at local level	and of appropriate responses 3.2. Modification in behaviour of targeted population
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Theory of Change

Kiribati's water security challenges have been well documented in past and demonstrated by the projects before this. The project recognises the complex context in which interventions have been attempted to achieve a similar objective. Such key challenges this project aims to overcome to reach the objective are:

- Legacy of unsuccessful projects where infrastructure have not been fit for purpose or fallen into disrepair quickly.
- Selection of water supply technology without proper assessing the available fresh ground water resources, actual demand and functional water system.
- National government capacity needs to enhance ongoing water services support to outer islands.
- Not enough focus on creating and establishing water management and coordination mechanisms in the outer island communities.
- People's behaviours and attitudes to water resources.
- Climate change and weather impacts affecting clean water availability.

To overcome these challenges, the project will be structured around five components as in Table below:

As outlined in Figure 10 diagram for the theory of change, the basic strategy employed by the project through component activities and resulting outputs will affect outcomes for Increased working water supplies, more equitable access to safe drinking water and sustainable management of water for safe drinking and other domestic and livelihood uses.

The success and learning from the project will become approaches that are scaled up in other outer island projects.

The project component outcomes and outputs are described in more detail in the following subsections and in Part II of this proposal document.

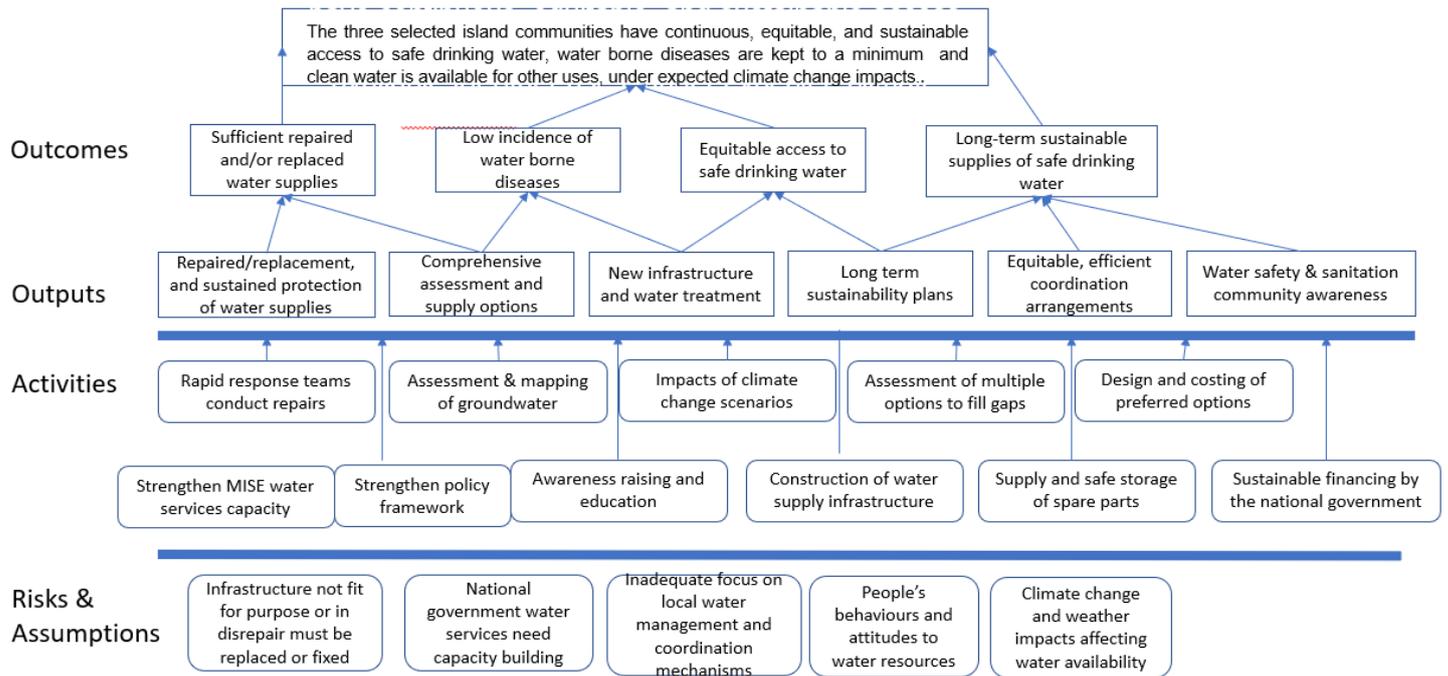


Figure 10. Project Theory of Change

Project / Programme Components and Financing:

Fill in the table presenting the relationships among project components, outcomes, outputs, and the corresponding budgets

Table 7. Components, Outputs, Outcomes, and Budget

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
Component 1 Rapid response for existing damaged and unused water supply systems in the targeted villages	Output 1.1.1 Rapid assessment and response through the completion of repairs on existing water infrastructure in the targeted villages on the three islands.	Outcome 1.1 The three selected island communities have repaired water supplies for safe drinking water and clean freshwater for other water uses	769,000
	Output 1.2.1 Implementation of water treatment systems to existing water supply systems	Outcome 1.2 <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i>	220,000
Component 2 Strengthening Government of Kiribati's capacity and capability in sustainable water resource management	Output 2.1.1 i) Comprehensive assessments for safe water sources and supply for water uses by targeted communities, under a range of climate change scenarios. ii) WSED water supply and sanitation framework	Outcome 2.1 Strengthened WSED (MISE/GoK) capacity and capability to provide comprehensive water assessments, analyses, and reports at regional and international standards.	583,200
	Output 2.2.1 Long-term sustainability plans for water resources on the three islands and climate change adaptation.	Outcome 2.2 Strengthened planning process for developing sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements.	200,000
	Output 2.3.1 Development of a National Water Act and a Long-term Water Strategy for sustainable water resource management and capacity development	Outcome 2.3 Commenced strengthening of policy and legal framework for sustainable management of water resources & capacity development	189,600
Component 3 Strengthening coordination mechanisms and	Output 3.1.1 Practices of the target outer island communities are consistent with the protection, sustainable, and equitable use of water (Integrated	Outcome 3.1 Equitable access to safe drinking water and clean freshwater for other uses in all three island communities.	208,200

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
community participation in water resource management	Community Water Management Plans).		208,200
	Output 3.1.2 Equitable and efficient coordination arrangements for water supply at all levels, from the household to the national government levels		
Component 4 Construction of new water infrastructure to adapt to future climate impacts	Output 4.1.1 Completion of new water infrastructure and water treatment systems designed to fill in the current supply gaps.	Outcome 4.1 Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other uses, and effective, affordable maintenance arrangements are in place in the three island communities	5,796,000
Component 5 Education, awareness raising, and knowledge management	Output 5.1.1 Sustainable water uses and safe sanitation practices and knowledge disseminated to the three selected island communities	Outcome 5.1 Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water	247,000
Project Execution cost			800,000
Total Project Cost			9,221,200
Project Cycle Management Fee charged by the Implementing Entity			778,800
Amount of Financing Requested			10,000,000

D. Projected Calendar:

Table 8. Proposed project milestones

Milestones	Expected Dates
Start of Project/Programme Implementation	Q1 2026
Mid-term Review (if planned)	Q1 2028
Project/Programme Closing	Q1 2030
Terminal Evaluation	Q4 2030

PART II: PROJECT / PROGRAMME JUSTIFICATION

Describe the project components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience.

Component 1. Rapid response for existing damaged and unused water-supply systems in the targeted villages

Component 1 focuses on the urgent rehabilitation and repair of damaged or non-functioning water supply systems across the outer islands of Aranuka, Makin, and Tabiteuea South. This includes repairs of existing tanks and wells, replacement of non-functional parts, cleaning and disinfection of storage systems, and the addition of basic treatment options where necessary. These measures are aimed at restoring access to safe clean water as quickly as possible, and responds directly to the increased vulnerability of island communities to climate-driven events.

Across the three islands is a total of 388 water supply infrastructure units (i.e., tanks, wells, and desalination plants – see table 10). However, only 272 or 70 percent of these are in use. Most of the functioning infrastructure units situated on Makin with 86 percent of its water infrastructure in use, whilst Aranuka has no useable water supply infrastructure and Tabiteuea South have just over half of its water infrastructure is in use. This equates to only 804,000 litres available at maximum capacity – or 179 litres per person in total, well below the WHO guidelines of 50-100 litres per day per person to meet daily basic needs. Furthermore, the island consultations found that available water supplies remain contaminated due to coastal inundation /overflow or lack of water safety regimes leading to runoff of contaminants into wells and tanks²⁹.

For a rapid response to community need for access to clean water, Component 1 focuses on (a) the repair of existing infrastructure, and (b) ensuring the current water supply is safe for drinking purposes through water treatment.

Outcome 1.1 The three selected island communities have repaired water supplies for safe drinking water and clean water for other water uses.

Accessing safe, clean water on the islands of Makin, Aranuka and Tabiteuea South is exacerbated by periods of drought, rising seawater and sporadic rains, but also lack of functioning water infrastructure.

Output 1.1.1 Rapid assessment and response through the completion of repairs for existing water supply systems in the targeted villages on the three islands.

Activity will commence with the procurement of a rapid response team to undertake the detailed water supply assessments on each island for identifying which infrastructure (tanks and wells) is suitable for repair. The rapid response team will work in collaboration with the Ministry of Infrastructure and Sustainable Energy (MISE) and local water technicians. Assessments will also consist of an analysis for including household rainwater harvesting

²⁹ Island consultation reports, available on request. To include would exceed page limit

systems as part of the repair and replacement programme – the replacement assessment will inform activities in Component 4.

Community consultation will be an integral part of the assessment and the prioritisation process in determining infrastructure repair and replacement plans. Consultations will adopt a participatory approach where the views and priorities of all members of the communities including women, youth and other vulnerable groups are addressed. Considerations for household rainwater harvesting systems will add another layer where consultations will assist to determine criteria for household level water infrastructure. Island decision-making processes will be observed for prioritising repair and replacement works, although the executing entity will ensure the consultations include women and vulnerable groups as part of the process.

Considerations for work under Component 2, Component 3, and Component 4 will also need to be configured into the assessments.

Table 9. Water resource infrastructure in Makin, Aranuka and Tabiteuea South

Makin								
Water infrastructure type	Number	Not in use	In use	Ownership				
				Private	Village	Church	School	Others*
Poly Tanks	104	15	89	11	30	18	16	29
Concrete Tanks	30	11	19	2	15	5	2	6
Wells	109	3	106	93	8	4	0	4
Desalination	1	1	0	0	1	0	0	0
Total	244	30	214	106	54	27	18	39
Aranuka								
Water infrastructure type	Number	Not in use	In use	Ownership				
				Private	Village	Church	School	Others*
Poly Tanks	17	17	0	1	4	0	3	9
Wells	29	29	0	14	1	0	3	11
Total	46	46	0	15	5	0	6	20
Tabiteuea South								
Water infrastructure type	Number	Not in use	In use	Ownership				
				Private	Village	Church	School	Others*
Poly Tanks	53	34	19	0	1	0	2	50
Concrete tank, Gallery & Overhead	7	4	3	0	3	1	0	3
Wells	37	2	35	22	2	0	0	13
Desalination	1	0	1	0	0	0	0	1
Total	98	40	58	22	6	1	2	67

Once the prioritisation exercise has been completed, the work programme will be finalised with the island councils and communities before the repair works³⁰ are undertaken.

Outcome 1.2 Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions.

The rising incidence of diarrhoeal and water-borne diseases in the target outer islands is closely linked to the impacts of climate variability and change, particularly prolonged droughts, saltwater intrusion into groundwater, and more erratic rainfall. These climate-related factors reduce access to safe freshwater and increase the reliance on unsafe water sources, leading to greater public health risks.

This outcome contributes to climate resilience by improving the quality and safety of repaired and new water supplies through treatment systems that are tailored to the environmental conditions of the islands. By addressing both the quantity and safety of water in a changing climate, the project builds long-term resilience in public health and water service delivery.

UNICEF data shows in 2020, the proportion of population using safely managed drinking water services (i.e., using drinking water from an improved source that is accessible on premises, available when needed and free from contamination) is 14 percent an increase from 9.9 percent in 2000³¹. For rural areas of Kiribati (i.e., outer islands), only 7 percent of the population was using improved water supplies free from contamination in 2020³².

On the target islands of Makin, Aranuka and Tabiteuea South, the restricted access to clean and safe water, has led to high levels of reported water-borne disease cases at health clinics on the target islands (Table 11). For example, 496 people across the three islands reported to health clinics with diarrhoea in 2020.

Table 10. Table 9. Water-borne disease statistics for Makin, Aranuka and Tabiteuea South (2020 data)

Island & Clinic with Water-borne disease	Aranuka			Makin			Tab South		
	Aranuka	Baurua	Takaeang	Anrawa	Kiebu	Makin	Buariki	Taku	Tewai
Diarrhoea	70	32	48	62	53	103	79	9	40
Dysentery	21	0	20	12	14	58	78	7	50
Scabies	9	55	1	22	1	27	16	3	13
Tinea Corporis	20	8	7	44	6	141	22	3	7
Tinea Vericolor	8	9	2	22	9	21	14	4	2
Worm Infestation	98	13	26	42	56	234	18	2	34

Data Source: Island Health Clinics

As water treatments and water safety measures are critical parts of the response for communities to have access to clean and safe water, Output 1.2 aims to address the incidence of water-borne diseases through improved water treatments for both existing, repaired, and new water systems supported under Components 1 and 4.

³⁰ Note the replacement works are scheduled under Component 4.

³¹ UNICEF, https://data.unicef.org/resources/data_explorer/unicef_f/?ag=UNICEF&df=GLOBAL_DATAFLOW&ver=1.0&dq=KIR.WS_PPL_W-SM.&startPeriod=1970&endPeriod=2022

³² UNICEF, <https://data.unicef.org/country/kir/>

Output 1.2.1 Implementation of water treatment systems to existing water supply systems

Coordinated with the detailed assessment under output 1.1.1, water treatment expertise will be procured to work with the Ministry of Health and Medical Services (MHMS), to undertake the initial water quality testing of the water supplies in the target communities. Results from the water quality testing will serve as (a) the baseline for monitoring under activity 1.2.2, and (b) provide the inputs into the assessment of longer-term water treatment options to be implemented under the project.

Through this process an initial assessment will also be undertaken to ascertain which water treatment technologies would be best for sustained use and effective monitoring in these three outer island communities. The technologies will be designed for, and tested in, remote communities and include ultraviolet water purification systems, clay filters, portable filters, chlorine dispensers, solar stills, and chlorine treatments.

The chosen technologies from the above-mentioned list will then be installed in villages and households as part of the rapid response efforts and will contribute to Component 4 as part of the new water infrastructure.

The selected water treatment technologies will serve as both immediate and scalable solutions to improve the safety of drinking water during the early stages of project implementation. These technologies are particularly important in communities where permanent water systems are not yet operational or where infrastructure has been compromised by climate events or lack of repair and maintenance. While their installation under Output 1.2.1 forms part of the rapid response, they are designed to be adaptable and may be retained in the medium to long term depending on performance, site-specific conditions, and community maintenance capacity. Permanent infrastructure solutions informed by these assessments and supported under Component 4 will complement the repaired systems, ensuring a sustained water safety approach in the face of climate variability and extremes.

As part of implementation of water treatment systems, a water quality monitoring programme will be developed or revisited and coordinated by the Water Technical Specialist and Island Coordinators and identified community champions. This programme will involve the training of local water technicians and community members to monitor and provide data to ensure the effectiveness of the water treatments, and awareness programmes. The programme will form part of the Integrated Community Water Management Plans under Component 3

Training under the water quality monitoring programme will include usage of the testing kits, record keeping of the test results and action to be taken when the results are positive in coordination with the WASH programmes and awareness programmes in outcome 5.1. Gender inclusivity in the training programme will be provided for men, women, and youth on each island to ensure that there is meaningful equal representation of all sectors of the communities in monitoring work undertaken. Results will be regularly collected and uploaded into the Project's monitoring and evaluation database and provided to the Ministry of Health and Medical Services.

An example of water test kits that could be made available to the target communities is, *Aquagenx* portable water test kits and Bacteriological H₂S field test kit bottles for regular water quality testing and monitoring. Both types have had proven usage and results, through implementation in the outer islands of Federated States of Micronesia (FSM), with similar environment and context, under an Adaptation Fund project. The advantage of these kits is

their simplicity to use in detecting if pathogens are in the water, that anyone in the community could use for testing.

Assessment will be made using the most suitable test kits for the outer islands based on conditions and capacity of the local communities.

Component 1 is informed by initial assessments and consultations in 2022 with follow up in 2024 by the Ministry of Infrastructure and Sustainable Environment (MISE). As such, the majority of activities under Component 1 are considered concrete and site-specific.

However, the project acknowledges that a limited number of communities or infrastructure needs may require further verification or scoping during inception or early implementation. In such cases, these would be treated as USPs, subject to the following process during assessments:

- Application of pre-established selection criteria (e.g. severity of damage, population need, climate vulnerability);
- Environmental and social screening using SPREP's Environmental and Social Safeguards System (ESSS);
- Development of site-specific Environmental and Social Management Plans (ESMPs);
- Review and approval of each ESMP by SPREP (as Implementing Entity) prior to the commencement of activities.

This safeguard-compliant approach ensures that all Component 1 interventions remain within the Adaptation Fund's definition of concrete adaptation actions, while preserving limited flexibility for implementation under dynamic conditions.

Linkages with other components: Consultations and assessments from activities under Component 1 will input to:

Component 2 – Input to water assessments and development of long-term sustainable plans

Component 3 – Input to development of integrated community water plans

Component 4 – inform the development of the new water infrastructures in the 3 targeted islands.

Component 5 – Input to engagement of beneficiaries in WASH programmes and with communication products to be produced.

Component 2. Strengthening Government of Kiribati's capacity and capability in sustainable water resource management

The Water and Sanitation Engineering Department (WSED) under the Ministry of Infrastructure and Sustainable Energy (MISE) is responsible for ensuring that the people of Kiribati have sufficient access to reliable, safe water supplies and safe sanitation facilities and practices. The department aims to consolidate and coordinate national water quality monitoring programmes, implement and enforce water protection and conservation measures, and strengthen national enforcement and coordination mechanisms in protecting water quality and quantity. The MISE and Department recognise the need to enhance their capacity and capability to achieve these aims and provide sustainable water resource management and support to outer islands – not always project bound. Under this component, WSED will work

with technical assistance to undertake and develop water assessments and long-term sustainable planning for the target islands whilst strengthening their knowledge, processes, and operations.

Outcome 2.1 Strengthened WSED (MISE/GoK) capability to provide comprehensive water assessments, analyses and reports at regional and international standards.

Under this outcome, the strengthening of WSED's water resource assessment capacity will be gained through the undertaking of water resource assessments on the target islands with technical assistance on all aspects of the process.

Output 2.1.1: Comprehensive assessments for safe water sources and supply for water uses by targeted communities under a range of climate change scenarios.

Understanding of the water resource availability and reliability in the three target islands is limited. Makin had water assessments undertaken during the KIRIWATSAN project while the islands of Aranuka and Tabiteuea South have not had comprehensive assessments done yet. Groundwater is the main source of water in the outer islands, but there remain considerable pressures on the limited water resources, and these pressures are further exacerbated by climate change.

Comprehensive assessments (updated and new) will be undertaken by WSED with technical assistance. The technical assistance is expected to take WSED capacity up to 100% of regional / international water resource assessment standards from the current 60-70% level, as viewed from a department self-assessment (Table 12). This technical assistance is also expected to enhance WSED's assessment and analysis incorporating climate and population scenarios.

The assessments will take a stepwise approach involving: (i) a data review; (ii) establishment of a strategic measurement and monitoring programme; (iii) data analysis and interpretation for developing water balances and conceptual models; (iv) development of a hydrological risk assessment model; and (v) evaluation of 'possible' groundwater extraction rates considering the risk of saltwater intrusion, as well as future climate impacts on recharge.

The project will utilise and enable MISE's ongoing water assessment programme into the target islands as the basis for undertaking an extensive review of all available data and reports from previous studies to identify key data gaps required to be addressed prior to developing a hydrological model for a given island. This exercise will help inform if enough baseline water infrastructure and data exist to practically undertake a water resource assessment, but also for establishing a strategic hydrological measurement and monitoring program required to collate enough data to proceed with building a hydrological risk assessment model.

This activity will also build on the monthly salinity and pH monitoring programme already established under MISE. Working in conjunction with island water technicians as well as Government of Kiribati staff, a hydrological measurement and monitoring programme will be implemented on the three islands. This will involve strategically selecting target groundwater wells to install data loggers for high-resolution (hourly) groundwater level and salinity measurements. This would also include training of the outer island water technicians and Tarawa MISE staff to undertake monthly manual water level measurements using a down-

hole electrical water level meter (this is important for ensuring reference values for the data loggers, but also training for a future monitoring programme after the project ceases). The hydrological monitoring programme will feed into the development of the Water Safety Plans (output 3.1.1) and the water quality monitoring (output 1.2.1).

The table below summarises WSED’s self-assessment of its water resource assessment technical capacity and where the project will enhance this:

Table 11. WSED Self-Assessment of Water Resource Assessment/Technical Capacity

Component of WRA	Description of current capability and capacity	Capacity strengthened under the project:
<p>1. Planning / preparation phase</p> <p>a. Collection of hydrological data</p> <p>b. Collection of physiographic data</p>	<p>i. Understanding of island environment</p> <p>ii. Ability to select areas and plan the duration of the survey based on the width and length of the island</p> <p>iii. Able to calibrate and undertake nulling procedures for the EM34 equipment before use</p> <p>iv. Ability to use water quality testing equipment for required parameters including E.coli, nitrate testing, salinity testing, turbidity, pH, including calibration of these hand-held equipment</p> <p>v. Use of GPS</p>	<p>In-depth understanding of water cycle relationship with the quality and quantity of groundwater, as well as drilling skills to understand the complete geology of the area, and other physiographic data such as soils as well as how to present these in a comprehensive GIS format</p> <p>Need 30% of TA input to this phase</p>
<p>2. Surveying and data collection Phase</p> <p>a. Use of the EM34 machine to collect groundwater data</p> <p>b. Surveying of other water resources utilising prepared templates</p>	<p>Use of the EM34 equipment to survey lines on the selected areas</p> <p>Intimate knowledge of different parts of the EM34 (e.g., cables) and where to use them depending on the topography / area.</p> <p>Correct reading and recording of the data</p>	<p>Use of other techniques or other equipment to conduct WRA</p>
<p>3. Reporting</p> <p>Calculation and mapping – Using GPS and QGIS</p> <p>Work with sophisticated GIS software to enhance quality of report and increase products from report</p>	<p>Able to utilise EM34 survey results to calculate freshwater depths and connect those lines as QGIS</p>	<p>Work with sophisticated GIS software to enhance quality of report and increase products from report</p> <p>Include advice on availability of water resources and suggested water and sanitation</p>

Component of WRA	Description of current capability and capacity	Capacity strengthened under the project:
<p>Include advice on availability of water resources and suggested water and sanitation technologies for the sites surveyed</p> <p>Include demand forecast based on available water resources under various climate and population scenarios</p>		<p>technologies for the sites surveyed</p> <p>Include demand forecast based on available water resources under various climate and population scenarios.</p>
<p>% of existing capacity and TA input required</p>	<p>Estimate existing capacity – 60- 70%</p>	<p>Required TA input 30 - 40% to upskill and improve WSED capacity by this % by end of project.</p>

Outcome 2.2 *Strengthened planning process for developing sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements.*

Under this outcome WSED information, advice and guidance to islands will be enhanced through incorporation of other technical environmental, social, economic considerations necessary for determining sustainable water management plans.

Output 2.2.1 Long term sustainability plans for water resources and climate change adaptation on the target islands. In addition to the information generated from Output 2.1.1, technical assistance will work with WSED and MISE to undertake technical, social, environmental, and economic assessments of multiple options to ensure the provision of sustained access to safe drinking water for all communities on the three islands. This will strengthen WSED’s decision-making process to provide considerable recommendations and water options and plans for the target islands.

The technologies to be assessed include current technologies such as continued use of tanks and wells, desalination plants, and where appropriate the new and emerging technologies which are suitable for small islands e.g., solar desalination, solar pumps, and portable desalination units. Lessons learned from previous water-related projects in Kiribati and other SIDS will be an important part of this assessment, as cost-effectiveness may not be the most important criterion if the technology is too difficult to maintain (e.g., constant replacement of filters), too exposed to the expected climate-related hazards such as over-wash, or culturally and socially unacceptable. Example of infrastructure and technologies that will/may be considered are listed under Component 4 - Construction of new and existing water infrastructure to adapt to future climate impacts.

MISE will work with the island councils and technical assistance provided under the project to deliver this output and in the process build capacity to enhance processes and operations for determining sustainable water plans for the islands. Activity under this output will also refer to the Memorandum of Understanding on the roles of Government, Island Councils and Communities for Kiribati as well as established and relevant national committees.

Outcome 2.3 - Commenced strengthening of policy and legal framework for the sustainable management of water resources and capacity development

Project activity under this outcome will instigate long outstanding reviews of the national legislation that will support WSED and MISE's mandate to ensure communities have sufficient access to reliable, safe water supplies and safe sanitation facilities and practices. This includes consolidating and coordinating national water quality monitoring programmes, implementing and enforcing water protection and conservation measures and improving national enforcement and coordination mechanisms in protecting water quality and quantity.

The expectation is that in the life of this project, the initiation of reviews, early drafts and targeted stakeholder consultations can be supported in the three islands. A further expectation is that MISE will seek co-funding from other sources e.g. from within government and other projects to support consultations with islands beyond the reach of this project and to progress the finalisation endorsement of the strategy/policy and legislation over time. The timeframe for the latter, especially for finalising and endorsing legislation, is expected to be beyond the five-year period of this project.

Like many other initiatives of this nature in the past, this project will continue in lieu of an updated or endorsed water and sanitation policy and water Act. The project will do so by instigating this work to start filling the gap that has long been outstanding and which is critical for WSED and MISE to promote sustainable management of water resources across the country's islets. Given the clear linkages of water resource management to sanitation, health, and the environment, WSED and MISE will collaborate with relevant agencies and stakeholders to ensure a cross-cutting approach is undertaken when strengthening the policy & legal framework. Section D (below) on Strategic Alignment discusses the KV20, the Kiribati Development Plan (KDP) and other existing policies which can form the basis for the development works under this outcome of the project.

Output 2.3.1 – Update the National Water Resources policy and National Sanitation Policy

The project will support MISE and WSED to revise the **National Water Resources Policy (2008)** and the **National Sanitation Policy (2009)**, which are both overdue for review. These updates will help reflect current sector conditions, address gaps, and incorporate recent developments such as the 2025 Building Law and national climate resilience priorities.

Recognising the close linkages between water and sanitation, MISE has indicated interest in a more harmonised policy approach. The revised policies are expected to clarify institutional responsibilities across WSED, the Public Utilities Board (PUB), and other actors, and will aim to provide a practical framework for implementation that is responsive to existing institutional capacity.

While the project initially proposed support for a Water Act, current priorities have shifted toward updating the policy framework as a more immediate and feasible step. However, the policy revision process will help identify areas for future legal development.

The work will include consultation with key stakeholders, including island councils and communities, and will consider gender, social inclusion, traditional governance norms, and

existing agreements such as the Memorandum of Understanding between the Government and local actors.

Project-supported activities under other components are expected to generate useful insights and data that will feed into the revision process. The goal is to facilitate a set of updated, context-appropriate policies that can be submitted for endorsement during the life of the project, while acknowledging that further support may be needed for full implementation.

At the time of proposal resubmission, no other development partner is addressing this specific policy gap, reinforcing the value and urgency of this output.

Linkages between Component 2 and others include:

Component 1 – to enhance efficiency or effectiveness of existing water systems.

Component 3 – to inform integrated community water management plans.

Component 4 – to inform programme for construction and/or installation of new water systems.

Component 3. Strengthening coordination mechanisms and community participation in water resource management

Outcome 3.1 Equitable access to safe drinking water and clean freshwater for other uses in all three island communities.

Output 3.1.1 Integrated Community Water Management Plans - Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water.

Within the outer islands, maintenance of infrastructure is the responsibility of the community and/or village, leading to a strong sense of ownership of the facilities by the community. Integrated Community Water Management Plans will define and guide the island communities on the management of their water supply through asset management, drought response plans, water safety, and sustainability plans. The Integrated Community Water Management Plans will consist of assessment management, sustainable maintenance and repairs plan, drought response, and water safety plans.

Asset management plans are critical tools in recording and maintaining the water and sanitation infrastructure on the outer islands, providing guides to the communities and villages on how to maintain their water and sanitation infrastructure. Led by the islands' existing Water Infrastructure Technicians and in partnership with MISE and technical assistance from the project, the asset management plans will be reviewed during early activity with the rapid response team under output 1.1.1 to reflect the water infrastructure currently in use and the units which will be repaired and/or replaced under the output's rapid response action. They will again be referred to and updated as works progress under outputs across outcomes 1, 2 and 4. Responsibility for the updating and finalising of the plans will be led by the Water Infrastructure Technician in partnership with MISE and the suppliers of the water supply and treatment infrastructure. Training on asset maintenance will build the capacity of the island Water Technicians and other interested community members in maintaining and servicing the infrastructure of the island water supply system.

Sustainable maintenance and repair plans. Led by the project management unit (PMU) in partnership with MISE and consultations with Island stakeholders and repairs plans will be

developed over the course of the project to ensure ongoing arrangements for the repair and maintenance of the assets can be funded and undertaken routinely. During outer island consultations across six islands (Makin, Aranuka, Tabiteuea South, Kuria, Abaiang, and Maiana) it was noted the very limited ability for island communities to undertake ongoing maintenance and repairs to water infrastructure. This demonstrated a gap between theory vs reality where past projects have expected outer island communities to self-fund, maintain and undertake repairs. To address this gap, the project will explore long-term options with the national government for the ongoing provision of spare parts, equipment and tools and training of the island water technicians and communities (Activity 3.1.1.3). This project will provide for an initial supply of spare parts and maintenance tools and equipment (activity 4.1.1.3) the usage and management of which is to be guided by these plans.

Drought Response Plans: With the current drought situation in Kiribati, there is an urgent need to have a clear response framework on the three islands for future drought situations, to ensure responses are put in place quickly and effectively, coordinated across outer island councils and national government ministries.

Utilising the approaches undertaken in developing the South Tarawa and Abaiang drought management plans, the project will focus on developing outer island drought response plans for the three target islands. The approach will focus on two core areas: (i) the development and implementation of the drought response plans (DRP) for each island; and (ii) strengthening the capacity of the Government of Kiribati to effectively act on drought response plan implementation.

The DRPs will articulate to specific communities how to prepare and implement mitigation actions such as reducing water demand and monitoring water resources and water use in drought situations. Furthermore, the plans will identify the early warning indicators for drought at different levels, including the incorporation of traditional knowledge into these indicators. The response plans and subsequent data collected will strengthen the coordination mechanisms between the **National Drought Committee** and the Island Councils, thus enabling implementation of actions in the lead-up to drought situations based on island-specific circumstances, rather than relying upon old information and the DRP for South Tarawa.

The DRPs will be developed in full collaboration and consultation with the relevant government ministries, Island Disaster Committees, Island Councils, and other relevant stakeholders at the village, island, and national levels.

Water Safety Plans: Kiribati has a very high incidence of water, sanitation, and hygiene related diseases; and it has among the highest rates of infant mortality in the Pacific region. Diarrhoeal disease, which is often linked to inadequate water supply, sanitation, and hygiene, is one of the three leading causes of under-5 mortality in Kiribati³³.

Only the current fresh groundwater sources in South Tarawa have specific regulations aimed at protecting them from contamination. There are no equivalent regulations for protecting water sources in rural areas or outer islands and training/information on water safety is *ad hoc*. This activity aims to work with the island communities to develop village-level water

³³ ADB 2014, '*Economic costs of inadequate water and sanitation: South Tarawa, Kiribati*', Asian Development Bank, Manila; UNDP 2014, '*Harvesting rainwater to improve access to safe drinking water and adapt to climate change: Spotlight on Kiribati*', UNICEF.

safety plans which can be implemented at the village level, and train villagers in water safety to reduce contamination of the water supplies.

The plans will be developed and implemented through the Ministry of Health and in full collaboration and consultation with the relevant government ministries, Island Disaster Committees, Island Councils, UNICEF WASH and other relevant stakeholders at the village and island level.

Output 3.1.2 Equitable and efficient coordination arrangements for water supply at all levels, from the household to the national government levels.

Output 3.1.2 is a cross-cutting component, linking the activities from inception through to project completion since effective coordination is critical to long term sustainability of the outer islands water security. The island coordination mechanisms, both vertically (household to national government) and horizontally (across government agencies and other island institutions) will be closely examined to determine areas that need strengthening as well as appropriate points of entry for project activities. Care will be taken to ensure that the project starts well with all key stakeholders fully informed and agreed on the project approach. Potential conflict points like which island to start working on under Component 1 or which parts of the island to start on will need to be avoided through extensive consultation with the mayors and social groups on the island, as well as the national government agencies involved.

What is crucial in building the adaptive capacity of the communities on the three islands is the need for the Government of Kiribati and local communities to jointly agree on water management solutions, including:

- a. Negotiating equitable responses to water shortages and/or inadequate water supplies (i.e., agreements on water allocations, infrastructure investments, etc.) due to drought, storm surges, increasing population, and/or infrastructure failures.
- b. Incorporating community inputs into engineering designs, i.e., so they address community needs, are culturally appropriate and sensitive, and consistent with government standards and environmental and social safeguards. This is key for drought management plans.
- c. Defining roles and responsibilities regarding operation and maintenance, including the monitoring and ongoing assessment of infrastructure conditions. This includes ensuring adequate resources and training, especially of the island Water Technicians, to complete ongoing jobs and the sourcing of spare parts. This is key for asset management plans.
- d. Agreeing on practical measures to protect the groundwater resources, (i.e., to limit freshwater extraction to within sustainable levels, clearing vegetation around groundwater wells, and limiting animals or human activity close to wells). This is part of water safety plans.
- e. Incorporating traditional knowledge and practices from Kiribati and learning from the Pacific region.

Building adaptive capacity through the engagement and mobilisation of the communities on the three islands, including the involvement of community members in the decision-making on the prioritisation of investments in water supply (output 1.1.1 and output 2.1.1) and the ongoing management of local water resources and associated infrastructure (output 3.1.1), is critical in building the longer-term sustainability of the water resources.

Output 3.1.2 will therefore focus on implementing co-management approaches to address common problems including:

- **Poor adherence to water-safe practices:** although water safety plans exist, typically provided by representatives for the Government of Kiribati, it remains a fact that water safety is poor in the outer islands of Kiribati, as evidenced both by field observations as well as widespread reports of waterborne disease through field observations and official reports. For example, there are widespread examples of poorly protected shallow wells and activities such as keeping pigs on the land of freshwater lenses that will severely contaminate groundwater. There is also no universal observance of mitigation measures, such as boiling water or treating drinking water with ultraviolet (UV) light (i.e., sunlight), and the resulting problems of contamination combined with inadequate mitigation measures are plain to see in reports of waterborne diseases.
- **Widespread failure in the management of infrastructure assets:** asset management plans exist, and the Government of Kiribati provide local staff to maintain infrastructure, but the reality on the ground is that infrastructure is largely poorly maintained and operated, with very frequent reports of asset failure, as well as poor access to spare parts, limited funds to maintain assets, and frustrated community members when they are asked to contribute to maintenance activities.
- **Common examples of engineering designs that do not consider community needs and/or local context:** for example, rainwater tanks installed that do not survive the first major storm, composting toilets in culturally and socially inappropriate location(s) making them inaccessible for women, installation of desalination facilities when there is no easy access to spare parts and where salt spray from the ocean makes corrosion an insurmountable problem; or locating water tanks in association with churches which could create inequitable access for communities.
- **Inadequate action and conflicts at times of water scarcity:** although plans exist for what communities on outer islands in Kiribati ought to do at times of water scarcity (usually triggered by drought) it is clear from field reports that responses tend to be largely uncoordinated, generally not resulting in adequate supplies (many would argue even at normal times, there is not adequate supply) and additionally, there are reports of conflicts in the community about access to limited supplies.

The reasons for the persistence of these types of problems have been shown to be socially and culturally complex, associated with power dynamics, unhelpful beliefs, poor understanding of the hydrological cycle, limited financial capacity of households, and informal and formal networks in the community³⁴, and at least in part due to a problem of strong doubts about the Government of Kiribati's capability to manage water resources, and communities feeling forced into implementations of plans they do not necessarily agree with³⁵.

In other words, these problems persist not just because of a lack of education and/or awareness. In fact, awareness-raising efforts can be counter-productive, especially when they communicate about the implications of climate change, in which case they could be

³⁴ Kuruppu, N., Adapting water resources to climate change in Kiribati: the importance of cultural values and meanings. *Environmental Science & Policy* 2009, 12, (7), 799-809

³⁵ Dray, A.; Perez, P.; Jones, N.; Le Page, C.; D'Aquino, P.; White, I.; Auatabu, T., The AtollGame Experience: from Knowledge Engineering to a Computer-Assisted Role Playing Game. *Journal of Artificial Societies and Social Simulation* 2006, 9, (1). Moglia, M.; Perez, P.; Burn, S., Water troubles in a Pacific atoll town. *Water Policy* 2008, 10, (6), 613-637

disempowering and disabling rather than allowing for anticipatory community-driven change³⁶. Importantly, national plans (such as for water safety etc.) are likely to be ineffective due to their inability to capture nuances and factors associated with the local contexts, which we know are critical for the success of water and infrastructure management and planning³⁷.

Technical assistance will be procured to facilitate and guide project staff and local i-Kiribati consultants to lead on this work. This is partly to ensure cost-effectiveness but importantly also to ensure capacity building that will make sure that these mechanisms can be embedded over the long term, and possibly used in other islands.

The output will ensure the inclusion and effective participation of key community groups (including churches, nongovernmental organisations (NGOs), women's groups, youth groups, etc.) in a way that is culturally appropriate and equitable. Care will be taken to ensure that the project starts well with all key stakeholders fully informed and agreed on the project approach. The project's co-design and community engagement activities will allow both effective inclusion as well as help to build evidence-based and adaptive decision-making capacity.

Linkages between Component 3 and others include:

Component 1 – Coordination and integration of consultations to obtain information from stakeholders for informing activities.

Component 2 – Coordination and integration of consultations to obtain information from stakeholders for informing activities.

Component 4 – ensure that the new water infrastructure can be maintained within the capabilities of key stakeholders.

Component 5 – Coordination and integration of consultations and engagement with stakeholders to obtain and provide information to and from beneficiaries.

Component 4. Construction of new water infrastructures to adapt to future climate impacts

Component 4 involves the construction and installation of new, climate-resilient water infrastructure. Until fully determined during assessments under components 1, 2 and 3 activity under component 4 is largely classified as Unidentified Sub-Projects (USPs) at the time of submission. These will be selected based on water insecurity, population needs, technical feasibility, and community readiness. All USPs will be screened using SPREP's Environmental and Social Safeguards System (ESSS), and a site-specific Environmental and Social Management Plan (ESMP) will be submitted to SPREP for approval prior to implementation. This process ensures compliance with SPREP and the Adaptation Fund's Environmental and Social Policy and safeguards requirements.

³⁶ Kuruppu, N.; Liverman, D., Mental preparation for climate adaptation: The role of cognition and culture in enhancing adaptive capacity of water management in Kiribati. *Global Environmental Change* 2011, 21, (2), 657-669.

³⁷ Moglia, M.; Perez, P., Participatory assessment of water developments in an atoll town. *Adaptive and Integrated Water Management: Coping With Complexity and Uncertainty* 2008, 381. Moglia, M.; Perez, P.; Burn, S., Assessing the likelihood of realizing idealized goals: the case of urban water strategies. *Environmental Modelling & Software* 2012, 35, 50-60.

Outcome 4.1 *Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other uses, and effective, affordable maintenance arrangements are in place in the three island communities*

Output 4.1.1 Completion of new water infrastructures and water treatment systems designed to fill in the current supply gaps.

Based on assessments, recommendations and decisions made under Components 1-3, construction work will be undertaken using a suitable company, local labour, and island water technicians. Procurement of materials and delivery to the islands including procurement and safe storage of spare parts is planned under this component.

The new infrastructure and spare parts will be added to the asset inventory maintained by the water technician, which will be mirrored with the national government as part of the normal checks and balances and to guard against any loss of information. The spare parts inventory will cover larger items like solar panel brackets (which are subject to corrosion), downpipes, pump filters, taps etc. The island communities will be given further advice and instruction on the proper care and maintenance of the water supply infrastructure, the need for water conservation, and the means of protecting against water contamination under Component 3.

Household rainwater harvesting system – The technical design section of the Ministry of Infrastructure and Sustainable Energy (MISE) have completed technical designs for self-harvesting rainwater systems for households that overcomes the catchment issue with thatched rooves, elevation and shelter to aide water safety measures and storage for up to 1000 Litres. Harvested water may be considered for other water usage needs besides drinking.

Polyethylene tanks: Rainwater harvesting from rooftops and tank storage is potentially an important supplement to groundwater resources, especially as a drinking water source and a reliable drought reserve. While many of the houses have thatched roofs that are unsuitable for rainwater harvesting, some options include (i) using government buildings and churches to collect rainwater and store water in community owned tanks; (ii) providing individual houses with plastic or metal shaded areas connected to a tank (i.e., with multiple uses of the shaded roofs); and (iii) collecting water from hard surfaced areas like roads or runways and pumping the water into tanks, predominantly for agricultural or garden uses, thus taking pressure off the groundwater resources. The main drawbacks of this option are (i) the logistics of supplying dozens of tanks to the outer islands; (ii) the limited supply capacity of each tank; (iii) the possible need for additional energy for pumping; (iv) difficulty in cleaning the tanks if contaminated or clogged with built up sediment; (v) possible microplastic contamination as the polyethylene becomes more brittle due to sun exposure; and (vi) contamination from animal and bird faeces.

Solar desalination: Brackish water can be distilled using the sun's energy to evaporate the water, which is then condensed and available as pure freshwater. Small portable units are currently available for sale, no larger than a suitcase, and can be easily transported to the outer islands. For drinking purposes, however, additional minerals for taste and possibly fluoride for teeth protection need to be added. A further drawback is that the solar panels need to be placed in the most exposed locations to get the maximum sunlight, which may make

them susceptible to vandalism or potential accidents (e.g., falling coconuts or tree branches in high winds).

Solar pumps: Submersible pumps in groundwater wells need a local source of energy, and if there is no electricity grid supply, then solar pumps may be the best option (rather than fossil fuel generators). The technology is relatively simple to maintain but exposure to salt spray from the ocean means that any metal brackets or other parts will have limited lifetimes. As for solar desalination, the solar panels may also be subject to vandalism or accidents and there would need to be readily available spare parts as there is no off-site storage of water beyond one- or two-days' supply.

Hydro-panels: In humid climates, it is possible to extract drinking water from the air. Commercially available hydro-panels collect distilled water from the atmosphere and, as for solar desalination, additional minerals and fluoride need to be added to the water to make it suitable and safe for drinking. A constant supply of these minerals and the need for well-trained people to add the correct amounts are the main drawbacks of this technology for use at the household level. Another possibility would be for a private sector company to utilise this technology on a larger scale and provide bottled water for sale.

Island scale desalination and a reticulated supply: For densely populated communities an option that needs to be considered is a publicly owned large reverse osmosis desalination plant and a reticulated water supply to each household. Apart from the obvious cost and technical sophistication of this option, the main drawback may be the provision of the reticulated supply and the retrofitting costs for each household to connect to the water supply system. Other possible options would be for piping to a standpipe in the centre of the community that all households could draw from or a central location close to the desalination plant where local villagers could come with their own water containers. Another drawback of large-scale desalination is the need to dispose of concentrated brine which can destroy coastal habitats and coral reef ecosystems.

Component 5. Education, awareness raising and knowledge management

***Outcome 5.1.** Practices of the target outer island communities are consistent with the protection, sustainable and equitable use of water*

Output 5.1.1 Sustainable water uses, and safe sanitation practices and knowledge disseminated to outer island communities. The importance of the education and awareness-raising of sanitation and hygiene is critical in reducing illness. A review undertaken by Bosch et al 2013³⁸, illustrates hygiene interventions such as handwashing and hygiene education in childcare centres significantly contribute to reducing diarrhoeal disease.

Complementing the project's overarching awareness raising activities and integrated with the water management plans (output 3.1.1), the project will focus on continued education and training of communities in the water, sanitation and hygiene (WASH) principles. Comprehensive WASH programmes for schools, health clinics and communities already exist in Kiribati, and go hand-in-hand with major water supply and sanitation projects conducted in the past 40 years³⁹. The project will work with UNICEF to value-add to existing WASH

³⁸ Bosch et al., 2013, 'Water and Sanitation' (Chapter 23) in Jeni Klugman (ed), *A sourcebook for Poverty Reduction Strategies (Vol. 2): Macroeconomic and sectoral approaches*, The World Bank Group

³⁹ Ridge to Reef

programmes, particularly in schools and health facilities in Makin, Aranuka and Tab South and expand the WASH programmes into the community on the three islands.

Awareness raising and knowledge management. Awareness raising and knowledge generation and dissemination will form a core part of the project. A communication officer will be supported by a consultant, in developing and implementing the project's communication and knowledge management programme over three (3) phases.

Phase 1: Stakeholder Identification and Development of Project Communication & Engagement Strategy

Complementing the WASH education programmes, one of the first tasks of the PMU's communication team, will be to review the stakeholder identification and mapping developed during the planning phase, and update based on any new information or change in priority groups. The mapping will enable the project to have a clear and coordinated framework of target audiences, including their involvement, across the outcomes.

Second, one of the first tasks corresponding to the stakeholder review, will be to develop the project-level communication and engagement strategy which will articulate the project's approach to the key messaging, tools and tactics to be used at the project level in communicating and raising awareness, delivering uptake of project outputs across the stakeholder groups. This phase will also involve the development of initial project communication materials, which will be critical for the stakeholder consultations on the outer islands.

Phase 2: Implement the Communication & Engagement Strategy and produce Knowledge Management Materials

This phase will focus on the implementation of the communication and engagement strategy, including the development of appropriate communication, awareness, and knowledge management materials, so that the island communities are not only aware that the project is commencing but also the planned intended sequencing of events (i.e., a rapid response to repair or replace damaged water supply systems as one of the first project activities). As radio and face-to-face communication appears to be the most effective and universal media (along with Facebook and Messenger), the PMU will use these media outlets to convey important messages about the project as well as water safety, hygiene, water conservation, and health messages.

Phase 3: Handover of Communication and Knowledge Management Resources

The completion phase will be the handover of the project's complete library of resources, communication materials, knowledge management materials including training materials etc. to the relevant government ministries e.g., MISE, MIA, and the outer island councils to ensure the resources are easily accessible by all stakeholders and can continue to be used. Throughout the life of the project, stakeholders will be trained in the use of the materials as part of the sustainability/exit strategy.

B. Economic, social, and environmental benefits

Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

Economic Benefits

Water and economy are inextricably linked with inadequate water and sanitation services to the poor increasing their living costs, lowering their income earning potential, damaging their well-being, and making life riskier⁴⁰. A country's overall development strategy and macroeconomic policies – including fiscal, monetary and trade policies – directly and indirectly affect demand and investment in water-related activities. Improved access to water services and improved management of water resources contribute substantially to economic growth through increasing business productivity and development⁴¹.

Kiribati continues to experience a high economic burden due to poor water and sanitation conditions. Conservatively, it is estimated the Government, individual households, and the whole economy, share the burden of annual economic costs between A\$3.7 million – A\$7.3 million, or 2-4 percent of national GDP⁴². In 2014, this translated to an annual economic cost of A\$550 - \$1,083 per household, or an equivalent of A\$71 – A\$140 per resident of South Tarawa⁴³.

Improved access to safe water can lead to increases in national income and GDP. A 0.3 percent increase in investment in household access to safe water is associated with a one percent increase in GDP⁴⁴, as increased access to safe water will increase the income-earning potential due to improved health, reduced loss of working days due to illness, and reduced time spent collecting water⁴⁵.

The IFAD-funded Outer Islands Food and Water Project (OIFWP) (2014-2023), initially funded rainwater harvesting systems on four outer islands: Abebama, Beru, North Tabiteuea and Nonouti, with a total population of over 11,600 people (2,200 households) and will be scaled up to an additional 1,300 households in five South Gilberts Group islands: Aororae, Nikunau, Onotoa, Tabiteuea Maiaki (Tabiteuea South) and Tamana. Phase 1 of the project benefited 2,501 households, who now have improved access to water. Reported cases of diarrhoea and dysentery have reduced amongst the households with access to improved water supply, from 90 percent to 69 percent. In the scaling up Phase 2, 2,275 additional water harvesting facilities of 10,000 litres each will be established to serve 1,650 households. The economic analysis,

⁴⁰ Bosch et al, 2013, 'Water and Sanitation' (Chapter 23) in Jeni Klugman (ed), *A sourcebook for Poverty Reduction Strategies (Vol. 2): Macroeconomic and sectoral approaches*, The World Bank Group

⁴¹ ADB 2014, 'Economic costs of inadequate water and sanitation: South Tarawa, Kiribati', Asian Development Bank, Manila

⁴² ADB 2014, 'Economic costs of inadequate water and sanitation: South Tarawa, Kiribati', Asian Development Bank, Manila; UNDP 2014, 'Harvesting rainwater to improve access to safe drinking water and adapt to climate change: Spotlight on Kiribati', UNICEF

⁴³ ADB 2014, 'Economic costs of inadequate water and sanitation: South Tarawa, Kiribati', Asian Development Bank, Manila

⁴⁴ Ibid

⁴⁵ Bosch et al, 2013, 'Water and Sanitation' (Chapter 23) in Jeni Klugman (ed), *A sourcebook for Poverty Reduction Strategies (Vol. 2): Macroeconomic and sectoral approaches*, The World Bank Group

principally based on time savings in water collection, generates an internal economic rate of return of 13.9 percent, plus other non-quantified benefits.

These national-level findings underscore the importance of targeted investments, such as those proposed in this project, in strengthening outer island economies.

Security implications regarding water is the root of all other security implications in Kiribati. Without freshwater supply (underground) there will be no vegetation. Without vegetation, there will be no food supply and no more copra for export. The *babai* (taro) pits, which are a key crop in Makin and Aranuka, will no longer be hospitable for these root crops⁴⁶.

Through the evidence base and decision-making frameworks in Outcomes 2 and 3, culminating in the implementation of water harvesting and supply interventions (Outcomes 1 and 4), this project will assist the Government of Kiribati to provide improved access to safe drinking water and other freshwater to the outer islands' populations, indirectly leading to improvement in the economic burden caused by water-related health problems, economic livelihoods, and the GDP of Kiribati.

Social Benefits

The project will deliver significant, measurable economic and social benefits to the target communities in Aranuka, Makin, and Tabiteuea South. By improving year-round access to safe drinking water through climate-resilient infrastructure, households - especially women and children - will experience reduced time and labour burdens related to water collection, estimated at over 1–2 hours per day during dry seasons. Safe water access at or near homes will improve public health outcomes by reducing waterborne illnesses, which currently contribute to high diarrhoeal disease rates in children under five. Schools and clinics will also benefit from reliable water supply, supporting improved education and health service delivery. The project will also strengthen livelihood resilience by enabling home gardens, improved sanitation, and reduced healthcare costs. Through gender-responsive training (Component 5), equitable community governance models, and inclusive site selection processes, the project ensures that all interventions prioritise the most vulnerable and support local empowerment.

The social benefits of equitable access to clean water and sanitation include improved health conditions, improved gender equality and enhancing women's empowerment, and basic human dignity. The Project will contribute towards these social benefits through the gender and social inclusion actions and the implementation of water resource infrastructure for the long-term future of the outer islands.

A 2013 household survey in South Tarawa⁴⁷ showed the health effects of poor water and sanitation (i.e., diarrhea and dysentery or dia-dys) within households were borne by females. The study found (i) females had a higher likelihood of suffering from dia-dys than males; and (ii) younger persons were more likely to suffer from dia-dys, with boys showing significantly lower chances of suffering dia_dys than girls. In the project three target outer islands of Makin, Aranuka and Tabiteuea South, health data for 2020 showed 756 people from the islands

⁴⁶ Security Implications of Climate Change in Kiribati, 2009.

⁴⁷ ADB 2014, '*Economic costs of inadequate water and sanitation: South Tarawa, Kiribati*', Asian Development Bank, Manila

reported to a health clinic suffering from diarrhoea or dysentery⁴⁸. This does not account for the number of cases unreported or not requiring medical treatment.

With the provision of the minimum amount of 50 litres per person per day through the project interventions, there will be a significant decrease in occurrence of water-borne diseases and water-washed diseases which are preventable by higher quality and quantities of water⁴⁹.

Access to clean freshwater is also critical for achieving gender equality and enhancing women's empowerment. Women often bear the brunt of a household's domestic work as they are responsible for supplying water for childcare, house maintenance, food gardens, and food preparation. In PICs, water collection is primarily considered the responsibility of women and girls, although men contribute to collecting and carrying heavier loads⁵⁰. Collecting and carrying water while pregnant may cause difficulties in pregnancy or reproductive health consequences, including uterine prolapse⁵¹.

This project is guided by a Gender Equality, Disability, and Social Inclusion (GEDSI) Action Plan (Annex 2), which is integrated across all five components. The plan outlines specific measures to address gendered impacts of climate change, including time poverty, waterborne disease burdens, and access to services. The GEDSI strategy ensures at least 50% women's participation in all community-led activities, prioritisation of vulnerable groups (including persons with disabilities and the elderly), and mainstreaming of inclusive practices in infrastructure design, site selection, consultation, and monitoring.

When water is not directly available in the premises, collecting it is often an arduous task. Worldwide, it is estimated that those without access to clean water spend over 30 minutes per round trip to collect it. More than time-consuming and dangerous, this activity restricts women from engaging in income-generating work or educational activities⁵².

Increases in educational attendance is also a social benefit brought about by access to safe water and sanitation. Inappropriate school sanitation or total lack of toilets or latrines, lack of water, and lack of privacy can lead to declines in the number of girls attending school with improvements in these areas encouraging attendance⁵³.

The benefits of this project will extend beyond the enhancement of health and well-being. Water projects can have indirect positive impacts on the residents by enabling higher income levels through improved productivity and time management, better childcare, and the overall enhancement of the quality of life. An adequate supply of water will also improve psychological aspects of the residents' life by lower stress levels, higher self-esteem, and the enrichment of communication, interactions and relationships between individuals and groups. It will also enable the observation of religious rites and customs with little to no limitations⁵⁴.

⁴⁸ Makin, Aranuka and Tab South Health Clinic data, 2020

⁴⁹ NewTap, 2019. *South Tarawa Water Supply Project Kiribati*.

⁵⁰ Anderson et al 2019, 'Water, Sanitation and Hygiene in the Pacific and the need to meet SDG6', Discussion Paper; ESCAP 2018

⁵¹ Anderson et al 2019, 'Water, Sanitation and Hygiene in the Pacific and the need to meet SDG6', Discussion Paper

⁵² Anderson et al 2019, 'Water, Sanitation and Hygiene in the Pacific and the need to meet SDG6', Discussion Paper; ESCAP 2018; Bosch et al. 2013

⁵³ Bosch et al. 2013

⁵⁴ NewTap, 2019. *South Tarawa Water Supply Project Kiribati*.

The project will also implement water treatment options and undertake water quality testing and monitoring (outcome 1.2) to provide some concrete solutions to the water safety issues. Initial water treatments such as ultraviolet water purification systems, clay filters, portable filters, chlorine dispensers, solar stills, and chlorine treatments will be implemented. The water quality testing and monitoring programme will establish a baseline and monitor the effectiveness of the water treatment measures, water safety plans, and the educational and awareness activities under outcome 5.1. These efforts align with Output 5.1 of the project, which aims to build sustained community awareness on hygiene and water conservation

The project will have a strong WASH component that is aimed at reducing the vulnerability to the adverse effects of climate change, but also combatting effects of villages practicing open defecation or poor sanitation practices. To this end, the project will promote good water safety, sanitation and hygiene practices, expanding beyond schools and health clinics, to the broader community. The WASH programmes will complement the project's educational and awareness activities promoting water safety and water conservation.

Beyond the targeting of women, youth and vulnerable groups, the project will additionally have a strong focus on ensuring an equitable participation rate (at least 50 percent of women and youth) in the decision-making, training, and active participation in activities on each of the three islands. For example, decisions on which water infrastructure should be repaired or upgraded under phase one, and which new water infrastructure and technologies are to be constructed and their location under phase two, will involve a strong representation from women. In addition, the Community Action Groups will be comprised of women, men and youth and these groups will form an important conduit for the project's activities on the islands.

These social outcomes enhance the resilience of Kiribati's outer island communities to the compounding impacts of climate change.

Environmental Benefits and safeguards

The project is expected to yield a range of positive environmental co-benefits while minimizing potential adverse impacts through carefully designed interventions and safeguard measures.

By improving access to safe drinking water, the project reduces the need for reliance on unsafe or contaminated sources, thereby decreasing pollution and the spread of waterborne diseases. In areas where open defecation persists and sanitation infrastructure is lacking, the installation of clean water systems reduces environmental contamination and helps protect coastal and inland water ecosystems from eutrophication and microbial loads.

The project interventions are designed to avoid any degradation or conversion of natural habitats. No activity will disturb mangrove areas, coastal vegetation, or wetland zones. Instead, by reducing pressure on degraded groundwater lenses and enabling source protection, the project contributes to the preservation of freshwater-dependent ecosystems.

The initiative will also reduce the need for firewood boiling and imported bottled water by promoting solar-based water treatment solutions. This not only minimizes greenhouse gas emissions but also encourages long-term energy efficiency and reduced waste. These

benefits align with environmental principles 2, 4, and 10 of the Adaptation Fund Environmental and Social Policy.

To ensure these environmental benefits are sustained and potential risks minimized, the project integrates robust safeguard measures. These include site-specific screening using SPREP’s Environmental and Social Safeguard System, monitoring of impacts on surrounding habitats and resources, and incorporation of mitigation measures into contractor and community agreements. The updated Environmental and Social Management Plan (ESMP) will be submitted to SPREP for review and approval prior to the start of physical interventions.

Note: Detailed compliance with the Environmental and Social Policy (ESP) of the Adaptation Fund is presented in Section II.K.

Table 13 outlines how the project not only aims to deliver long-term environmental and social benefits, but also integrates measures to manage risks and uphold the principles of the Adaptation Fund Environmental and Social Policy throughout implementation.

Table 12. Environmental and Social Benefits Aligned with Safeguard Risk Management and Project Design

The project will align with national environmental and disaster risk management legislation, ensuring activities are implemented lawfully and contribute to the long-term governance of climate adaptation in Kiribati.
By improving access to safe drinking water and freshwater, the project addresses immediate water insecurity while embedding principles of equity and climate resilience into long-term island water resource planning.
The project empowers marginalized and vulnerable groups by embedding their participation in community planning and governance structures, including the creation of island-level women’s and youth groups with defined implementation roles.
While no human rights violations are anticipated, the project affirms the right to a clean and safe environment through sustainable infrastructure and inclusive engagement at every stage.
The project’s Gender Equality, Disability, and Social Inclusion (GEDSI) Action Plan guarantees balanced participation, equitable benefits, and measures to safeguard all groups from unintended harms throughout implementation.
Local labour engagement will respect international labour standards, including core ILO conventions ratified by Kiribati, ensuring fair treatment, safety, and decent working conditions during project activities.
The project respects the rights and traditions of all community members, including any indigenous populations, by operating within culturally sensitive and non-discriminatory frameworks.
No activities under the project will involve any form of relocation, thereby eliminating risks associated with displacement or disruption of livelihoods.
The project is designed to avoid any degradation or conversion of natural habitats, reinforcing ecosystem protection while improving water access.

Biodiversity will be safeguarded through careful planning and monitoring to prevent species loss and the introduction of invasive species in all project locations.
The project contributes to climate change adaptation without generating greenhouse gas emissions and incorporates solar-based water technologies, resource efficiency, and waste minimization strategies.
Public health will be improved through reliable access to clean water, which directly reduces the incidence of waterborne diseases such as diarrhoea and dysentery.
All project activities have been screened to avoid locations with physical or cultural heritage value, preserving important community assets and traditions.
The project will avoid any damage to productive land or landscapes providing ecosystem services, preserving natural resources that support food security and livelihoods.

C. Cost effectiveness

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

The proposed project design has been developed with a strong emphasis on cost-effectiveness, recognizing the resource constraints and geographic challenges of implementing water security measures in remote, climate-vulnerable atoll communities such as Aranuka, Makin, and Tabiteuea South. The project targets the most urgent water security needs while seeking to maximize benefits through island-specific interventions, community participation, and integration with existing infrastructure where feasible.

Cost Efficiency in Sustainability terms - The project maximizes cost-efficiency through a national to community-centred delivery model. By investing in training, upskilling, and mobilizing local technicians and ward-level implementation teams, the project avoids the long-term costs of sole reliance on international expertise. These investments enable community ownership of water systems, lower operational costs, and reduce future maintenance burdens. Component 2 plays a key role in strengthening the Water and Sanitation Engineering Department, ensuring long-term in-country technical support to improve cost efficiency.

Comparison with Alternatives Considered - The project avoids high-capital expenditures associated with widespread new installations by prioritizing rehabilitation of existing but unused water systems under Component 1. Water trucking and emergency relief measures, while used in the past, are prohibitively expensive and unsustainable, particularly for outer islands. The cost per litre delivered by boat is significantly higher than the cost of establishing localized supply systems. Desalination units are energy-intensive, costly to maintain, and less feasible given logistics and technical capacity constraints. Larger centralized infrastructure would require substantial upfront costs and may not equitably serve the most remote or dispersed households. These comparisons illustrate a preference for cost-effective, context-appropriate options.

The flexibility allowed for Unidentified Sub-Projects (USPs) ensures cost optimization by selecting the most appropriate solutions during implementation.

Cost-Effectiveness through Improved Planning and Governance - Component 2's socio-economic and groundwater assessments will ensure investments in infrastructure are targeted based on actual community need and hydrological feasibility, improving long-term efficiency. Component 3 addresses policy gaps, such as the need to revise the National Water Resource policy and National Sanitation Policy, ensuring institutional support for sustained, cost-efficient water management. Assessments under components 1 and 2 provides the project with up to date information for effective project planning, budgeting and implementation.

Cost-Effectiveness through Behavioural and Systemic Change - Leveraging existing WASH platforms reduces duplication and maximises the reach of communication activities without substantial new costs. Component 5 enhances uptake of good practices, reducing water contamination risks and improving overall water-use efficiency.

The below consolidates an illustrative cost effectiveness analysis

Table 13. Cost effective analysis

Outcome / Intervention Area	Baseline Scenario	Benefits of Proposed Measures
Component 1: Repair of Existing Systems	Many water systems (e.g., 86% in Makin, 52% in Tabiteuea South) are in use but in disrepair.	Repairing usable systems is more cost-effective up to 3–4 times less than installing new ones. Fewer materials are required and local technicians can be trained for future maintenance.
Component 4: Installation of New Water Systems	No water infrastructure in some areas (e.g., 0% in Aranuka); high dependence on unsafe sources.	New systems are targeted only to areas without functional infrastructure. The investment maximises coverage while avoiding redundancy.
Component 2: Institutional Strengthening & Strengthening Policy, Planning and Regulatory Environment	At approximately 60% capacity for technical water assessment and safeguard compliance. Outdated legislation (e.g. National Water Resource Policy and Sanitation Policy) and lack of clarity on sector responsibilities.	WSED strengthened to independently undertake water assessments and advise on planning. Lowers future dependence on costly international consultants. Socio-economic analysis supports more equitable and impactful allocation of funds. Improved legal and policy framework increases efficiency in implementation and reduces long-term institutional fragmentation.
	Aranuka and Tabiteuea South 0 Water resource assessment Makin Preliminary water resource assessment under	Updated and new comprehensive water resource assessments

	KIRIWATSAN project (2015–2019),	
Component 3: Strengthening Island Resilience and sustainability	Low community engagement in O&M and mismanagement of infrastructure.	Cost-effective by fostering community ownership, which leads to better maintenance and reduced system breakdowns. Reduces ongoing operational costs and increases system lifespan.
Component 5: Behaviour Change & Awareness	Fragmented implementation and duplication of efforts.	Working with existing MFAT, World Bank, UNICEF and UNDP projects enables knowledge-sharing and efficient delivery.

In addition to the cost-effective design elements already discussed, a comparative analysis of relevant completed and ongoing projects provides further evidence of the strategic value and efficiency of the proposed investment.

Table 14. Comparative Analysis of Related Water Projects in Kiribati

Project Name	Donor / Implementer	Status	Duration	Budget	Scope & Coverage	Relevance for Cost-Effectiveness
Water Resource Assessment, Rehab. & Installation	NZ/MFAT / MISE	Completed	2021–2024	AUD \$1.2M	14 islands (all villages)	Broad geographic reach but lower per-island investment. Less integration of safeguards, governance or WASH.
Water Resource Assessment (Schools & Clinics)	UNICEF / MISE	Ongoing	2019–2026	USD \$4M	~14 islands (schools & clinics only)	Focused on institutions; no household systems. Limited behavioural and governance support.
Survey and Maintenance	UNDP / MISE	On Hold	2020–2024	AUD \$436,525	2 islands (North Tarawa & Banaba)	Low-cost, limited scope. Did not include infrastructure or resilience measures.
Proposed AF Project	Adaptation Fund / MISE / SPREP	Proposed	2025–2030	USD \$10M	3 underserved islands (full household and village coverage)	Higher per-island investment justified by comprehensive delivery: infrastructure, safeguards, governance, WASH.

Compared to previous projects that either had a broad geographic spread but minimal local depth (e.g. NZ/MFAT), or focused only on specific sites like schools (e.g. UNICEF), the proposed AF project integrates infrastructure delivery with strong institutional and community systems. The per-island investment (USD \$3.3M per island) reflects the high cost of logistics and installation in remote outer islands but is justified by the comprehensive, multi-layered design that includes:

- Household-level infrastructure (Component 1 & 4)
- Institutional capacity building (Component 2)
- Risk-informed governance and safeguards (Component 5)
- Behavioural change and WASH outreach (Component 5)

This makes the AF project not only complementary to existing and past efforts but also a value-enhancing investment that fills persistent service and institutional gaps while ensuring sustainability. It also builds on established lessons such as the importance of community ownership, locally managed systems, and inclusive planning.

The delivery model is thus cost-effective both in terms of economic efficiency and long-term resilience outcomes. It ensures that investments will not only deliver infrastructure but embed the capacity and systems needed to sustain them over time.

D. Strategic Alignment

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

The project is strategically aligned with Kiribati's national climate change, development, and sectoral priorities. The initiative advances multiple national and international commitments by directly responding to core objectives of national policies, adaptation frameworks, and development strategies, as well as supporting Kiribati's efforts to meet the Sustainable Development Goals (SDGs).

While there are currently no sub-national or island-specific development plans available in published or formal formats for the target islands, the project's design integrates local priorities through continuous engagement with communities and the Outer Island Councils. Community-based planning and participatory assessments undertaken through Components 1, 2, 3 and 5 help ensure contextual relevance at the sub-national level, filling a critical gap in decentralised planning frameworks.

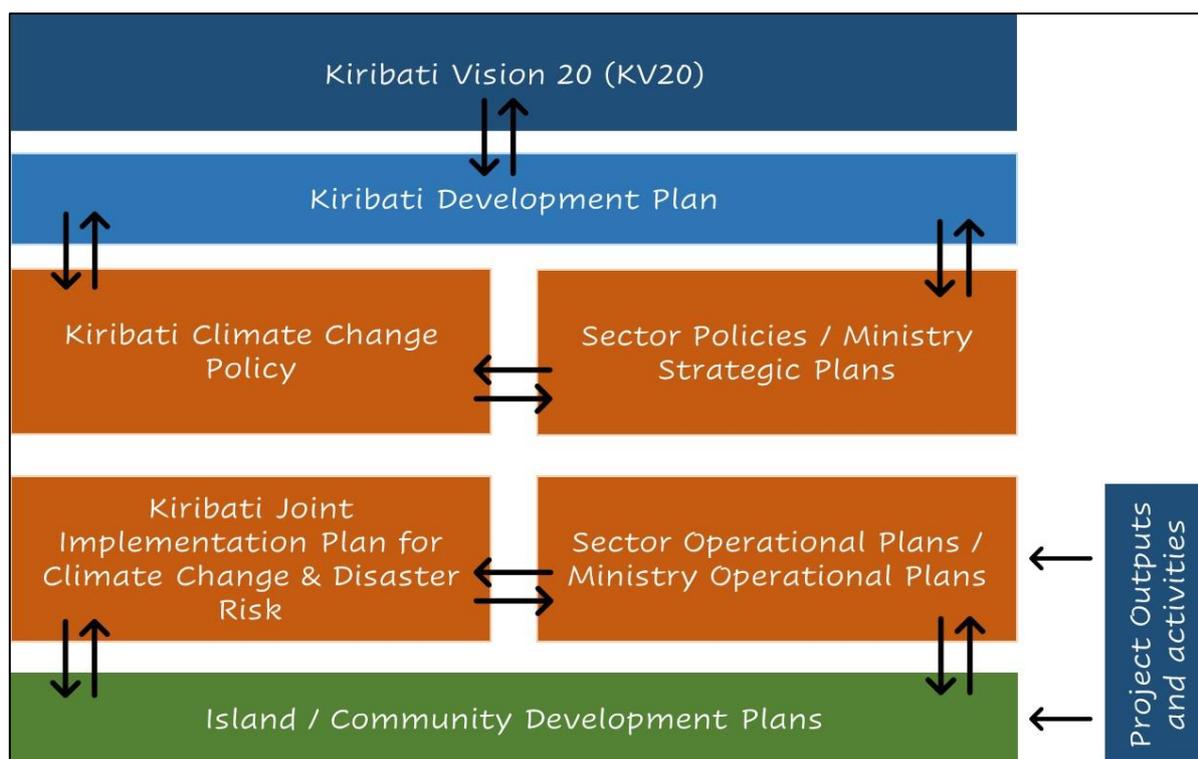


Figure 11. Integration of project outputs and activities into the context of Kiribati policies and national frameworks and processes

The project aligns with the following national and sectoral strategies:

- Kiribati Joint Implementation Plan on Climate Change and Disaster Risk Management (KJIP 2019–2028): Serves as the country’s National Adaptation Plan (NAP), prioritising water and food security, health, and disaster risk resilience. The project addresses these through both physical infrastructure and institutional strengthening.
- Revised Nationally Determined Contribution (NDC 2023): Includes freshwater security and adaptation targets, to which this project contributes through solar and gravity-fed water systems, catchment improvements, and institutional capacity building.
- Kiribati Climate Change Policy (2019): Provides the national vision for climate resilience, with emphasis on water, health, and ecosystem protection—core areas targeted by this proposal.
- Kiribati Adaptation Program (KAP Phases I–III): Earlier adaptation investment with lessons informing this proposal, particularly the need for robust safeguards and community-led water interventions.
- Kiribati Development Plan & KV20 Vision (2016–2036): National targets include achieving universal access to potable water by 2036 and strengthening local institutions to deliver water services—explicitly addressed by project Components 1–5.
- Draft Kiribati Development Plan 2024–2027 and MISE Strategic Plan 2024–2027: Although not yet endorsed, these reinforce government commitment to enhancing access to water, sanitation, and infrastructure sustainability.
- WHO-KOICA Te Mamauri Project: Complements this project’s approach by aligning with health-based water resilience strategies in remote island settings.

- National Communication to the UNFCCC (3rd NC, 2023): Highlights water insecurity as a key vulnerability, with this project responding directly to noted climate-exacerbated risks in outer island communities.
- SDG Framework (particularly SDG 6, SDG 13, and SDG 1): Promotes clean water and sanitation, climate action, and poverty reduction—cross-cutting themes embedded throughout the proposal.

Table 15. Illustrative Alignment of Project Activities with Key Policies and Instruments

Instrument / Plan	Project-Specific Alignment
KJIP (NAP)	Targets water security, disaster resilience, and gender-responsive adaptation planning via Components 1, 2 and 5.
Revised NDC	Supports adaptation targets on freshwater access and low-emission technologies (e.g. solar pumping).
Climate Change Policy	Strengthens local adaptive capacity and environmental stewardship in remote areas.
Kiribati Adaptation Program	Learns from past gaps—prioritising safeguards, inclusive consultations, and sustained maintenance.
KV20 & Kiribati Dev Plan	Delivers improved water access and embeds service delivery improvements in local systems.
MISE Strategic Plan	Builds institutional knowledge, technical skills, and support for sustainable infrastructure planning.
WHO–KOICA Project	Strengthens synergy with health-sector adaptation and WASH programming.
3rd National Communication	Directly addresses identified vulnerabilities related to outer-island water scarcity.
SDG 6, 13, 1	Expands equitable water access, enhances resilience to climate risks, and reduces time and economic burdens from water insecurity.

E. National Technical Standards and Environmental and Social Policy

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

The project ensures alignment with relevant national technical standards and the Adaptation Fund’s Environmental and Social Policy (ESP) by integrating compliance mechanisms throughout the design, implementation, and monitoring phases. Infrastructure works will conform to building and environmental codes enforced by the Government of Kiribati, while water quality and safety will be overseen through Ministry of Health protocols. Compliance will be systematically ensured through SPREP’s Environmental and Social Safeguards System (ESSS) and the project’s Environmental and Social Management Plan (ESMP), submitted as Annex 1. The ESMP provides screening tools, risk classification guidance, mitigation strategies, and responsibilities for each safeguard domain, ensuring that all project activities are assessed and monitored accordingly.

The following table summarizes key national standards and how compliance will be maintained:

Table 16. Table summarizing the National Standards applicable to the Project

Relevant Technical Standard / Policy	Project Compliance Measures
Kiribati Building Code (2007)	Design and construction of infrastructure will follow structural codes for cyclone and climate resilience. Engineering plans will be submitted for MISE review and sign-off prior to procurement and construction.
Kiribati Environmental Act 1999 (amended 2007)	All project activities will undergo environmental screening as per the Act. Activities with moderate or high risk will be registered with MELAD for oversight and permitting. All sites will be monitored using the ESMP checklists (Annex 1).
Public Health Ordinance – Water Quality Standards	Water supply systems will comply with Ministry of Health requirements. Regular testing of household and community water systems will be carried out post-installation to ensure potability and user safety.
Disaster Risk Management and Climate Change Act 2019	Component 3 enhances institutional capacity for climate monitoring and early warning. Community engagement and localised risk-reduction planning will comply with DRM protocols.
Gender and Disability Inclusion Frameworks	As outlined in Annex 2 (Gender & GEDSI Action Plan), the project ensures accessibility, inclusion and benefit-sharing across gender, age, and disability status.
Environment Act 1999 (amended 2007)	The project aligns with this Act by adopting its principles in the Environmental and Social Management Plan (ESMP), including sustainability, pollution control, and natural resource protection, even though an environmental licence is not required
Environmental Impact Assessment – Part III of the Act	Although project activities are not listed in the Act’s Schedule (thus not requiring a licence), the ESMP follows the EIA framework to ensure environmental and

	social safeguards are applied during planning and implementation.
Native Lands Ordinance 1956 (amended 2013)	ESMP procedures ensure legal land use and long-term access to sites on customary or private land. The project will secure land access through leases or easements in line with this Ordinance.
Adaptation Fund Environmental and Social Policy	SPREP's ESSS system and the ESMP (Annex 1) provide safeguards screening, risk categorisation and mitigation protocols. Project activities will not proceed without safeguards clearance from SPREP.
Adaptation Fund Principle on Resource Efficiency	Where feasible, water technologies (e.g. solar-based or gravity-fed) will be selected for energy efficiency, minimal waste generation, and reduced lifecycle costs.

Community-Level Interventions, Unidentified Sub-Projects (USPs) and Safeguards Compliance

While the project has a framework for the types of water security interventions to be supported—including infrastructure upgrades, repairs, and new installations—the specific locations, scopes, and quantities of these activities will be finalised following technical and social assessments under Component 1. This staged approach allows the project to tailor interventions to local needs while remaining within the overall project design and objectives. As these cannot be fully identified at the time of submission, a portion of activities are classified as Unidentified Sub-Projects (USPs) or undefined activities.

To ensure compliance with both national, Implementing Entity and Adaptation Fund safeguard standards, all USPs will be screened using the Environmental and Social Management Plan (Annex 1), which incorporates SPREP's Environmental and Social Safeguards System (ESSS). This screening process will classify activities according to risk, determine required mitigation, and identify any that may require exclusion. Dedicated provisions for screening and managing Unidentified Sub-Projects (USPs), as outlined in Section 7.4 of the ESMP (Annex 1)

Environmental and social screening, as well as monitoring of safeguards implementation, will be carried out by the Executing Entity MISE, supported by technical oversight and periodic review from SPREP. All USPs will be subject to this screening process, in accordance with the SPREP Environmental and Social Safeguards framework.

The Implementing Entity (SPREP) will not approve implementation of any USP until it has undergone full safeguard screening and obtained written approval from the ESMP focal point. All USP activities will be tracked, documented, and included in project-level monitoring and reporting. The project will also ensure that USP decision-making includes consultation with affected communities, with particular attention to the participation of vulnerable and marginalised groups.

This safeguard-driven process ensures that the flexibility offered by USPs does not compromise compliance or environmental and social integrity.

F. Duplication

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

During the project design stage, consultations were held with stakeholders from key ministries and development partners to avoid duplication and ensure complementarity. This includes engagement with past and present initiatives funded by GCF, ADB, EU, MFAT, UNICEF, and others. The project targets underserved islands (Makin, Aranuka, and Tabiteuea South) and introduces critical additions such as support for water governance, household-level rainwater harvesting systems, and integration of environmental and social safeguards in line with Adaptation Fund policy.

The project design intentionally builds on lessons learned and addresses policy and institutional gaps not covered by other initiatives, including those now completed. Table 18 has been revised to include relevant completed projects, alongside ongoing efforts.

In addition to coordination to avoid duplication, the project is strategically designed to fill existing service and capacity gaps left by other initiatives, especially in remote outer islands. It draws on lessons learned from past projects such as KIRIWATSAN II and the Kiritimati Drinking Water project, which highlighted the importance of community engagement, tailored infrastructure design for atoll contexts, and sustainable water governance models. The project integrates these learnings by targeting neglected geographies and institutional gaps, such as local water governance capacity (Component 2) and safeguards application (Component 5).

Furthermore, the project fosters knowledge sharing and synergy with ongoing efforts, including KOIRAP, UNICEF’s WASH Programme, and MFAT-supported assessments, by contributing new data, strengthening local capacities, and co-developing protocols with partners. This ensures not only cost-effective delivery, but also accelerated institutional learning and reduced long-term dependency on external actors.

Table 17. Relevant Projects and Synergies

Project	Donor / Implementing Entity	Status	Time-frame	Coverage	Synergies with Proposed Project
KIRIWATSAN II (Water & Sanitation in Outer Islands)	EU / Government of Kiribati, SPC	Completed	2014–2020	8 islands (Gilbert Group)	The AF project was scoped to complement this project by focusing on different villages not previously targeted. Lessons learned on infrastructure and capacity development are informing the AF project approach.
South Tarawa Water Supply and Sanitation Projects	ADB, WB, GCF, GoK	Ongoing	2020–2027	South Tarawa	Focuses on central urban area; AF project complements this by focusing on underserved outer islands. Engagement underway to share lessons on capacity building and technical design.
Safe and Sustainable Drinking Water – Kiritimati	EU / SPC	Completed	2016–2021	Kiritimati Island	Provides valuable insights on water infrastructure design and groundwater resource management in atoll contexts, applicable to AF project planning.

Project	Donor / Implementing Entity	Status	Time-frame	Coverage	Synergies with Proposed Project
Kiribati Outer Island Food & Water Project	GoK / Unspecified	Completed	2018–2022	Abemama, Beru, Tab North, Nonouti	Demonstrated the effectiveness of household rainwater harvesting. AF project builds on these models and targets islands not previously included.
KOIRAP – Kiribati Outer Islands Resilience and Adaptation Project	World Bank / GoK	Ongoing	2022–2028	Multiple Outer Islands	AF project complements KOIRAP's focus on governance and planning by providing direct WASH infrastructure. Coordination planned with MISE.
Water Scarcity / Resource Management	MFAT / MISE	Ongoing	2021–2024	14 islands (incl. Makin, Aranuka, Tab South)	AF project builds on initial water assessments and planning activities. Will fill infrastructure and capacity gaps where implementation was incomplete.
UNICEF WASH Programme 2023–2027	UNICEF / GoK	Ongoing	2023–2027	National incl. Makin, Aranuka, Tab South	UNICEF is focusing on WASH in schools and clinics. AF project will ensure household-level water access and coordinate on messaging, hygiene promotion, and safeguards.

G. Learning, Knowledge Management and Lessons Learned

Describe the learning and knowledge management component to capture and disseminate lessons learned.

Effective knowledge management including the collection, generation and dissemination of data and information, is an important component of climate adaptation in the Pacific region, and particularly in SIDS where there remains little access to, or generation of, climate related data and information. Learning from adaptation activities and being able to transform knowledge into products for various audiences is an essential component to climate change adaptation. Component 5 will be the key driver in the knowledge management strategy of the project. Outcome 5.1 will generate and disseminate project information, experience, and results on an ongoing basis.

The overall responsibility for the communication and knowledge management will reside with the Project Management Unit supported by an international communication advisor on retainer. The PMU will work closely with project members to ensure the information developed and disseminated is effectively monitored and reported against. The communication team will be responsible for the development and implementation of the communication and knowledge management strategy and action plan (to be delivered within the first 6 months of project implementation), and the development and implementation of resulting activities and actions from the action plan.

Output 5.1.1 will form the key communication and knowledge management effort with radio programmes, social media and face-to-face interactions functioning as the key delivery mechanism of the awareness raising programme. A community-wide (across the three

islands) educational and awareness raising campaign will highlight the benefits of water management and conservation, water safety, sanitation, and hygiene, to better adapt to the challenges posed by climate change. This will include the production of local language educational activities, leaflets and radio and social media campaigns on drought response strategies and the importance of good sanitation and hygiene practices. Radio and face-to-face communication are the most effective and universal media (along with Facebook and Messenger) in use in the outer islands. The communication mechanisms will form the basis of the dissemination of knowledge to the communities on the three outer islands.

This effort combined with the WASH programme will form part of a community wide awareness raising campaign highlighting the benefits of water safety, conservation and use, and good sanitation and hygiene habits to better adapt to the impacts posed by climate change on island water resources.

The importance of improving data capability in climate change adaptation and resilience in the Pacific SIDS cannot be underestimated. Outcomes 1.1, 1.2, and 2.1 – will all contribute significantly towards filling data and knowledge gaps in Kiribati. Specifically, the water resource assessments, and the vulnerability and hazard mapping and modelling generated under outcome 2.1, will provide Kiribati with the evidence-basis for informing sustainable on-ground adaptation interventions to address compelling water security issues and associated climate change risks for local communities, now and into the future.

Lessons learned. Experiences, success stories and lessons learned will be captured and reported against as part of the monitoring and evaluation component. Lessons learned will be integrated back into the project implementation as appropriate and be made publicly available through reporting and other mechanisms for use in future plans and projects.

H. Consultative Process

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

The proposal has undergone a structured and sustained consultative process over multiple phases of development, including island-specific design consultations conducted in 2022 for the target outer islands of Makin, Aranuka, and Tabiteuea South. These most recent consultations were focused specifically on informing the detailed design of this project. The consultations were implemented between June and August 2022 by a national team of facilitators and subject matter experts, with the support of SPREP and MISE.

The consultations were designed to ensure inclusive engagement, with attention to gender, age, ability and social inclusion, in line with the project's Gender and Social Inclusion Strategy (Annex 2). Communities were consulted using structured focus group discussions (FGDs) and stakeholder interviews covering six key thematic areas relevant to climate resilience and water security: (1) intra-household and gender dynamics, (2) prioritization of water-related challenges and solutions, (3) access and quality...

The consultation findings fed directly into the project's design elements such as: infrastructure placement and prioritisation, identification of sites, design of gender-responsive water access, and community-based governance mechanisms. The consultations revealed strong local demand for community water committees, support for participatory monitoring of

infrastructure, and prioritised freshwater access for women, children and persons with disabilities. These are directly reflected in project activities.

Despite the consultations being conducted in 2022, their continued validity into 2025 is ensured through engagement mechanisms between MISE, WSED and the outer island councils and local technicians. The proposal includes plans for further community engagement during implementation, particularly during the final design of island-specific sub-projects. In addition, the presence of national agencies and partners in the target islands provides continued feedback loops and reinforcement of priorities, ensuring that the information gathered remains relevant. Importantly, the consultations conducted in 2017 to 2019 remain valid in 2025 not only because they laid the foundational understanding of water access challenges and community preferences, but also because they were supplemented and reinforced by subsequent design consultations in 2022 and validated again through project partner engagement in 2024. These earlier consultations helped identify systemic issues, social dynamics, and implementation gaps which remain highly relevant, particularly in the context of limited institutional change and slow infrastructure rollout in outer islands.

In addition to direct community consultations, the project design has been informed through active engagement with development partners and implementing agencies that have led or are leading similar water-related initiatives in Kiribati. These include the Pacific Community (SPC), UNICEF, IFAD, IUCN, the Asian Development Bank (ADB), and the New Zealand and Australian High Commissions. Lessons learned from these partners—relating to community mobilisation, technical design, sustainability risks, and institutional capacity—have shaped the proposed delivery modalities and risk mitigation strategies. Their inputs also helped triangulate findings from community consultations and ensured the project is not duplicative but builds on successful approaches. Record of stakeholder engagement is documented in comprehensive records that are too extensive to include in the proposal page limits.

During implementation, particularly at the final design stage of island-specific sub-projects, community priorities will be verified and updated during assessment and survey activity under component 1. In addition, the ongoing presence of national agencies and development partners in the target islands ensures a continuous feedback loop, reinforcing and refreshing the relevance of earlier consultation findings.

A summary of consultations to date is provided below in Table 19. To note: The consultations reflected below were carried out primarily in 2022 as part of project design and in preparation of the ESMP. While formal documentation of more recent community consultations by MISE and WSED is not available, both agencies have maintained regular engagement with the outer islands as part of other water-related programming and coordination missions from 2023–2025. These visits helped to reconfirm the relevance of the earlier consultation findings and ensured the project continues to reflect community needs and priorities. No major discrepancies have been reported, and the proposed interventions remain aligned with national and local planning priorities.

Table 18. Summary of Consultations with Island Communities⁵⁵

Date(s)	Location	Entities/Groups Consulted	Participants (M/F)	Topics Discussed	Outcomes and How Reflected in Design
11–14 July 2022	Makin Island	Island Council, Water Committee, Women’s Group, Health Clinic, General Community	54 (23M / 31F)	Water system conditions, challenges in dry seasons, governance and community roles, preferred technologies	Confirmed urgent need for repair and household water access. Influenced focus on household RWH systems and capacity building under Components 1 and 2
14–17 July 2022	Aranuka Island	Island Council, Community Groups, Health and Education Representatives	60 (25M / 35F)	Community resilience, past WASH project issues, cultural and operational concerns	Identified weak governance and limited data. Shaped governance strengthening (Component 2) and M&E efforts (Component 5)
17–20 July 2022	Tabiteuea South	Village Elders, Youth Representatives, Water Technicians, Island Council	58 (22M / 36F)	Existing infrastructure gaps, youth involvement, sustainability concerns	Prioritised need for long-term sustainability. Led to strong safeguards, gender/youth involvement and maintenance plans

I. Justification for Funding

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

This project is designed to deliver its adaptation objectives and achieve its intended outcomes solely with the funding requested from the Adaptation Fund (AF). It does not rely on additional financing to realize its results. The proposed interventions are both targeted and costed in a way that ensures that the project will be fully implemented under the AF grant. All five components address clearly defined climate vulnerabilities in the outer islands of Makin, Aranuka, and Tabiteuea South, which are severely affected by increasing water insecurity due to climate change.

Without AF support, the three islands will continue to experience significant exposure to water-related climate risks. Historical and current data shows that while previous interventions have installed some infrastructure, the coverage is inadequate and unsustainable due to the lack of systems for repair, maintenance, water treatment, and community ownership.

⁵⁵ Community engagement and consultation processes were primarily conducted in 2022. Between 2023–2025, MISE and WSED officials visited the project islands (Makin – July 2023, Aranuka – February 2024, Tabiteuea South – August 2023) for water assessment and planning discussions as part of other donor-supported activities. These visits provided informal validation of the community priorities reflected in the proposed AF project design.

Across the three islands, only 804,200 litres of water is available from functioning infrastructure, averaging 179 litres per person—a quantity that would last less than four days at the minimum daily requirement of 50 litres. In Aranuka, none of the 46 installed systems are functioning, and reliance on shallow, unprotected groundwater sources has led to contamination, particularly during heavy rainfall and overtopping events. In Makin, freshwater lenses are the main source, but roof types are unsuitable for rainwater harvesting and wells are often contaminated due to proximity to latrines. Tabiteuea South faces severe brackishness in well water, forcing some communities to travel 8 km by boat to access freshwater from other islets.

Further compounding these risks are:

- Absence of water treatment options
- High rates of diarrhoeal diseases (756 reported cases in 2020)
- Inadequate capacity to manage water systems locally due to limited technical support and institutional resources

Previous projects did not include mechanisms for ongoing maintenance or long-term sustainability. Communities are expected to raise funds for repairs—an impractical expectation given the low-income status of households. This has resulted in the widespread failure of infrastructure and ongoing vulnerability to climate shocks.

The project is structured to overcome these challenges through five integrated components, each fully covered by AF financing:

Component 1: Rehabilitation of Existing Systems	Restores access to clean water by repairing defunct community and household water systems. Includes procurement, logistics, and safeguards, implemented entirely with AF resources.
Component 2: Institutional Strengthening	Builds the capacity of the Water and Sanitation Engineering Division (WSED) to manage and maintain water infrastructure. AF funding supports training, policy frameworks, and community technical engagement to strengthen national systems and reduce reliance on international actors.
Component 3: Risk-Informed Water Governance	Establishes a national Water Safety Framework and technical standards, embedding adaptation into planning and implementation. AF support covers technical expertise, stakeholder consultations, and policy development.
Component 4: New Infrastructure for Resilience	Installs household and community rainwater harvesting systems designed for climate resilience. These are fully financed under the AF grant with no reliance on co-financing.
Component 5: Community Engagement and Safeguards	Embeds resilience through behavioural change and safeguards. Includes gender-responsive awareness campaigns, participatory planning, and social inclusion strategies, all costed within the AF budget.

Each project component has been scoped to be **financially and operationally self-contained**, ensuring that no adaptation outcome is dependent on parallel or co-financed projects. While the project will benefit from coordination and information-sharing with ongoing efforts by UNICEF, SPC, KOIRAP, MFAT and others, the outcomes are not contingent on their delivery.

The project's alignment with national policies and frameworks, integration of environmental and social safeguards, and capacity building at local and institutional levels ensure long-term sustainability of adaptation benefits.

J. Sustainability

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

The project is designed to deliver lasting adaptation benefits by embedding sustainability considerations throughout its design, implementation, and exit strategy. The project targets deeply vulnerable outer island communities, and its success hinges not only on infrastructure delivery, but also on long-term functionality, local ownership, and strengthened institutional systems. The following outlines how economic, social, environmental, institutional, and financial sustainability will be achieved:

Economic

Sustainability

The project enhances household and community resilience to water insecurity by providing options for reliable and affordable access to safe water. By reducing the burden of sourcing water (both time and cost), especially for women and children, the project frees up time for education and livelihoods. Infrastructure investments will prioritise low-maintenance and locally appropriate systems, ensuring communities can operate and maintain them with minimal external support. Local economic opportunities will also be stimulated through engagement of small contractors and technicians trained under Component 2.

Social

Sustainability

Community consultation and ownership have been central to project design (see Part II.H and Annexes 7–9). Local committees will be supported to manage water assets, incorporating inclusive governance practices as outlined in the GEDSI Action Plan (Annex 2). The project will build local leadership capacity and ensure gender-equitable participation in decision-making. Targeted awareness campaigns will foster behavioural change to promote water conservation, hygiene, and collective responsibility.

Environmental

Sustainability

All project activities will comply with the Environmental and Social Safeguards System (ESSS) of SPREP and be screened accordingly. Technologies will be selected based on minimal environmental footprint (e.g. solar-powered systems, nature-based solutions where feasible). The rehabilitation of existing systems will reduce pressure on groundwater and prevent overextraction. Environmental impacts will be monitored and mitigated through site-specific

Environmental and Social Management Plans (ESMPs), particularly for Unidentified Sub-Projects (USPs).

Institutional

Sustainability

The project will strengthen national systems for water governance through capacity-building for the Water and Sanitation Engineering Division (WSED) and local councils (Island Councils and Village Committees). Guidelines and toolkits will be developed and institutionalised to support decentralised operation and maintenance. Data systems developed under Component 3 will enhance long-term planning capacity, enabling government and partners to continue adaptation efforts beyond the project lifecycle.

Financial

Sustainability

Operation and maintenance (O&M) plans will be developed for all infrastructure, supported by budgeting guidance and simplified financial tools for local use. The project will also explore options for modest user contributions or community-managed funds to support basic upkeep, while ensuring affordability. Close coordination with the Ministry of Finance and Economic Development (MFED) and MISE aims to mainstream water resilience into national budgetary frameworks and increase future resource allocations.

By embedding these measures across project components, the project establishes a foundation for scalable, durable, and community-owned adaptation solutions aligned with national climate and development priorities.

K. Environmental and Social Impact Risks

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

The proposed project has been screened in accordance with SPREP's Environmental and Social Safeguards System (ESSS) and is designed to be fully compliant with the Environmental and Social Policy (ESP) of the Adaptation Fund.

The project has been categorized as a **Category B** project, indicating that potential adverse environmental or social impacts are limited in scale and can be effectively mitigated through appropriate management measures.

The project is guided by a dedicated Environmental and Social Management Plan (ESMP), provided in **Annex 1**, which outlines the safeguard measures, screening tools, and monitoring protocols required to manage environmental and social risks throughout implementation. SPREP, as the Accredited Implementing Entity, has primary oversight of safeguards compliance under its Environmental and Social Safeguards System (ESMS), while MISE will lead the on-ground implementation and initial screening of activities. All project components, including Unidentified Sub-Projects (USPs), will undergo a structured assessment process, including risk categorization, mitigation planning, and community consultations. For USPs, site-specific screening will be conducted using SPREP's ESSS, and an Environmental and Social Management Plan (ESMP) will be prepared for SPREP approval prior to activity commencement – this is outlined in more detail in section 7.4 of the ESMP (Annex 1). This framework ensures that all project activities (whether identified at design or during

implementation) adhere to both national standards, SPREP and the Adaptation Fund’s environmental and social policy requirements.

This safeguards framework ensures that the entire project, including future sub-projects identified during implementation, adheres to national and Adaptation Fund environmental and social requirements.

Table 20 below presents the full screening checklist against the 15 Environmental and Social Principles of the Adaptation Fund. The table includes an indication of whether further assessment is required and outlines potential risks and corresponding mitigation measures for compliance.

Table 19. Checklist of Environmental and Social Principles

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<p>Compliance with the Law Projects supported by the Fund shall be in compliance with all applicable domestic and international law.</p>	<p>x</p>	<p>No Risk Relevant national and local authorities have been consulted during the proposal development process to ensure compliance with all relevant laws. Project activities will be implemented in alignment and compliance with national and international regulatory and policy frameworks signed by the Government of Kiribati.</p>
<p>Access and Equity Projects supported by the Fund shall provide fair and equitable access to benefits in a manner that is inclusive and does not impede access to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, and land rights. Projects should not exacerbate existing inequities, particularly with respect to marginalized or vulnerable groups.</p>		<p>Low to Medium Risk The exact sites for installation of water security interventions in the Outer Islands are not yet determined. Based on previous experiences by some community members, there is a risk of inequitable or restricted access to the provided water supply if sites ultimately come with restrictions placed on access by third parties. To avoid this risk the ESMP provides mitigation measures including and requires ongoing screening during site selection. The Project Proposal understands this risk and is developed on the basis of equitable access to the installed water security investments will be a crucial guiding principle for the selection of all installation sites and the process of allocating access to these project benefits will be fair and impartial. A fair process treats people equally without favouritism or discrimination, and an impartial process treats all rivals or disputants equally. Project ensures that equity begins with the Project staff, and then with the approaches and processes in design and finally in project implementation. The principles of access and equity have been captured in the Projects ESMP which all project staff and relevant community members will receive training on.</p>

		<p>Equitable access requirements of the Project have been clearly and transparently communicated with communities, relevant stakeholders, Island Council, and government agencies.</p> <p>The projects M&E Framework will measure developments related to 'access and equity' throughout the Project duration and the Project will be adaptive should the evaluations require changes.</p> <p>Ongoing environmental and social screening during site selection will ensure ongoing compliance with this Principle.</p>
<p>Marginalized and Vulnerable Groups Projects supported by the Fund shall avoid imposing any disproportionate adverse impacts on marginalized and vulnerable groups including children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities, and people living with HIV/AIDS. In screening any proposed project, the implementing entities shall assess and consider particular impacts on marginalized and vulnerable groups.</p>	X	<p>No Risk Through its equitable access approach, the Project focuses on marginalized and vulnerable groups (women, youth, elderly, disabled etc.) and aims to assist them to improve their water supply and sanitation access thus their living conditions. The project will be focusing on reducing the specific impacts of climate change by building resilience in the water security, with both individual households and community services. In this way, all vulnerable groups are expected to be positively impacted. The project does not have negative impact on these groups and the Stakeholder Engagement Plan promotes a GESI approach to consultations.</p>
<p>Human Rights Projects supported by the Fund shall respect and where applicable promote international human rights.</p>	X	<p>No to Low Risk The AF ESP Guidelines state that this principle is triggered by all projects funded by the AF. The project affirms the fundamental rights of people in targeted areas, and thus does not affect their freedom. Furthermore, the Project does not integrate any activities contrary to custom law or traditions. Participation in the Project will be participatory, voluntary, and free. The project affirms the fundamental rights of people in targeted areas, and thus does not affect their freedom. Furthermore, the Project does not include any activities contrary to the custom law or traditions. Necessary monitoring for this principle is limited to those parameters already included in the ESMP.</p>
<p>Gender Equality and Women's Empowerment Projects supported by the Fund shall be designed and implemented in such a way that both women and men 1) have equal opportunities to participate as per the Fund gender policy; 2) receive comparable social and</p>	X	<p>Low Risk Gender plays a significant role in the interaction with water and the impact of waterborne diseases. Women's role in water and sanitation includes water collection from wells and communal rainwater harvesting systems, responsibility for household hygiene and sanitation, decision making on use of household resources and care for household members whose illnesses are a result of waterborne diseases such as diarrhoea. In the context of Kiribati, no specific regulation or policy</p>

<p>economic benefits; and 3) do not suffer disproportionate adverse effects during the development process.</p>		<p>disallows women form participation in decision making, community development and capacity building. However, traditional practices, traditional gender roles and societal acceptance of roles of men and women in communities hinders the active participation of women in projects such as this.</p> <p>To ensure that the Project (a) does not include elements that are known to exclude or hamper a gender group based on the Kiribati customary system and (b) does not maintain or exacerbate inequality or the consequences of gender inequality, a Gender Action Plan (GAP) has been developed and included in the Project Proposal document. The GAP is developed to attain the goal of gender equality and the equal treatment of women and men, including through targeted efforts to ensure participation of both men and women in the Project activities and outcomes. The GAP is designed to ensure that there is accountability over gender inclusion and empowerment of women through rigorous monitoring tied into the results framework of the Project.</p> <p>The ESMP requires the implementation of the GAP as part of its requirements for activity design and consultations.</p>
<p>Core Labour Rights Projects supported by the Fund shall meet the core labour standards as identified by the International Labour Organization.</p>	<p>X</p>	<p>Low Risk</p> <p>The Republic of Kiribati is a member of the International Labour Organisation and has ratified 7 fundamental ILO conventions.</p> <p>The project will be implemented in compliance with legislation including the Employment Act. No child labour nor forced labour is expected to result from this project. Core labour rights concern gender, respect, work hours, etc., and any labour standard will be observed and respected on infrastructure interventions.</p> <p>Additionally, the Project will ensure that appropriate wages will be paid per assigned task. This is particularly important in the case of requiring community members to provide construction labour free of charge as has been the case in previous projects on the outer islands. No child will be employed. Core labour rights on gender, respect, work hours and national labour standards will be respected.</p>
<p>Indigenous Peoples The Fund shall not support projects that are inconsistent with the rights and responsibilities set forth in the UN Declaration on the Rights of Indigenous Peoples and other applicable international instruments relating to indigenous peoples.</p>	<p>X</p>	<p>No Risk</p> <p>All the population within the potential Project sites are indigenous, in the sense of having ancestral attachment to their land which is still important in the livelihoods of the majority who are rural dwellers. This reliance on natural resources and both customary and legal rights are recognised under national law.</p> <p>As Indigenous Peoples are the overwhelming majority of direct project beneficiaries safeguard measures have been integrated into the Project's overall design through the ESMP. They include: (i) free, prior, and informed consultation leading to broad community support during project preparation; (ii) measures to ensure culturally appropriate processes and benefits; (iii) measures to ensure that adverse impacts are mitigated; and (iv) measures for disclosing key project</p>

		documents in a language understandable to them. Community consultation and regular engagement with the community is integral and the ESMP stipulates that this will be undertaken through the life of the Project.
Involuntary Resettlement Projects supported by the Fund shall be designed and implemented in a way that avoids or minimizes the need for involuntary resettlement. When limited involuntary resettlement is unavoidable, due process should be observed so that displaced persons shall be informed of their rights, consulted on their options, and offered technically, economically, and socially feasible resettlement alternatives or fair and adequate compensation.		Low to Medium Risk Water supply and sanitation services do not require any resettlement so there will be no involuntary resettlement under the project. Furthermore, there will be no compulsory land acquisition for the activities. Any long-term access to lands for installation of infrastructure will be secured through close consultations and formal and legally binding agreements with the landowners. The ESMP stipulates the process for securing land and monitoring will ensure that no installations are made on land without an agreement already being in place. Although no resettlements are necessary for the activities, this will be closely monitored. Frequent monitoring and regular consultations will identify risks of resettlement, including to physical natural assets and economic/livelihood activities, and manage potential risks as per the ESMP. For the long-term protect the ground water resource or extraction site from contamination, there may be a need for land management of private lands. Any management measures will be developed in close consultation with the landowners and all measures will be voluntary. Ongoing screening of the activities during site selection, as required in the ESMP, will ensure compliance with this Principle.
Protection of Natural Habitats The Fund shall not support projects that would involve unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional or indigenous local communities.	X	No Risk It is expected that installation of water security interventions will be carried in areas surrounding the villages which are already changed from their natural condition. The project will work with measures for water conservation to limit the runoff and soil erosion during construction works. There are no critical habitats within the project islands urban or semi urban areas.
Conservation of Biological Diversity Projects supported by the Fund shall be designed and implemented in a way that avoids any significant or	X	No Risk As the physical works proposed under this project are small scale and in already altered habitats, there is no potential of a significant or unjustified reduction or loss of biological diversity. There will be no introduction of invasive species for

unjustified reduction or loss of biological diversity or the introduction of known invasive species.		this project.
Climate Change Projects supported by the Fund shall not result in any significant or unjustified increase in greenhouse gas emissions or other drivers of climate change.	X	No Risk The main drivers of climate change that are considered by the AF under this principle are the emission of carbon dioxide gas from the use of fossil fuel and from changes in land use, methane and nitrous oxide emissions from agriculture, emission of hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, other halocarbons, aerosols, and ozone. This is not applicable to the project.
Pollution Prevention and Resource Efficiency Projects supported by the Fund shall be designed and implemented in a way that meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants.	X	Low Risk Installation of water security investments will require the production of concrete which has the potential to pollute soil or water if the concrete wastewater or slurry isn't correctly managed. It is expected that required concrete volumes will be minimal and can be readily avoided through the standard measures provided in the ESMP. Waste will be generated by the project activities. Overburdening of islands existing solid waste systems and pollution (from leachate into ground water or direct dumping of waste into marine environment) stemming from poor solid waste management practices. The ESMP provides the required management measures to ensure that impacts are avoided through the standard waste hierarchy of reduce, reuse, recycle, minimum standards for waste storage and through stipulating no solid waste disposal on project islands.
Public Health Projects supported by the Fund shall be designed and implemented in a way that avoids potentially significant negative impacts on public health.	X	Low to Medium Risk By supplying more and better water services a positive impact is expected on the public health of targeted communities, due to water-related diseases and vectors. Proposed education and training in water management and planning at community level can be extended to prevent water-related diseases (amoeba, cholera, etc.) and vectors as mosquito, avoiding Zika, Dengue, Malaria, etc. There is a risk that water storage facilities may increase mosquito habitats, which carry vector-borne diseases. The ESMP requires design measures to avoid vector risks. There is a risk of contamination of the ground water from poor land use management and poor water extraction habits. The project activities are designed to minimise this and the ESMP provides guidance for the ongoing compliance with any land use plans and to adequate resourcing by MISE after project completion.
Physical and Cultural Heritage Projects supported by the Fund shall be designed and implemented in a way that avoids the alteration, damage,	X	No Risk Sites will be selected to avoid any physical or cultural

<p>or removal of any physical cultural resources, cultural sites, and sites with unique natural values recognized as such at the community, national or international level. Projects should also not permanently interfere with existing access and use of such physical and cultural resources.</p>		<p>heritage.</p>
<p>Lands and Soil Conservation Projects supported by the Fund shall be designed and implemented in a way that promotes soil conservation and avoids degradation or conversion of productive lands or land that provides valuable ecosystem services.</p>	<p>X</p>	<p>No Risk There are no fragile lands that would be lost or degraded by the project activities.</p>

A. Arrangements for project implementation

Describe the arrangements for project implementation.

The project will be implemented through a collaborative and structured arrangement between the Implementing Entity (IE) – the Secretariat of the Pacific Regional Environment Programme (SPREP) – and the Executing Entity (EE) – the Ministry of Infrastructure and Sustainable Energy (MISE) of Kiribati. The operational arm of MISE for this project will be the Water and Sanitation Engineering Division (WSED).

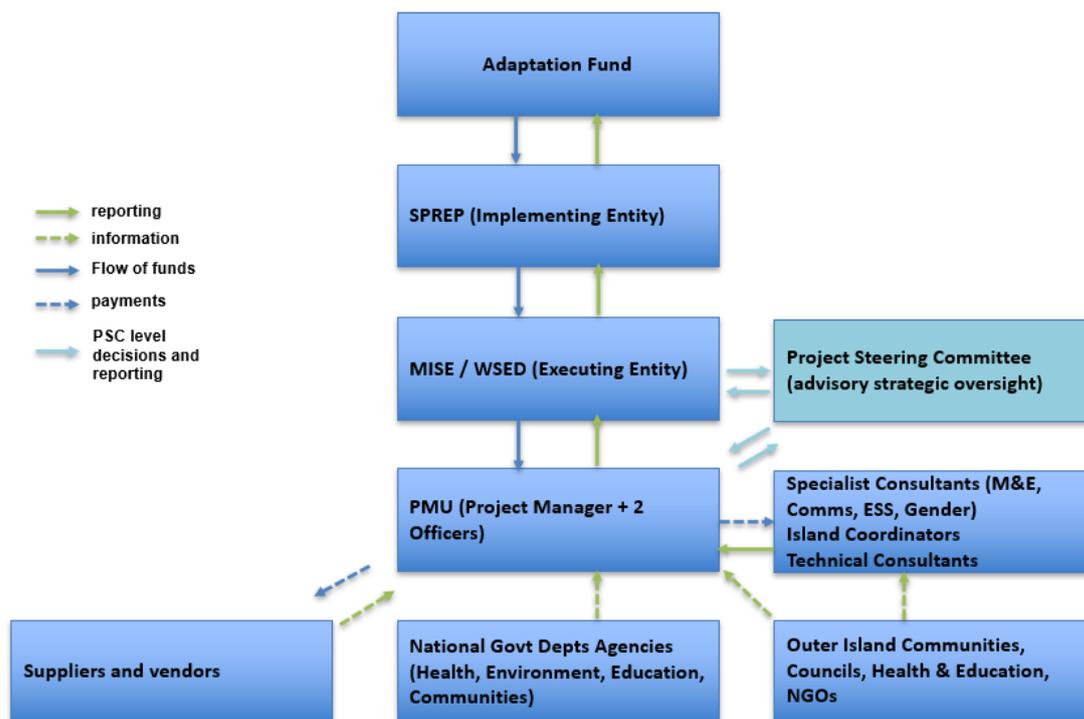


Figure 12. Institutional and Reporting Structure for Project Implementation

SPREP serves as the Implementing Entity, overseeing project execution in compliance with Adaptation Fund (AF) and SPREP policies. SPREP will:

- Manage and coordinate reporting to the Adaptation Fund
- provide fiduciary oversight,
- ensure that the project remains compliant with the Fund’s policies on Environmental and Social Safeguards (ESS), Gender, and Monitoring and Evaluation (M&E) e.g. through review, screening, approval and monitoring of ESMPs
- Lead and manage mid-term and terminal evaluation
- Provide technical back-stopping and regular coordination with MISE to ensure implementation progress.

SPREP, as the Implementing Entity, will receive periodic technical and financial progress reports from MISE/WSED through the PMU. In turn, SPREP will compile and submit periodic

Project Performance Reports (PPRs), annual audited financial statements, and mid-term and final evaluation reports to the Adaptation Fund in accordance with its reporting requirements.

SPREP will be a proactive and hands-on IE, reflecting its established relationship with member countries and the needs of a remote atoll nations with limited capacity.

MISE will act as the Executing Entity with full responsibility for day-to-day implementation and coordination of project activities. Project execution will be delivered through the WSED where the Project Management Unit (PMU) will be located and embedded in Tarawa.

The PMU will be responsible for planning, execution, and operational management and will be staffed by 1 x Project Manager and 2 x Project Officers (for Finance, Admin & Logistics).

The PMU will coordinate with partners and stakeholders, manage local implementation logistics, and support data collection and field-level execution including for project monitoring and evaluation, gender action monitoring data collection and environment and social management monitoring data collection. The Project Manager with support of WSED and MISE will maintain close coordination with development partners active in water security and WASH in Kiribati (including SPC, UNICEF, ADB, and bilateral donors) to ensure complementarity, avoid duplication, and leverage lessons learned. Information sharing will occur through the Project Steering Committee, bilateral technical meetings, and use of national coordination platforms such as the Kiribati National Expert Group (KNEG) and Joint Implementation Plan mechanisms.

Specialist roles (Monitoring & Evaluation, Gender and Communications) will be engaged through short-term consultancies, in line with the intermittent nature of these functions. These consultants will contribute to system establishment, capacity building, periodic quality checks, and remote working and support. Their work will cascade through the PMU to island coordinators and other delivery actors.

Due to the geographic isolation of the target islands (Makin, Aranuka, Tabiteuea South), the project design includes decentralised human resourcing with Island Coordinators (one per island)

will be contracted part-time over the project duration to provide logistical support, facilitate on-the-ground implementation, liaise with local stakeholders, ensure water quality monitoring, and support reporting from the islands. These positions are crucial to ensure continuity and community-level engagement between PMU visits. They will be project focal points on the islands managing relations with Island Councils, community leaders and representatives to help inform and support implementation planning and delivery on-ground including stakeholder engagement.

The Ministry of Health and Medical Services, Ministry of Women, Youth, and Social Affairs, and other national stakeholders (e.g. local councils, schools, health centres) will be engaged in community mobilisation, behaviour change campaigns, and integration of gender-responsive and inclusive approaches. Similarly with other government ministries such as Ministry of Environment, Lands and Agricultural Development (MELAD) who provide the national guidance on screening of project sites and advise on land access and permitting,

Ministry of Finance and Economic Development (MFED) who will support alignment with national development priorities and financial accountability procedures.

Technical consultants will work closely with WSED and other sector partners to co-develop design, operations, and training content for water systems.

The project implementation budget has been designed to reflect operational realities in Kiribati, balancing the need for decentralised delivery with tight budget ceilings. High costs of transport, shipping, and inter-island logistics in remote settings are accounted for. While limited, the budget is strategically allocated to maximise impact, ensure sustainability, and leverage coordination and knowledge from other initiatives.

This arrangement ensures that the project can be implemented effectively despite logistical and capacity challenges, through close IE-EE coordination, decentralised staffing, and tailored support.

Project Steering and Coordination Structures

The project will have a multi-level governance arrangement, anchored in strong national ownership and supported by SPREP as the accredited Implementing Entity (IE) for the Adaptation Fund. A Project Steering Committee (PSC) will be established within the first quarter of the project's implementation. The PSC will provide the independent approval process for the annual work plans and funding allocations and provide advice on project activities including ensuring that implementation is in line with the approved funding and timeline, and that there is coordination and integration across (a) current and future projects in the outer islands and (b) across government ministries and departments.

The PSC will consist of representatives from relevant stakeholder ministries (e.g., MISE, MFEC, MELAD, MIA), outer island representation, the Implementing Entity and project technical partners. The PSC will convene once a year to review annual work plans and budgets and make decisions about resource allocations consistent with performance and priorities agreed to by the whole group. Terms of reference for the PSC will be developed in the inception period. Development of the PSC will look at established national governance structures for climate and disaster related projects, for example the Kiribati National Expert Group (KNEG) who provides **advisory oversight** and **strategic coordination** for climate change and disaster risk initiatives, for efficiency, visibility and effective oversight at national level.

Decisions of the Project Steering Committee, including endorsement of annual work plans and budgets, will be formally communicated to the PMU. These decisions will directly inform operational planning, activity sequencing, and implementation adjustments. The PMU will, in turn, report on implementation progress and constraints at each PSC meeting, ensuring iterative feedback and adaptive management.

This multi-level implementation and governance structure ensures strategic oversight, effective day-to-day execution, and adaptive management based on learning and community feedback—critical in the remote and climate-vulnerable context of Kiribati's outer islands

B. Project Risks

Describe the measures for financial and project risk management.

The proposed project incorporates robust risk management measures to ensure effective delivery, transparency, and long-term sustainability. Risks have been systematically identified, categorised (financial, institutional, operational, technical, social, environmental), and assessed for likelihood and impact.

Financial risks are addressed through established fiduciary and procurement systems. SPREP, as the Implementing Entity, applies internationally recognised financial management procedures aligned with the Adaptation Fund's standards, including regular financial audits, reporting, and disbursement tracking. At the country level, MISE/WSED, as the Executing Entity, will be supported by a dedicated Project Management Unit (PMU) including finance and procurement personnel. The PMU and Ministry of Finance will be trained in Adaptation Fund financial management requirements, with oversight from SPREP to ensure financial controls, due diligence, and real-time budget monitoring are in place.

Institutional and operational risks, such as limited absorptive and technical capacity, especially in outer island settings, will be mitigated by engaging local coordinators, targeted capacity building, and hands-on support from the PMU and SPREP. SPREP's direct implementation support and quality assurance oversight will help maintain delivery standards across project components.

Social and environmental risks, such as the potential for unequal participation or unintended environmental impacts, are managed under the Environmental and Social Management Plan (Annex 1) and Gender Equality, Disability and Social Inclusion Action Plan (Annex 2). Screening, consultation, and safeguards monitoring processes are in place to detect, manage, and respond to such risks across the project lifecycle. While key risks are addressed under Part II.K, select high-level social and environmental risks are also reflected in Table 21 to maintain visibility in the project's overall risk profile.

Technical and delivery risks, including delays in infrastructure procurement or technology failure, are managed through early engagement of technical experts, scheduling buffers, and contingency planning. Regular progress reviews and adaptive management approaches will enable the project team to respond to emerging challenges.

Overall, risk management is integrated into the project's design, with responsive mitigation strategies, oversight mechanisms, and institutional learning loops built in. Risks and mitigation measures will be revisited during each Project Steering Committee meeting and Project Meetings to enable early warning and timely response. This layered risk management approach ensures that financial and delivery risks are minimised while fostering accountability and resilience in project implementation.

Table 20. Project Risks and mitigation measures

Category and Risk Description	Risk Level	Mitigation Measure(s)
Financial: Funds misappropriation or inadequate financial oversight	Low	Mitigated by adherence to GoK procurement policies, clear budget lines, engagement with reputable partners, and oversight by SPREP and the PSC.
Institutional: Delays due to procurement or coordination issues	Medium	SPREP and GoK experience in contract administration will support timely procurement through proactive planning and PMU support.
Institutional: Limited capacity within MISE/WSED	Medium	Capacity building embedded in project design; technical consultants will support implementation and mentor WSED/PMU staff.
Operational: Geographic remoteness of target islands	Medium	Local Island Coordinators will be contracted; logistics and travel planned in advance to ensure continuity.
Operational: Training not tailored to local audiences	Low	Train-the-trainer model and participatory approaches to ensure relevance; delivery adapted to local context.
Social: Inadequate community engagement	Low	Project activities grounded in consultations; Island Coordinators will support ongoing communication and feedback.
Environmental & Social: Non-compliance with ESS/ESP standards	Low	Screening of USPs, training for staff, oversight by PMU and SPREP to ensure ESP compliance (see Part II.K, Annexes 5 & 6).

Note: Detailed social and environmental risk mitigation measures are outlined in Part II.K and Annexes 5 (Environmental and Social Management Plan) and 6 (GEDSI Action Plan).

C. Environmental and Social Risk Management

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

The project has been screened against the Adaptation Fund's Environmental and Social Policy (ESP) and assigned a Category B risk level, reflecting that its activities may result in limited and reversible environmental and social risks. These have been pre-identified and managed through a robust Environmental and Social Management Plan (ESMP) presented in Annex 1.

To clarify, MISE/WSED, as the Executing Entity, will lead the management and mitigation of identified environmental and social risks on the ground. SPREP, as the Implementing Entity, will play a proactive technical support and supervisory role to ensure full alignment with the Environmental and Social Policy (ESP) of the Adaptation Fund.

Management of Environmental and Social Risks, including for Unidentified Sub-Projects (USPs) such as small-scale infrastructure or capacity-building activities to be defined during implementation—will be managed in full compliance with AF requirements.

All USPs will undergo systematic screening, categorisation, and mitigation as outlined in the ESMP using SPREP’s Environmental and Social Safeguards Management System (ESMS) Screening Tool. This tool applies the 15 AF ESP Principles and ensures that risks are properly classified, monitored, and mitigated. No USP will proceed until appropriate safeguards are in place, as verified by SPREP and MISE/WSED. Environmental and social screening, as well as monitoring of safeguards implementation, will be carried out by the Executing Entity MISE, supported by technical oversight and periodic review from SPREP. All USPs will be subject to this screening process and SPREP approval, in accordance with the SPREP Environmental and Social Safeguards framework. This is outlined in Section 7.4 of ESMP Annex 1

Consistency of Risk Identification - Risks listed in this section are fully aligned with the AF ESP Checklist presented in Section II.K and with the summary matrix in Annex 1. These include potential impacts related to land access, vulnerable group inclusion, water safety, waste disposal, and labour conditions. See section 7 in Annex 1 for a detailed environmental and social risk mitigation matrix aligned to the 15 ESP principles.

Project-Level Grievance Mechanism - The project includes a five-step Grievance Redress Mechanism (GRM) to be finalised during project inception and tailored to the Kiribati context. Stakeholders will be able to lodge a complaints via email, in writing, or in person through Island Councils or directly to the PMU. This will be made publicly known during stakeholder engagements. The project GRM will consider both formal and traditional pathways for submitting grievances, with preference given to resolving issues at the community level before escalation. Complaints can also be lodged directly to SPREP via the website and email, in which pathway to resolution through the Project GRM will be an initial consideration. Full details of the mechanism, including procedures and responsible institutions, are outlined in Annex 1, Section 4.5.

Budget Allocations for ESMP Implementation The project implementation budget includes allocations for environmental and social safeguard implementation, monitoring, and compliance. Specific line items include consultancy days for an Environmental and Social Safeguards Advisor, training for the PMU and Island Coordinators, periodic monitoring visits by SPREP, and reporting costs. These provisions will ensure that the ESMP is actively implemented and periodically updated in response to field realities and evolving risks.

D. Monitoring and Evaluation Arrangements

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.

A comprehensive Monitoring and Evaluation (M&E) Plan has been developed and is described below to guide the tracking of project results, performance, and risk mitigation throughout the project lifecycle. This section constitutes the full M&E Plan as required for the full project proposal stage. The M&E Plan draws directly on the Results Framework (Table 24) and ensures alignment with the Adaptation Fund (AF) Evaluation Framework, Environmental and

Social Policy (ESP), and Gender Policy. It defines clear roles, methods, tools, and timelines for monitoring inputs, activities, outputs, outcomes, and impacts.

M&E Objectives and Functions The M&E Plan will serve the following functions:

- Monitor progress against the Results Framework, including core AF indicators and project-specific indicators.
- Track the effectiveness of environmental and social safeguards (per ESMP, Annex 1).
- Capture lessons and knowledge for adaptive management and learning.
- Provide evidence to inform reporting to the AF and national stakeholders.

M&E Governance and Responsibilities The Project Management Unit (PMU), housed within WSED, will lead day-to-day M&E activities. Key responsibilities include:

- **Project Manager:** oversight of M&E activities.
- **Project Officer (Admin & Logistics):** coordination of data collection and quality assurance led by M&E, Gender and ESS consultants.
- **M&E Consultant (set days over term of the project):** supports the development of data templates, training, baseline studies, and periodic review, evaluations and reporting.
- **Island Coordinators:** provide field-level data and verification.
- **SPREP (Implementing Entity):** reviews and validates reports, provides M&E technical back-stop support, and ensures AF reporting standards are met. Responsible for Mid-Term Review and Terminal evaluation.

Table 21. Key M&E Activities and Timeline

Activity	Timeline	Responsible Entity
Baseline data collection	Project inception phase (Year 1)	PMU, M&E Consultant
Quarterly monitoring & updates	Throughout project	PMU, Island Coordinators
Mid-Term Review	Year 3	SPREP, External Evaluator
Final Evaluation	Final year of implementation	SPREP, External Evaluator
Adaptive management check-ins	Semi-annually	PMU, SPREP

These activities are supported by monitoring templates, data collection protocols, and field verification mechanisms. An inception workshop will finalise the detailed M&E calendar and tools.

Environmental and Social Risk Monitoring Monitoring of Environmental and Social (E&S) risks will follow the procedures outlined in the ESMP (Annex 1). This includes:

- Screening and categorisation of Unidentified Sub-Projects (USPs) using SPREP's ESS tools.
- Regular compliance checks during implementation of activities.

- Inclusion of E&S indicators in quarterly reports.
- Stakeholder feedback via the Grievance Mechanism.

The PMU, with support from SPREP, will lead risk tracking and mitigation follow-up. Safeguard responsibilities are integrated into consultant and staff TORs. Key risks and mitigation measures are also embedded in the Results Framework.

Integration with Results Framework All output and outcome indicators from the Results Framework are linked to corresponding monitoring activities. Indicators include both quantitative metrics (e.g., number of households with water access) and qualitative assessments (e.g., satisfaction with infrastructure).

Knowledge Management and Learning M&E findings will feed directly into the project's knowledge management system. Good practices, challenges, and adaptations will be captured through learning briefs, shared with communities, stakeholders, and regional partners.

Delivery Partners Where applicable, the term "delivery partners" refers to organisations who may support technical delivery of project activities. These may include non-government organisations and agencies like the UN on WASH programmes, as well as relevant technical departments such as the Ministry of Health and Medical Services, and the Ministry of Women, Youth, Sports and Social Affairs.

Budget for M&E and Safeguard Oversight

Table 22. Budget for M&E and Safeguard Oversight

Activity	Estimated Cost (USD)	Timing	Responsible Entity
M&E Advisor (Consultant)	40,000	Year 1	SPREP, PMU
Mid-Term Review*	30,000	Year 3	SPREP, Independent Evaluator
Final Evaluation*	50,000	Final year	SPREP, Independent Evaluator
Real-time studies^	41,850	Ongoing (all components)	PMU, M&E Consultant, SPREP
Total Estimated Budget	161,850		

*Denotes cost under Implementing Entity (IE) fee budget

^Real-time studies will be embedded within broader implementation activities, particularly component 5, and will provide real-time data to guide learning and adaptive management.

Grievance Mechanism (GM) While the GM process is detailed in Annex 1, this section confirms that physical submissions can be made to the WSED office in Tarawa. Once

established an email address and mechanism for lodging any grievances will be published in community materials and public notices.

E. Results Framework

Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.

Table 23. Project Results Framework

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
<p>Impact: Enhanced climate resilience of three outer island communities in Kiribati through reliable, equitable, and sustainable access to safe drinking water and clean water is available for other uses, under expected climate change impacts.</p>	<ul style="list-style-type: none"> • % of population with reliable access to climate-resilient water • No. of institutions applying risk-informed planning tools • No. of new or improved water systems in use <p>Number of people (disaggregated by GSI, age and gender), engaged through information provision concerning intentions to improve water supply systems</p>	<ul style="list-style-type: none"> • 2,225 women (49.5% of population) direct beneficiaries • 2,266 men (50.5% of population) direct beneficiaries • 1,825 are under 14 years of age • 1,956 are youth (15-49 years old) 	78% population across 3 islands with improved access to safe drinking water a 40% female representation.	<p>Project technical reports</p> <p>Community engagement survey form (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> • Appropriate consultation, surveys and information provision occurs
<p>Outcome 1.1 The selected three island communities have repaired and/or replaced water supplies for safe drinking water and</p>	<p>Number of people (disaggregated by</p>	0 focused engagements about existing water supply systems conducted on target islands (# some preliminary engagement	At least 50 percent of community members involved in engagement (education sessions,	Community engagement survey form (attendance, methods,	<ul style="list-style-type: none"> • Appropriate consultation and information provision occurs • Approvals to conduct

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
clean freshwater for other water uses	<p>GSI, age and gender), engaged through information provision concerning intentions to improve water supply systems</p> <p>Type, and number of, repairs and/or replacement work to water supply systems identified by rapid assessments</p> <p>Number of households benefiting from repaired water system.</p>	<p>has occurred during pre-planning for the KIRAF project and may contribute to the target for this indicator)</p> <p>0 recent repairs and/or replacements made to water supply systems</p> <p>0 community members benefitting from recent repairs and/or replacement work to water supply systems</p>	<p>workshops, decision making processes with a 30% female representation.</p> <p>At least 50% of repairs or new installations identified by the rapid assessments are completed on each island</p> <p>50% of households from the target villages on the 3 islands are benefitting from repairs and/or replacement work to water supply systems (50% evidence from female household respondents)</p>	<p>feedback)</p> <p>Workplan checklist with accompanying physical evidence of work (reports and photos)</p> <p>Household survey form completed once repairs and/or replacement work to water supply systems have been completed.</p>	<p>assessments by relevant decision makers</p> <ul style="list-style-type: none"> Assessments undertaken on site Outputs will inform Activity 1.1.1.2 Community will need to be informed prior to work about any potential disruption to water access due to construction Agreements made for repair and/or replacement priorities Repair and replacement works will be adhering to ESMP mitigation measures
	<p>Number of site-based rapid assessments completed</p> <p>Number of village and household assessments completed</p>	<p>0 formal community assessments on household rainwater harvest system as part of water need response</p>	<p>At least 1 village from each of the 3 islands has a completed rapid assessment for its existing water supply systems</p>	<p>Completed methodology for assessment of water supply systems</p> <p>Completed rapid assessment report</p>	<ul style="list-style-type: none"> Appropriate consultation and information provision occurs Approvals to conduct assessments by relevant decision makers

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
			At least 1 village from each of the 3 islands has a completed assessment regarding household RWH.	<p>provided by technical team</p> <p>Completed methodology for assessment of household RWH</p> <p>Completed household RWH assessment report provided by technical team with HH prioritization recommendations</p>	<ul style="list-style-type: none"> Assessments undertaken on site Outputs will inform Activity 4.1.1.1
Outcome 1.2 <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i>	<p>Completed report of recommended water treatment options</p> <p>Number and type of effective water treatment technologies installed and in use in conjunction with repaired and/or replaced water supply systems</p> <p>Percentage of households benefiting from improved treated water.</p>	<p>Basic water treatment (i.e. boiling of water) occurs for village and domestic uses</p> <p>Water borne diseases are a continuing health problem</p>	<p>1 completed water treatment options list for utilisation in villages</p> <p>At least 50% of identified repairs or new installations for water treatment purposes are completed on each island</p> <p>50% of households from each of the 3 islands are using effective water treatment</p>	<p>Water treatment options report</p> <p>Village assessment survey results</p> <p>Workplan checklist with accompanying physical evidence of work and usage activity (photos)</p> <p>Household survey form completed once installations have been</p>	<ul style="list-style-type: none"> Water treatment technologies are feasible for remote island use Community will be informed about new water treatment technologies and practices Water treatment technologies and practices will be adhering to ESMP mitigation measures.

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
			technologies in conjunction with repaired and/or replaced water supply systems (50% evidence from female household respondents)	completed.	
	<p>Number, and type of, water quality sampling and testing using modern technologies and methods</p> <p>Reduction in instances of water-borne diseases identified</p>	<p>Regular water quality monitoring is minimal</p> <p>Data is reliant on information provided by local health clinics.</p> <p>Water quality monitoring uses old-fashioned techniques based on detection of <i>E. coli</i></p>	<p>At least 1 village from each of the 3 islands is undertaking water quality sampling and testing using modern technologies and methods</p> <p>Instances of water-borne disease fall within recognised public health parameters in villages that are using modern technologies and methods</p>	<p>Workplan checklist with accompanying physical evidence of work (photos)</p> <p>Framework for acceptable levels of water-borne disease occurrence</p> <p>Water quality monitoring data sheets</p> <p>Community engagement survey form (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> • Testing of water quality samples can be done • Training occurs for water technicians and community members to monitor water quality and record data • Access to appropriate testing facilities for cyclical water testing to occur

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
<p>Outcome 2.1 Strengthened WSED/MISE/GoK capacity and capability to provide comprehensive water assessments, analyses, and reports at regional and international standards.</p>	<p>Self-capacity assessment</p> <p>Technical evaluation</p> <p>Assessment methodology and required equipment/ infrastructure inventory developed</p> <p>Number of water management SOPs, internal protocols, or institutional procedures, systems (new or enhanced) adopted or implemented</p>	<p>At 60% capacity to deliver water services at regional organisation level</p> <p>0 Technical evaluation</p> <p>One water resource assessment conducted in Makin (needs review) No technical and scientific assessments have occurred to describe surface and groundwater resource quantity and quality relevant to the scale in the islands of Aranuka and Tab South</p>	<p>At 95% capacity to deliver water services at regional organisation level</p> <p>Assessments have occurred on the 3 islands</p> <p>3 technical evaluations evidencing increasing improvement from first to last. (start, mid, end)</p> <p>Assessment completed for 3 target islands</p> <p>At least 4 new or enhanced SOPs or protocols or systems adopted by project</p>	<p>Annual self-evaluation</p> <p>Technical evaluation – TA annual report and assessment</p> <p>Comprehensive water resource assessment reports Surface and groundwater mapping methodology and groundwater resource quantity and quality</p> <p>Government documents, SOPs, internal circulars, policy notes, meeting minutes</p>	<ul style="list-style-type: none"> Assessments will require field equipment capable of assessing topographic, bathometric and substrate composition to effectively map water bodies along with qualified technician/s to operate and assess field data Community leaders will need to provide input and permissions to allow mapping, particularly if remote sensing technology is deployed that may involve photography or videography of homes and people

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
		Existing protocols, systems, procedures	end		
	<p>Establishment of MISE training programme for improving understanding and capacity for decision making on water resources and climate modelling</p> <p>Number of government stakeholders (disaggregated by GSI, age and gender), informed about, or participating in, water resource assessments and climate modelling for decision-making in future water security planning</p>	No specific involvement by national government stakeholders in water resource assessments and climate modelling for decision-making in future water security planning for the three targeted islands	<p>At least 1 training session completed with MISE</p> <p>At least 50% of relevant government agency staff undertake relevant awareness and capacity development activities. (30% female participants)</p>	<p>Water resource assessment communication material</p> <p>Climate modelling impacts communication material</p> <p>Government training session programme</p> <p>Training survey form (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> All relevant government agencies have been identified and are aware of their obligation for undertaking capacity development exercises
Outcome 2.2 Strengthened planning process for long-term sustainable supplies of safe drinking water, clean freshwater for other uses,	Completion of technical, social, environmental, and economic assessment of multiple water supply options	Technical, social, environmental, and economic assessment of multiple water supply options have not been	<p>Water security plans developed for all 3 targeted islands</p> <p>50% of national</p>	<p>Reports describing multiple water supply options</p> <p>Island level water</p>	<ul style="list-style-type: none"> All background information has been obtained and is available in clearly interpreted format to

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
and effective affordable maintenance arrangements	<p>Completion of integrated, long term water security plans</p> <p>Number of people (disaggregated by GSI, age and gender), participating in the decision-making relating to the future options</p>	<p>done</p> <p>Integrated, long term water security plans have not been developed</p>	<p>stakeholders involved in engagement (education sessions, workshops, decision making processes</p> <p>At least 40% of national stakeholder engaged on options assessments are female and considered youth.</p>	<p>security plans</p> <p>Community engagement / consultations survey form (attendance, methods, feedback)</p>	<p>assist decision making</p> <ul style="list-style-type: none"> Decision making processes are effectively facilitated and derive agreed outcomes Decision-making processes enable consultations with all community members i.e. women, men, youth
Outcome 2.3 Commenced strengthening of policy and legal framework for sustainable management of water resources and capacity development	<p>Completion of desk review and consultations</p> <p>Final long-term strategy approved.</p> <p>Initial draft of Act is endorsed for further development</p>	<p>KV20 (2016-2020) KDP</p> <p>Water Resources Policy 2008</p> <p>National Sanitation Policy 2010</p> <p>Climate Change Policy</p> <p>Integrated Environment Policies and Acts</p>	<p>60% of targeted participants were engaged in the desk review & consultations.</p> <p>Endorsed revised National Water Resource Policy and Sanitation Policy</p>	<p>Report describing the inception and consultations to develop act & strategy (including attendance, methods & feedback)</p> <p>Written copies of the long-term strategy & act</p>	<ul style="list-style-type: none"> Government and community support for the development of legislation and policy Strengthened position of both the government & communities to engage in water resource management. Decision making & available resources will underpin consultative processes

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
<p>Outcome 3.1 Equitable access to safe drinking water and clean freshwater for other water uses is in place in the selected island communities</p>	<p>Integrated Community Management Plans to include</p> <p>a. Asset Management - b. Sustainable maintenance c. Water Safety. d. Drought Plan.</p> <p>Number of community members</p> <p>(disaggregated by GSI, age and gender), involved in development of island/ village level sustainability and drought response plans</p>	<p>0 recent informal water infrastructure inventories or condition assessments undertaken for the three targeted islands (# preliminary inventories recorded during pre-planning for the KIRAF project and may contribute to the target for this indicator)</p> <p>No system for checking water infrastructure condition</p> <p>Water infrastructure is not maintained</p> <p>No structured water infrastructure maintenance program</p> <p>No water safety plans nor drought response plans exist for the targeted islands</p> <p>No response framework on the three islands for droughts and other hazards exacerbated by</p>	<p>All 3 islands have a long-term sustainable management plan to guide water usage, the proper maintenance of its water supply infrastructure and its water quantity and quality monitoring systems</p> <p>At least 1 of the 3 targeted islands has a water safety plan</p> <p>At least 1 of the 3 targeted islands has a drought response plan</p> <p>At least 50% of community members engaged on assessment outputs are female and considered youth.</p>	<p>Integrated Community Water Management Plans inclusive of</p> <ul style="list-style-type: none"> - Asset management plan - Maintenance and repairs plan - Water safety plan - drought response plan - Record of formal agreements with these plans - Records of training provided in water infrastructure maintenance 	<ul style="list-style-type: none"> • Designated individuals with formal asset maintenance duties • Initial stock of spare parts and equipment for asset maintenance funded through project, planning for thereafter included in planning. • Information and evidence from Component 2 has been acquired and is used to inform sustainable water management plans

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
	<p>Water supply sustainability plans formally endorsed, and adopted by relevant national government agencies and implemented</p>	<p>climate.</p> <p>National government does not have specific agreements concerning funding arrangements for the sustainable management plans for the three targeted islands</p> <p>Outer islands are required to fund maintenance and repairs themselves</p>	<p>Final sustainability plan endorsed and adopted by government agency/ies.</p> <p>An agreement at national level for appropriate funding commitment to water supply sustainability plans for the three targeted islands</p>	<p>Integrated Community Water Management Plan inclusive of:</p> <p>Funding allocations required for sustainable water management for each island and is identified in the annual budgets of relevant national government agencies</p> <p>Funding allocations are identifiably expended on water supply sustainability resourcing such as specialist advice, training, information provision, spare parts, materials, products, tools and</p>	<ul style="list-style-type: none"> Available funding is sufficient to address identified water security needs for the three islands Communities, and especially those individuals with specific water management responsibilities, have the capacities (advice, training) and resources (information, guidelines, spare parts, materials, products, tools, equipment) required to adequately maintain water infrastructure <p>Relevant national government agencies provide the support required by island communities</p>

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
	<p>Number of participatory stakeholder engagement forums designed and conducted to examine and determine agreed actions on all aspects of island water management water (climate change scenarios, water resources protection and allocation, infrastructure installation, maintenance, water plans, roles and responsibilities)</p> <p>Number of people (disaggregated by GSI, age and gender) participating in information sharing and joint decision-making forums</p> <p>Stakeholder consultations review, improve and validate the effectiveness and impact of water sustainability plans and associated water infrastructure improvements</p>	<p>No structured approaches exist to facilitate joint community and government decision-making for water sustainability on the three targeted islands</p>	<p>At least one engagement forum for 3 islands to examine and agree on options and including representation from national level</p> <p>At least 1 engagement forum at a national level to examine and agree on options and including representation from the three targeted islands</p> <p>At least 50% of community members engaged on assessment outputs are female and considered youth.</p> <p>At least 1 stakeholder session per island per year to review effectiveness of water sustainability plans and update where necessary</p>	<p>equipment</p> <p>Engagement feedback survey forms (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> • Capacity to convene proposed engagement forums at national and island levels • Capacity to enable representation of island representatives at national forums and national representatives at island forums

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
<p>Outcome 4.1 Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements are in place in the three targeted island communities</p>	<p>Number of people (disaggregated by GSI, age and gender), engaged through information provision concerning a continuing program of water supply system improvements</p> <p>Completion of future water infrastructure needs assessments to improve water security on each island</p> <p>Completed report on all identified needs and potential options for new water supply infrastructure.</p>	<p>0 focused engagements about future water supply systems conducted on target islands</p> <p>0 future water infrastructure needs assessment produced for each island</p> <p>0 options report for new water supply infrastructure for each island</p>	<p>50% of community members involved in engagement (education sessions, workshops, decision making processes with a 50/50 gender representation.</p> <p>1 completed report on future water infrastructure needs assessments for each island</p> <p>1 completed report on future water infrastructure options, costings, and design for each island</p>	<p>Community engagement survey form (attendance, methods, feedback)</p> <p>Completed methodology for design and costing of additional water supply systems</p> <p>Completed reports for recommended additional water supply systems</p>	<ul style="list-style-type: none"> • Appropriate consultation and information provision occurs • Approvals to conduct assessments by relevant decision makers • Agreements made for new water supply infrastructure
	<p>Number and type of water supply infrastructure and water treatment system improvements</p>	<p>0 recent new water supply infrastructure and water treatment systems</p> <p>0 households benefitting from recent new water supply infrastructure and water treatment systems</p>	<p>At least 50% of recommended improvements completed in at on each islands</p> <p>50% of households each of the 3 islands are benefiting from repairs and/or</p>	<p>Workplan checklist with accompanying physical evidence of work (photos)</p> <p>Household survey form completed once new water supply</p>	<ul style="list-style-type: none"> • Community will need to be informed prior to work about any potential disruption to water access due to construction <p>Provision of new water supply infrastructure will be adhering to ESMP mitigation measures.</p>

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
	<p>Number of people (disaggregated by GSI, age and gender) benefitting from new water supply infrastructure and water treatment systems</p>		<p>replacement work to water supply systems</p> <p>50% of beneficiaries are female</p>	<p>infrastructure has been completed</p>	
	<p>Completion of water management resources inventories (equipment, tools, spare parts, repair products, construction materials, storage methods)</p> <p>Completion of water supply system maintenance guides</p> <p>Number of people (disaggregated by GSI, age and gender) who have received training on basic water supply usage, repairs, maintenance and overall management</p>	<p>0 current water management resource inventories</p> <p>0 current water supply system repairs and maintenance guides</p> <p>0 recent training on basic water supply system repairs and maintenance</p>	<p>At least 1 village from each of the 3 islands has an inventory of water management resources</p> <p>At least 1 village from each of the 3 islands has a water supply system maintenance guide</p> <p>At least 3 people from each village from each of the 3 islands have been trained in water supply system repairs and maintenance</p>	<p>Current water management resource inventories at village level</p> <p>Current water supply system maintenance guides suitable for all three targeted islands</p> <p>A training program for basic water supply system management</p> <p>Training survey form (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> Designated individuals with formal asset maintenance duties

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
	<p>Number of WASH style training sessions that have occurred on each island</p> <p>Number of people (disaggregated by GSI, age and gender)</p> <p>participating in educational activities designed to improve their approaches to water security, sanitation and hygiene (WASH)</p>	<p>0 WASH style training sessions designed and informed by the technical assessments, evidence and water supply related decisions of this project</p>	<p>At least 1 WASH style training session has occurred on each island</p> <p>80% of community members involved in education sessions</p> <p>At least 50% of participating community members are female and considered youth.</p>	<p>Community education programme</p> <p>Survey form (attendance, methods, feedback)</p>	<ul style="list-style-type: none"> All necessary background information concerning island water resources and climate modelling has been obtained and is available in clearly interpreted format to support WASH style training Effective integration with related water education programs and providers
<p>Outcome 5.1 Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water</p>	<p>Number of people (disaggregated by GSI, age and gender)</p> <p>who have engaged in the process of reviewing their knowledge, local circumstances, practices and behaviors that impact water security, sanitation, and hygiene</p> <p>“Good practice” guideline for improving water security, sanitation and hygiene at individual and community</p>	<p>0 current record of island specific knowledge, circumstances, practices and behaviors that impact water security, sanitation, and hygiene</p> <p>0 “good practice” guidelines for improving water security, sanitation and hygiene at individual and community level relevant to the three targeted islands</p>	<p>50% of people from each island engaged in reviewing their knowledge, local circumstances, practices and behaviors that impact water security, sanitation, and hygiene</p> <p>1 “good practice” guideline for improving water security, sanitation and hygiene at individual and community level</p>	<p>Program for reviewing knowledge, local circumstances, practices and behaviors that impact water security, sanitation, and hygiene</p> <p>“Good practice” guideline</p>	<ul style="list-style-type: none"> Effective integration with related water education programs and providers

Expected Results	Indicators	Baseline	Target	Means of Verification	Assumptions
	level		relevant to three targeted islands		

AF Core Indicator : Number of Direct Beneficiaries

The project aligns with AF Core Indicator 1 (Number of direct beneficiaries). As per AF guidance, the number of direct beneficiaries is disaggregated by sex and age. Based on a total population of approximately 4,490 across the three islands, the project is expected to reach 3,500 individuals directly through activities that will enhance access to climate-resilient water resources, including the identification and implementation of priority water interventions through stakeholder inclusive planning.

Core Indicator	Baseline (if applicable)	Mid-term Target	Final Target	Disaggregation (if applicable)	Methodology and Sources of Data
1. Number of direct beneficiaries	Not applicable (new project)	1,500	3,500 (estimated based on household-level infrastructure and outreach coverage)	50.5% men (~1,775); 49.5% women (~1,725); ~1,420 under 14; ~1,575 youth (15–49)	Community survey and census data; disaggregated via project monitoring reports

Beneficiary Estimates and Rationale

The project is expected to directly benefit approximately 3,500 individuals across Aranuka, Makin, and Tabiteuea South through access to climate-resilient water infrastructure, community training, and household-level interventions. This estimate reflects approximately 78% of the total island population of 4,490.

An additional 990 individuals are expected to benefit indirectly through improved water governance, strengthened institutional capacity, school- and clinic-level improvements, and awareness activities. Indirect beneficiaries are not included in the Adaptation Fund Core Indicator 1 tally but are noted here for context, in line with AF guidance.

Summary of Beneficiary Estimates:

Type of Beneficiary	Estimated Number	Notes
Direct beneficiaries	3,500	Individuals receiving household-level support and direct services
Indirect beneficiaries	990	Individuals reached through institutional support and awareness activities
Total population (all 3 islands)	4,490	Based on latest census and local estimates

AF Core Impact Indicator: Assets Produced, Developed, Improved, or Strengthened

This indicator will be updated following Year 1 of implementation, though at time of this proposal it reflects the available data on existing water infrastructure in the project target islands (Makin, Aranuka, and Tabiteuea South). While sub-projects remain unidentified, the number and condition of existing assets provides a basis for estimating the scope of potential improvements. Final asset targets will be confirmed through community-based planning and technical assessments during Year 1 of implementation.

	Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
Sector (identify)		Water Resources Management		
Targeted Asset 1) Health and Social Infrastructure (developed/improved) 2) Physical asset (produced/improved/strengthened)	Makin: 244 assets (214 in use) Aranuka: 46 assets (0 in use) Tabiteuea South: 98 assets (58 in use)	Rehabilitation or replacement of up to TBC non-functional or partially functional assets across the three islands;	To be determined through Year 1 assessments and consultations	TBD

		installation of new infrastructure based on community prioritisation		
Changes in Asset (Quantitative or qualitative depending on the asset)	TBD	Functional improvements to critical water infrastructure (e.g. tanks, wells, desalination); improved reliability, safety, and year-round access to potable water in all three islands	To be determined through Year 1 assessments and consultations	TBD

F. Alignment with the Adaptation Fund Results Framework

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

Table 24. Project Objective(s) Level

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
To enhance the climate resilience of three outer island communities in Kiribati through reliable, equitable, and sustainable access to safe drinking water and clean water is available for other uses, under expected climate change impacts.	<ul style="list-style-type: none"> • % of population with reliable access to climate-resilient water • No. of institutions applying risk-informed planning tools • No. of new or improved water systems in use 	<p>Outcome 2: Strengthened institutional capacity</p> <p>Outcome 4: Increased adaptive capacity in sectors</p>	<p>2.1: Capacity of staff and community representatives to respond to climate impacts</p> <p>4.2: Infrastructure improved to withstand climate impacts</p>	8,421,200

Table 25. Project Outcome(s) Level

Project Outcome(s) ⁵⁶	Project Outcome Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p>Outcome 1.1 The selected three island communities have repaired and/or replaced water supplies for safe drinking water and clean freshwater for other water uses</p>	Number of water systems rehabilitated or newly constructed	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	769,000
<p>Outcome 1.2 <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i></p>	Number of direct beneficiaries in the three islands with sustained access to climate-resilient, safe drinking water year-round	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	220,000
<p>Outcome 2.1 Strengthened WSED/MISE/GoK capacity and capability to provide comprehensive water assessments, analyses, and reports at regional and international standards</p>	<p>Strengthened water services within MISE for maintenance of water resources under climate change and variability induced stress.</p> <p>Completed and updated island water assessments for the target islands.</p>	<p>Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets</p> <p>Outcome 1: Reduced exposure to climate-</p>	<p>4.1. Responsiveness of development sector services to evolving needs from changing and variable climate</p> <p>1. Relevant threat and hazard information generated and</p>	583,000

⁵⁶ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

		related hazards and threats	disseminated to stakeholders on a timely basis	
Outcome 2.2 Strengthened planning processes for long-term sustainable supplies of safe drinking water, clean freshwater for other water uses and effective, affordable maintenance arrangements	Improved national government information for decision-making and planning. Strengthened water services within MISE for maintenance of water resources under climate change and variability induced stress.	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	200,000
Outcome 2.3 Strengthened policy and legal framework for sustainable management of water resources and capacity development	Completion of desk review and consultations Endorsed updated national water resource policy and sanitation policy	Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	189,600
Outcome 3.1 Equitable access to safe drinking water and clean freshwater for other water uses is in place in the selected island communities	Number of island communities with increased capacity to maintain water supply. Number of people with reduced risk of inaccessibility to safe water during extreme weather events.	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate 2.2. Number of people with reduced risk to extreme weather events	208,200
		Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Modification in behaviour of targeted population	

Outcome 4.1 Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements are in place in the three targeted island communities	Number of water systems rehabilitated or newly constructed	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.1.1 Physical infrastructure improved to withstand climate change and variability-induced stress	5,796,000
Outcome 5.1 Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water	Percentage of targeted beneficiaries aware and practicing measures for improved safe and sustainable water use. Changes in behaviour of target communities.	Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Modification in behaviour of targeted population	247,000
Project Output(s)	Project Output Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
Output 1.1.1 Rapid assessment and response through the completion of repairs and/or replacement on existing water infrastructure in the targeted villages on the three islands	No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	769,000
Output 1.2.1 Implementation of water treatment systems to existing water supply systems	No. of physical assets strengthened withstand conditions resulting from climate variability and change (by asset types)	Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	220,000

<p>Output 2.1.1 Comprehensive assessment of safe drinking water sources and agreed supply options to fill gaps in supply for all water uses, under a range of climate change scenarios</p>	<p>No. and type of natural resource assets maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)</p>	<p>Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability</p>	<p>4.1.1. No. and type of development sector services modified to respond to new conditions resulting from climate variability and change (by sector and scale)</p>	<p>583,200</p>
<p>Output 2.2.1 Long-term sustainability plans for water resources on the three islands and climate change adaptation under future scenarios</p>	<p>No. and type of assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)</p>	<p>Output 2.1: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events</p>	<p>2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)</p>	<p>200,000</p>
<p>Output 2.3.1 Endorsed Updated National Water Resources Policy and National Sanitation Policy</p>	<p>Outdated national water resource policy and national sanitation policy.</p>	<p>Output 7: Improved integration of climate-resilience strategies into country development plans</p>	<p>7.1. No. of policies introduced or adjusted to address climate change risks (by sector)</p>	<p>189,600</p>
<p>Output 3.1.1 Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water (Integrated Community Water Management Plans)</p>	<p>No. of target beneficiaries trained to manage water resources in response to, and mitigate impacts of, climate-related events</p> <p>No. of indirect beneficiaries trained to manage water resources in response to, and mitigate impacts of, climate-related events</p> <p>No. of target beneficiaries or communities organized and prepared to manage water resources for sustainable, equitable and accessible water use.</p> <p>Percentage of population covered by</p>	<p>Output 2.1: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events</p> <p>Output 2.2: Targeted population groups covered by adequate risk reduction systems</p>	<p>2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events</p> <p>2.2.1. Percentage of population covered by adequate risk-reduction systems</p>	<p>208,200</p>

	adequate risk-reduction systems			
Output 3.1.2 Equitable and efficient coordination arrangements for water supply at all levels, from the household to the national government levels	No. of target communities organized and prepared to manage water resources for sustainable, equitable and accessible water use. No. and type of risk reduction actions or strategies introduced or strengthened at local level No of case studies evidencing change at local and government level.	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at local level 3.1.2 No. of news outlets in the local press and media that have covered the topic	208,200
Output 4.1.1 Completion of new infrastructure and water treatment systems designed to fill in the current supply gaps, including assessment of potential new technologies	No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	5,796,000
Output 5.1.1 Sustainable water use and safe sanitation practices knowledge disseminated to the three selected island communities	No. and type of risk reduction actions or strategies introduced at local level No. of case studies evidencing change at local and government level.	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at local level 3.1.2 No. of news outlets in the local press and media that have covered the topic	247,000

Note: Outputs 1.1.1 and 4.1.1 represent distinct activities aligned to different components of the project. Output 1.1.1 focuses on the rehabilitation of existing water systems under Component 1, while Output 4.1.1 refers to the construction of new water infrastructure under Component 4. These are treated separately in both the results framework and budget, in line with the design of the project.

G. Project Budget

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 26. Project Budget

Detailed Budget (in USD)													
Component 1	Outcome 1.1	Output 1.1.1	Outcomes / Outputs/Activity	Budget Categories	Unit	# of Unit	Unit Cost	Total Budget (per budget category)	Total Budget (per output)	Total Budget (per Component)	B Notes		
				Consultants - Local	W/Day	20	800	16,000	769,000	989,000	16,000	A	2 Local consultants to assist EE in the rapid assessments@ daily rate USD400/pax for 20 days (can combine with Budget note H)
				Consultants/Firm - International				-			see Budget Note P		
				Travel International				-			see Budget Note T		
			Activity: 1.1.1.1a	Local travel for Rapid Assessment Team (x4 pax) - retrun airfare from Tarawa	Trips	6	2,000	12,000			12,000	B	2 consultants & 1 PMU & 1 Govt @ USD 500/pax/return airfare 2 trips per island, 3 islands
			Activity 1.1.1.1b	Local travel for Rapid Assessment Team (x4 pax)- DSA	W/Day	30	800	24,000			24,000	C	2 consultants & 1 PMU & 1 Govt @ USD 200 DSA for 30 days
			Activity: 1.1.1.2	Workshops/Training/Meeting	Events	3	1,000	3,000			3,000	D	3 consultations in the 3 islands @ USD 1000 /island for refreshments/lunchs for 25 people @ USD 40/pax
				Company /Firm	Package	3	125,000	375,000			375,000	E	package = 3 islands @ USD 125,000 for the company/firm includes provision of all materials & tools for the repairs of existing water infrastructure
				Spare parts, tools, maintenance support, extended waranty	Package	3	50,000	150,000			150,000		package = 3 islands @ USD 50000 each
				Transportation of materials to outer islands	Package	3	33,000	99,000			99,000	F	Transportation /shipping to the 3 islands at USD 50,000 per island to transport the materials and tools.

Component 2	Outcome 1.2	Output 1.2.1	Activity: 1.2.1.1 Activity 1.2.1.2	Local labour for repairs work	Package	3	30,000	90,000	220,000	972,800	90,000	G	Budget estimate for local labour to assist the company/firm on the repair works at USD 30,000 per island.
				Consultants - Local	W/Day	20	800	16,000			16,000	H	2 Local consultants to assist EE in the assessments@ daily rate USD400/pax for 20 days (can combine with Budget note A)
				Consultants / Firm International							-	I	see Budget Note P
				Consultations/Workshops	Event	3	1,000	3,000			3,000	J	3 consultations in the 3 islands @ USD 1000 /island for refreshments/lunchs for 25 people @ USD 40/pax
				Local travel for Assessment/Survey Team (x4 pax) - retrun airfare from Tarawa	Trips	6	2000	12,000			12,000	K	2 consultants & 1 PMU & 1 Govt @ USD 500/pax/return airfare 2 trips per island, 3 islands
				Local travel for Assessment/Survey Team (x4 pax)- DSA	W/Day	30	800	24,000			24,000	L	2 consultants & 1 PMU & 1 Govt @ USD 200 DSA for 30 days
				Company/Firm	Package	3	50,000	150,000			150,000	M	Treatment systems for the 3 islands at USD 50,000 per island.
				Transportation of materials to outer islands							-	N	included in output 1.1.2 - see row 12
				Sundries	Trips	6	2,500	15,000			15,000	O	on-ground travel costs, cultural customs
				Component 2	Outcome 2.1	Output 2.1.1	Activity 2.1.1.2 Activity 2.1.1.1	Consultant/Firm International - Water Technical Specialist			W/Day	200	1,600
Consultants Local	W/Day	0						-	-	Q	Technicians to work with WSED		
Travel international	Trips	3	15,400					46,200	46,200	R	3 return airfares for the 2 consultants international, airfares USD 3500/pax, DSA 200/pax for 21 days per trip		
Travel local	Trips	9	15,000					135,000	135,000	S	2 international & 2 local consultants 2 EE personnel @ return airfare Usd 500/pax, USD 200 DSA per pax for 10 days each trip		

				Workshop/Training/Meetings	Event	4	3,000	12,000			12,000	T	Workshops and training for WSED
				Data/information/imagery acquisition	Package	1	50,000	50,000			50,000	U	GIS package or other relevant as recommended by technical specialist
				IT Equipment	Package	1	20,000	20,000			20,000	V	Upgrade hardware e.g. laptops, printers and software for WSED / MISE
Outcome 2.2	Output 2.2.1	Activity 2.2.1.1		Consultants / Firm International	W/Day	100	800	80,000	200,000		80,000	W	Technical assistance for environmental, social, socio-economic assessments on options and development of long-term sustainability plans. ESS expert, gender expert, economist / socio-economic analyst
				Travel International	Trips	3	11,000	33,000		33,000	X	Return airfares USD 3500/pax; DSA at USD200 10 days per trip	
				Consultant local	W/Day	100	400	40,000		40,000	Y	on-ground support for environmental, social, socio economic assessments	
				Local Travel	Trips	3	7,500	22,500		22,500	Z	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 3 Govt = 5 pax) @ DSA 200 & 5 days per trip	
				Workshops/Meetings/Consultations	Events	5	3,500	17,500		17,500	AA	consultations and workshops in Tarawa and three islands on development of longterm plans	
				Publishing	Lumpsu m	1	5,000	5,000		5,000	AB	printing and publishing of plans and materials for stakeholders	
				Sundries	Lumpsu m	1	2,000	2,000		2,000	AC	on-ground travel costs, cultural customs	
Outcome 2.3	Output 2.3.1	Activity 2.3.1.1		Consultants / Firm International	W/Day	92	800	73,600	189,600		73,600	AD	To draft National Water strategy and Water and Sanitation Act and initiate consultations in Tarawa and three islands
				Travel International	Trips	3	11,000	33,000		33,000	AE	Return airfares USD 3500/pax; DSA at USD200 10 days per trip	
				Consultant/Firm - Local	W/Day	90	400	36,000		36,000	AF	on-ground support for environmental, social, gender, socio economic assessments	
				Local Travel	Trips	3	7,500	22,500		22,500	AG	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 3 Govt = 5 pax) @ DSA 200 & 5 days per trip	

				Workshops/Meetings/Consultations	Events	5	3,500	17,500			17,500	AH	consultations and workshops in Tarawa and three islands on development of Water and Sanitation Strategy and Act		
				Publishing	Lumpsum	1	5,000	5,000			5,000	AI	Editing, desktop publishing and printing of drafts and materials for stakeholder consultations		
				Sundries	Lumpsum	1	2,000	2,000			2,000	AJ	on-ground travel costs, cultural customs		
Component 3	Outcome 3.1	Output 3.1.1	Activity 3.1.1.1 Activity 3.1.1.2	Consultant/Firm - international	W/Day	0	800	-	410,400	416,400	-	AL	Partnership Facilitator - 90 days (4.5 months) will ensure the communication and feedback pathways, and relationships are established and maintained between the project team and the outer islands for on-ground development and establishment of island coordination mechanisms to sustainably manage water resources.		
				Island coordinators - Local Consultants	month	118.8	2,500	297,000			297,000	AE	3 x island coordinators 30 months each over duration of the project - assist in the implementation of activities in the islands through logistical support, stakeholder engagement, communication and feedback of project information and outputs, ensuring the water quality testing and monitoring is continued to be undertaken, and reporting on actions undertaken on island		
				Travel international	Trips	6	4,900	29,400			29,400	AF	Return airfares USD 3500/pax; DSA at USD200 7 days per trip		
				Travel local	Trips	6	6,000	36,000			36,000	AG	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 1 Govt 1 PMU = 4 pax) @ DSA 200 & 5 days per trip		
				Workshops/Training/Meeting	Events	12	1,500	18,000			18,000	AH	Stakeholder engagements - consultations, workshops, training for developing plans		
				Publications including translations	Package	1	30,000	30,000			30,000	AI	Translation costs, Editing, desktop publishing and printing of plans for communities		
				Output 3.1.2	Activity 3.1.2.1	Consultant - International	W/Day	0			800	-	6,000	-	AJ
		Consultant local - island coordinators	month	0		2,500	-	-	AK	included in 3.1.1					
		Travel - international	Trips	0		4,900	-	-	AL	included in 3.1.1					
		Travel local	Trips	0		6,000	-	-	AM	included in 3.1.1					
		Workshops /Training /Meeting	Events	6		1,000	6,000	6,000	AN	stakeholder consultations, 2 events per island for 3 islands @ USD 1000 per event					
		Publications including translations	Package	0		20,000	-	-	AO	included in 3.1.1					
		Com	Outcome 4.1	Output 4.1.1	Activity 4.1.1.1	Company /Firm local - new Infrastructure /technologies, Others	Package	3	1,260,000	3,780,000	5,796,000	5,796,000	3,780,000	AP	Supply all required materials for installation of new water infrastructure on 3 islands, as determined from plans under output 2.1.2 which may include household rainwater harvesting

			Activity 4.1.1.2	Spare parts, tools, maintenance support, extended warranty	Package	3	120,000	360,000			360,000	AQ	package = 3 islands @ USD 120,000 each
			Activity 4.1.1.3	Transportation /Shipping to the outer islands	Package	1	100,000	100,000			100,000	AR	Transportation /shipping to the 3 islands of materials and tools.
				Workshop/Training/Meeting	Events	6	1,000	6,000			6,000	AS	Training on trouble shooting, maintenance - 2 per island
				Travel - Local	Trips	10	25,000	250,000			250,000	AT	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
				Company /Firm - water treatment systems for new infrastructure	Package	3	300,000	900,000			900,000	AU	Supply & installation of water treatment systems at the 3 islands - includes repaired water infrastructures and new water infrastructures.
				Spare parts, tools, maintenance support, extended warranty	Package	3	100,000	300,000			300,000	AV	package = 3 islands @ USD 50000 each
				Transportation /Shipping to the outer islands	Package	1	100,000	100,000			100,000	AW	Transportation /shipping to the 3 islands of materials and tools.
Component 5	Outcome 5.1	Output 5.1.1		Activity 5.1.1.1	Company /Firm	Package	1	60,000	60,000	247,000	247,000	60,000	AX
			Travel international		Trips	4	5,500	22,000	22,000			AY	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
			Travel local		Trips	6	6,000	36,000	36,000			AZ	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
			Activity 5.1.1.2	Publishing	Package	1	30,000	30,000	30,000			BA	Development, Editing, translation, desktop publishing and printing of Knowledge products for islands and WSED
				Awareness /dissemination costs	Package	3	15,000	45,000	45,000			BB	
				Consultants/firm - Local	Package	3	12,000	36,000	36,000			BC	Local consultants/firm - to develop at least 6 casestudies demonstrating project outcomes
				Workshop/Training/Meeting	Events	6	1,000	6,000	6,000			BD	Community consultations - 2 per island
				Translation to local language costs	W/Day	30	400	12,000	12,000			BE	Local translators assisting with events and meetings
Total Outcome Budget									8,421,200				
Programme Management Unit (PMU)	Project Manager	Month	60	4,500	270,000	Actual amount and %	Maximum PEC	270,000	BF	Project Manager for 60 months			

placed with the Executing Entity	Project Officer - Administration, logistics	Month	60	2,500	150,000	of PEC requested:	that can be requested:	150,000	BG	Project Officer for 60 months (Administration & Logistics)
	Project Officer - Finance & Procurement	Month	60	2,500	150,000			150,000	BH	Project Officer for 60 months (Finance & Procurement)
	Consultant/Firm - Communications	Package	1	63,000	63,000			63,000	BI	For developing communication products on the outcomes and progress for project visibility
	Consultant/ Firm - Monitoring and Evaluation	Package	1	40,000	40,000			40,000		technical assistance for project monitoring and evaluation
	Office equipment, supplies, furniture, etc	Year	5	2,500	12,500			12,500	BJ	PMU laptops and equipment for day to day work
	Communication /internet costs/Utilities	Year	5	2,000	10,000			10,000	BK	Contribution to internet and utility feeds
	Travel	Year	5	9,000	45,000			45,000	BL	PMU travel for project related training and activities
	Financial Audits	Year	5	4,500	22,500			22,500	BM	Annual audit budget
	Inception meeting	Package	1	20,000	20,000			20,000	BN	Inception Meeting
	Workshop/Training/Meeting	Year	5	3,400	17,000			17,000	BO	Project Steering Committee Meetings
								-	BP	Contribution to office space and facilities costs
								9.50%	9.50%	
	Total PMC Budget							800,000		

Summary Total Project Budget

Total Outcome Budget	8,421,200
Project Management Costs (Executing Entity) – 9.5% of Outcome budget	800,000
Sub-Total	9,221,200
Implementing Entity Management Fee - 8.5% of the Sub-Total	778,800
Total Project Budget (requested from the Adaptation Fund)	10,000,000

Budget Notes

A	2 Local consultants to assist EE in the rapid assessments@ daily rate USD400/pax for 20 days (can combine with Budget note H)
	see Budget Note P
	see Budget Note T
B	2 consultants & 1 PMU & 1 Govt @ USD 500/pax/return airfare 2 trips per island, 3 islands
C	2 consultants & 1 PMU & 1 Govt @ USD 200 DSA for 30 days
D	3 consultations in the 3 islands @ USD 1000 /island for refreshments/lunchs for 25 people @ USD 40/pax
E	package = 3 islands @ USD 125,000 for the company/firm includes provision of all materials & tools for the repairs of existing water infrastructure
	package = 3 islands @ USD 50000 each
F	Transportation /shipping to the 3 islands at USD 50,000 per island to transport the materials and tools.
G	Budget estimate for local labour to assist the company/firm on the repair works at USD 30,000 per island.
H	2 Local consultants to assist EE in the assessments@ daily rate USD400/pax for 20 days (can combine with Budget note A)
I	see Budget Note P
J	3 consultations in the 3 islands @ USD 1000 /island for refreshments/lunchs for 25 people @ USD 40/pax

K	2 consultants & 1 PMU & 1 Govt @ USD 500/pax/return airfare 2 trips per island, 3 islands
L	2 consultants & 1 PMU & 1 Govt @ USD 200 DSA for 30 days
M	Treatment systems for the 3 islands at USD 50,000 per island.
N	included in output 1.1.2 - see row 12
O	on-ground travel costs, cultural customs
P	2 International consultants @ USD800/day/pax for 200 each days over 18 months Provision of support and advice for activities under Component 2 (e.g. Water Resource Assessments for Aranuka & Tab South, update for Makin, long term sustainability plans); Component 1 (assessments and water testing/monitoring), Component 3 (water management plans) and Component 4 (infrastructure works). Provision of training.
Q	Technicians to work with WSED
R	3 return airfares for the 2 consultants international, airfares USD 3500/pax, DSA 200/pax for 21 days per trip
S	2 international & 2 local consultants 2 EE personnel @ return airfare Usd 500/pax, USD 200 DSA per pax for 10 days each trip
T	Workshops and training for WSED
U	GIS package or other relevant as recommended by technical specialist
V	Upgrade hardware e.g. laptops, printers and software for WSED / MISE
W	Technical assistance for environmental, social, socio-economic assessments on options and development of long-term sustainability plans. ESS expert, gender expert, economist / socio-economic analyst
X	Return airfares USD 3500/pax; DSA at USD200 10 days per trip

Y	on-ground support for environmental, social, socio economic assessments
Z	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 3 Govt = 5 pax) @ DSA 200 & 5 days per trip
AA	consultations and workshops in Tarawa and three islands on development of longterm plans
AB	printing and publishing of plans and materials for stakeholders
AC	on-ground travel costs, cultural customs
AD	To draft National Water strategy and Water and Sanitation Act and initiate consultations in Tarawa and three islands
AE	Return airfares USD 3500/pax; DSA at USD200 10 days per trip
AF	on-ground support for environmental, social, gender, socio economic assessments
AG	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 3 Govt = 5 pax) @ DSA 200 & 5 days per trip
AH	consultations and workshops in Tarawa and three islands on development of Water and Sanitation Strategy and Act
AI	Editing, desktop publishing and printing of drafts and materials for stakeholder consultations
AJ	on-ground travel costs, cultural customs
AL	Partnership Facilitator - 90 days (4.5 months) will ensure the communication and feedback pathways, and relationships are established and maintained between the project team and the outer islands for on-ground development and establishment of island coordination mechanisms to sustainably manage water resources.
AE	3 x island coordinators 30 months each over duration of the project - assist in the implementation of activities in the islands through logistical support, stakeholder engagement, communication and feedback of project information and outputs, ensuring the water quality testing and monitoring is continued to be undertaken, and reporting on actions undertaken on island
AF	Return airfares USD 3500/pax; DSA at USD200 7 days per trip
AG	Return airfares USD 500/pax for (1 international consultant, 1 local consultant, 1 Govt 1 PMU = 4 pax) @ DSA 200 & 5 days per trip
AH	Stakeholder engagements - consultations, workshops, training for developing plans

AI	Translation costs, Editing, desktop publishing and printing of plans for communities
AJ	included in 3.1.1
AK	included in 3.1.1
AL	included in 3.1.1
AM	included in 3.1.1
AN	stakeholder consultations, 2 events per island for 3 islands @ USD 1000 per event
AO	included in 3.1.1
AP	Supply all required materials for installation of new water infrastructure on 3 islands, as determined from plans under output 2.1.2 which may include household rainwater harvesting
AQ	package = 3 islands @ USD 120,000 each
AR	Transportation /shipping to the 3 islands of materials and tools.
AS	Training on trouble shooting, maintenance - 2 per island
AT	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
AU	Supply & installation of water treatment systems at the 3 islands - includes repaired water infrastructures and new water infrastructures.
AV	package = 3 islands @ USD 50000 each
AW	Transportation /shipping to the 3 islands of materials and tools.
AX	Development and provision of WASH activity and communication products (implementing local practice and raising awareness in communities) complementary to existing UNICEF program; including development of guidebook
AY	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
AZ	Return airfares for 10 pax @ USD 500/pax; DSA USD200/pax/day for 10 days per trip
BA	Development, Editing, translation, desktop publishing and printing of Knowledge products for islands and WSED
BB	
BC	Local consultants/firm - to develop at least 6 casestudies demonstrating project outcomes
BD	Community consultations - 2 per island

BE	Local translators assisting with events and meetings
BF	Project Manager for 60 months
BG	Project Officer for 60 months (Administration & Logistics)
BH	Project Officer for 60 months (Finance & Procurement)
BI	For developing communication products on the outcomes and progress for project visibility
	technical assistance for project monitoring and evaluation
BJ	PMU laptops and equipment for day to day work
BK	Contribution to internet and utility feeds
BL	PMU travel for project related training and activities
BM	Annual audit budget
BN	Inception Meeting
BO	Project Steering Committee Meetings
BP	Contribution to office space and facilities costs

Table 27. Implementing Entity Fees

Implementing Entity Fees	Project Implementation & Supervision	250,000.00	<p>Travel / annual oversight missions for IE Task Manager + NPO support - 50,000 (\$10000 x 5yrs = 50,000 for 2 persons return trip and mission costs for 1 week trip)</p> <p>Travel for training and/or quality assurance ESS/Gender/Monitoring - 50,000 (\$10 x 5 years for 2 persons return flight and mission costs for 1 week trip)</p> <p>Undertaking financial, technical and closure reporting - including auditing and audit costings</p> <p>Training and refresher on IE policies and standards</p> <p>SPREP North Pacific Office oversighting support</p>
		80,000.00	North Pacific Office oversighting support

	Mid-Term and Terminal Evaluation	80,000.00	Oversee the preparation of project completion, independent terminal evaluation including mission costs, project and financial closure.
	IA Programme Support Costs	200,000.00	Finance, Legal, IT, Communications, Knowledge Management, (policy support, PRMG, portfolio management, reporting, outreach/ knowledge sharing)
	Project Development	100,000.00	Develop new AF project proposals (including mission travel, project planning workshop)
	Corporate engagement with Donor	68,800.00	strategic planning and partnerships
Total IE fee budget		778,800.00	8.45% of the Project Outcome Budget + Executivity Entity Budget

H. Disbursement Schedule

Disbursement Schedule with timebound milestones

Table 28. Disbursement Schedule

	Signing of Agreement	One year after project start	Year 2	Year 3	Year 4	Year 5	Total USD
Scheduled date	Jan 2026	Jan 2027	Jan 2028	Jan 2029	Jan 2030	Mar 2031	
Project Funds	\$ 2,157,580	\$ 4,636,020	\$ 1,689,100	\$ 499,500	\$ 239,000		\$ 9,221,200
Implementing Entity Fees	\$ 233,640	\$ 194,700	\$ 140,184	\$ 101,244	\$ 109,032		\$ 778,800
Total	\$ 2,391,220	\$ 4,830,720	\$ 1,829,284	\$ 600,744	\$ 348,032		\$ 10,000,000

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

A. Record of endorsement on behalf of the government²

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

<i>(Enter Name, Position, Ministry)</i>	<i>Date: (Month, day, year)</i>
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B. Implementing Entity certification

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

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

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 (.....list here.....) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Name & Signature

Implementing Entity Coordinator

Date: *(Month, Day, Year)*

Tel. and email:

Project Contact Person:

Tel. And Email:



GOVERNMENT OF KIRIBATI

MINISTRY OF FINANCE & ECONOMIC DEVELOPMENT

Phone: (686) 74021806, Address: PO Box 67, Tarawa, Kiribati

File ref: FED2/1

Date: 21 January 2025

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

Subject: Resubmission of Proposal 'Enhancing the resilience of the outer islands of Kiribati'

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

Accordingly, endorsement of the above project/ proposal remains with support from the Adaptation Fund. The implementing and executing entities of which are respectively the Secretariat of the Pacific Regional Environment Programme (SPREP) IE and the Government of Kiribati Ministry of Infrastructure and Sustainable Energy (MISE) EE also remain the same.

Sincerely,

A handwritten signature in black ink, appearing to read 'Teuea Toatu', with a large circular flourish at the end.

Dr Teuea Toatu

Honourable Vice President and Minister for Finance and Economic Development
Designated Authority for the Adaptation Fund

Annex 1 - Environmental and Social Management Plan

Enhancing the Resilience of the Outer Islands of Kiribati

Quality Information

Document Environmental and Social Management Plan

Date November 2021

Prepared
by SPREP

Revision History

Revision	Revision Date	Details
A	November 2021	Draft ESMP for Project Preparation
B	May 2024	Updated to align with revised project proposal
C	May 2025	For more specificity on management of undefined or unidentified sub-projects or activities.

Glossary

AF	Adaptation Fun
AP	Affected Persons
CFD	Climate Finance Division
DPO	Disabled Person's Organisation
EE	Executing Entity
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Safeguards
GoK	Government of Kiribati
GRM	Grievance Redress Mechanism
IC	Island Council
IE	Implementing Entity
ILO	International Labour Organisation
KIRIWATSAN	Kiribati Water and Sanitation Project
KMS	Kiribati Meteorological Society
MELAD	Ministry of Environment, Land and Agriculture Development
MFED	Ministry of Finance and Economic Development
MCIA	Ministry of Culture and Internal Affairs
MISE	Ministry of Infrastructure and Sustainable Energy
MoH	Ministry of Health
MWYSA	Ministry of Women, Youth and Social Affairs
NGO	Non-Governmental Organisation
OHS	Occupational Health and Safety
PMU	Project Management Unit
SCT	Self-Composting Toilets
SECP	Stakeholder Engagement and Consultation Plan
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of Pacific Regional Environmental Program
TOR	Terms of Reference
UNICEF	United Nations Children's Fund
USAID	United States Aid Program
WASH	Water, Sanitation and Hygiene
WHSS	Water Harvesting Storage System
WIW	Women's Island Worker
WSE	Water and Sanitation Engineering Unit

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Introduction

Project Overview

The Republic of Kiribati is located in the Central Pacific and is one of the smallest, most remote, geographically dispersed and climate vulnerable Least Developed Countries (LDC). Comprised of 33 atolls in three groups (Gilbert Islands, Line Islands and the Phoenix Islands), these far-flung atolls are mostly less than two meters above sea level, lack surface water and soil, have fragile groundwater systems and limited terrestrial biodiversity, and are vulnerable to the impacts of climate change.

Water supply issues in Kiribati are amongst the most complex in the world, and feature among the key priorities in the Government’s Kiribati Vision 2020 (KV20). Water resources in Kiribati are very vulnerable, limited and scattered and have to be protected and utilized carefully. Households in the outer islands rely on groundwater and rainwater harvesting to provide for their daily water needs including drinking, cooking and washing. However, groundwater resources and rainwater water supply are critically dependent on weather conditions, climate variability and even seawater inundation during extreme sea level events arising from a combination of high tides, storm waves and elevated regional sea levels, affecting water quality and having an increasingly negative impact on health.

The Adaptation Fund’s ‘Enhancing the Resilience of the Outer Islands Kiribati’ project (the Project) responds directly to the Government of Kiribati’s KV20 vision for all Kiribati households to have access to potable water and sanitation facilities by 2036. In contribution towards this broad vision, the Project has two core objectives that: (i) people in targeted villages in the outer islands have equitable access to water facilities; and, (ii) people in the targeted villages are using the facilities and train in their maintenance. These objectives will be achieved through four complimentary end-of-project outcomes and six intermediate project outcomes:

End of Project Outcomes:

Component	End of Project Outcomes
Component 1: Rapid response for existing damaged and unused water supply systems in the targeted villages	<p>Outcome 1.1: The selected three island communities have repaired and/or replaced water supplies and safe drinking water and clean freshwater for other water uses.</p> <p>Outcome 1.2: <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i></p>
Component 2 Strengthening Government of Kiribati’s capacity and capability in sustainable water resource management	Outcome 2.1: Strengthened WSED (MISE/GoK) capacity and capability to provide comprehensive water assessments, analyses, and reports at regional and international standards.

	<p>Outcome 2.2: Strengthened planning process for developing sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements.</p> <p>Outcome 2.3: Commenced strengthening of policy and legal framework for sustainable management of water resources & capacity development</p>
<p>Component 3 Strengthening coordination mechanisms and community participation for water resource management</p>	<p>Outcome 3.1: Equitable access to safe drinking water and clean freshwater for other water uses is in place in the selected island communities</p>
<p>Component 4 Construction and repair of infrastructure to adapt to future climate impacts</p>	<p>Outcome 4.1: Availability of long-term sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable maintenance arrangements are in place in the three targeted island communities</p>
<p>Component 5 Education, awareness raising and knowledge management</p>	<p>Outcome 5.1: Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water</p>

This project focuses on three outer islands as endorsed by the Government of Kiribati Cabinet in November 2021:

MAKIN: Makin is the second smallest inhabited island in the Gilbert Group, situated 190 kilometers north of Tarawa. Makin’s land area is 7.89 square kilometers with a width varying from 50m to 2km, consisting of five main islets - the largest two of which, namely Makin and Kiebu, are inhabited. The islet of Makin has the largest land area of 6.7km². Like other coral islands and atolls Makin has sandy and porous soils and is on average two meters above sea-level. The 2020 census noted the population was 1,914 people or 1.6 percent of the Kiribati population total.

ARANUKA: Aranuka is a lagoonal atoll located just north of the equator in the Central Gilbert Islands, with a land area of 11.6 square kilometers. It consists of four villages on the island and one village on the islet of Takaeang. Aranuka is one of the less populous islands in Kiribati with a population of 1,221 people or one percent of Kiribati's total population.

TABITEUEA SOUTH: Tabiteuea is separated into two islands with Tabiteuea South (Tab South) starts from Aiwa in the centre of Tabiteuea island and, heading south, includes Tewai, Taungaeaka, Buariki, Nikutoru, Katabanga and the islet of Takuu as the southernmost village. The total population on Tabiteuea South is 1,356 people.

Purpose of ESMP

This Environmental and Social Management Plan (ESMP) has been prepared to document the environmental and social risks and impacts presented by the Project and sets out the associated mitigation and management measures that will be implemented as part of project delivery.

Project screening based on field investigations, stakeholder meetings and a desktop study of similar projects in the region as well as a review of potential options confirms an assessment of Category B for the Project. It finds that potential impacts are less than significant, site specific, mostly reversible and that a range of potential measures for mitigation can be readily designed in most cases. In accordance with the SPREP's and Adaptation Funds (AF) Environmental and Social Safeguard (ESS) policy, an environmental assessment was required to adequately screen and assess potential environmental and social impacts, and to prepare an ESMP.

Therefore, this ESMP has been produced to ensure the integration of environmental and social stewardship into the Project as required by the Adaptation Fund for funding approval and SPREP's Environmental and Social Management System (ESMS) Policy. The ESMP can also assist to meet the Republic of Kiribati's relevant environmental and social safeguard laws and regulations.

At this stage of project preparation, there are still some unknowns such as the design of the specific water security interventions and their specific locations therefore this ESMP serves as environmental and social framework and provides guidance for screening of potential environmental and social risks, identify mitigation and management measures for environmental and social risks identified.

This ESMP will be updated or revised to the appropriate safeguard instrument once the scope, design and the specific activities and sub-projects are final.

Integration of ESMP

It is the responsibility of SPREP as the Implementing Entity (IE) and the Ministry of Infrastructure and Sustainable Energy (MISE) as Executing Entity (EE) to ensure that the ESMP is fully integrated into the Project. It is the IE's responsibility that proper processes and monitoring are in place to ensure the Project is delivered with no significant negative environmental or social impact.

SPREP and MISE will:

- Ensure that all relevant government employees and contractors are sensitized on aspects of the plan and received appropriate training to fulfil their individual environmental and social responsibilities.
- Ensure that the necessary resources and skills are retained to successfully carry out all mitigation measures.
- Formally monitor and report on the environmental and social performances of all activities.
- Require that contract services manage their environmental and social performance in line with this ESMP.

MISE will also coordinate the Project Management Unit (PMU) to:

- Continually monitor and report as needed issues related to social and environmental risk.
- Raise awareness amongst target communities on the Environmental and Social Policy of the AF and this ESMP.

The ESMP shall form part of any bid documentation or Terms of Reference (TOR), and it shall be the IE's responsibility to ensure that ALL procurement documents and contractual specifications are subject to review against this ESMP to ensure that all appropriate safeguard measures are captured at the bid stage and in all contracts.

It is further the responsibility of the IE to ensure that this ESMP is considered in review of any TOR for Technical Assistance developed for the Project. The safeguard requirements for any design or supervision of the Project will be fully integrated into TOR to ensure that all safeguard responsibilities allocated within the ESMP are realized at the tender stage.

In this way, the ESMP will be fully integrated within the Project so that the required measures will be fully appreciated by all responsible parties and successful implementation will be achieved.

Policy, Legal and Regulatory Framework

Adaptation Fund Safeguard Requirements

The Adaptation Fund Environmental and Social Safeguard Policy requires that all projects be screened for their environmental and social impacts, that those impacts be identified, and that the proposed project be categorised according to its potential environmental and social impacts. Regardless in which category a project is screened, all environmental and social risks shall be adequately identified and assessed by the IE in an open and transparent manner with appropriate consultation.

The scope of the environmental and social assessment shall be commensurate with the scope and severity of potential risks. The assessment should assess all potential environmental and social risks and include a proposed risk management plan, or in this case an Environmental and Social Management Plan.

All projects supported by the AF shall be designed and implemented to meet the ESS Policy principles, although it is recognised that depending on the nature and scale of a project not all principles will be relevant to every project.

SPREP Environmental and Social Management System Policy

SPREP also implements all projects according to their own Environmental and Social Management System (ESMP) through a series of 'Environmental and Social Standards'. SPREPs ESMS set the policy and minimum sustainability requirements for SPREP and its implementing and executing partners and enables SPREP to anticipate and manage emerging environmental and social issues.

The SPREP ESMS responds directly to the Adaptation Funds ESP and sets the provisions which are to be used on all AF projects where SPREP is the IE.

Therefore, the ESMP was prepared in accordance with the SPREP ESMS policy and requirements which also satisfied the Adaptation Funds ESP. The table below highlights the SPREP standards in relation to the AF principles.

Adaptation Fund Principle	Relevant SPREP ESMS Standard
AF Principle 1: Compliance with the Law	SPREP Environmental and Social Policy (Clause 3)
AF Principle 2: Access and Equity	SPREP Principle 1: Human Rights
AF Principle 3: Marginalized and Vulnerable Groups	SPREP Principle 1: Human Rights; and SPREP Safeguard 1: Assessment and Management of Environmental and Social Risks and Impacts (requirement 3)
AF Principle 4: Human Rights	SPREP Principle 1: Human Rights
AF Principle 5: Gender Equality and Women's Empowerment	SPREP Principle 2: Gender Equality
AF Principle 6: Core Labour Rights	SPREP Safeguard 4: Labour and Working Conditions
AF Principle 7: Indigenous Peoples	SPREP Safeguard 9: Indigenous Peoples
AF Principle 8: Involuntary Resettlement	SPREP Safeguard 7: Land Acquisition and Involuntary Resettlement
AF Principle 9: Protection of Natural Habitats	SPREP Safeguard 8: Biodiversity Conservation and Sustainable Management of Living Natural Resources
AF Principle 10: Conservation of Biological Diversity	SPREP Safeguard 8: Biodiversity Conservation and Sustainable Management of Living Natural Resources SPREP Principle 5: Biodiversity and Ecosystem Services
AF Principle 11: Climate Change	SPREP Principle 4: Climate Change
AF Principle 12: Pollution Prevention and Resource Efficiency	SPREP Safeguard 5: Resource Efficiency and Pollution Prevention SPREP Principle 6: Waste Management
AF Principle 13: Public Health	SPREP Safeguard 6: Community Health, Safety and Security
AF Principle 14: Physical and Cultural Heritage	SPREP Safeguard 10: Cultural Heritage
AF Principle 15: Lands and Soil Conservation	SPREP Safeguard 8: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Kiribati Environment Act 2021

The Environment Act 2021 is the primary environmental legislation that provides for the protection, improvement and conservation of the environment in the Republic of Kiribati. The Act is supported by the Environmental (General) Regulations 2017. Under Part IV of the *Environment Act 2021* an Environment Licence is required for all activities that are deemed environmentally significant, as listed under the Schedule of the Regulation and the requirements for the Environmental Management Plan (EMP)

The 1999 Principal Act established the Environment and Conservation Division (ECD) within the Ministry of Environment, Land and Agricultural Development (MELAD) as the line Division with the mandate for environmental protection, resource conservation and sustainable development. The ECD must respond to all environmental safeguard issues arising in Kiribati. This includes advising project proponents on environment licence requirements including need for the environmental management plan, environmental impact assessment (EIA), inspecting environmental violations and compliance issues and providing enforcement to correct non-compliance. The ECD must also deliver environmental communication, education and public awareness on Kiribati's environment protection and management and protection requirements at the local, national, regional and international level.

The Environment Act 2021 provides for the protection, restoration and enhancement of Kiribati's natural, social and cultural environment through the following thematic areas and programs.

- Waste management, litter and pollution prevention.
- Protection, conservation, management, and sustainability of biodiversity
- Climate Change
- Environmental Licensing and EIA system
- Enforcement and Compliance
- Data management, awareness and outreach

Kiribati State Lands Act 2001

Empowers the State, as the owner of land, to make land available for development purposes including for the permanent settlement of citizens and their families. The State is equally empowered to reverse the transfer of land back to the State, or to another party.

Government Approved Compensation Rate for Trees, Crops and Buildings sets out the current compensation rates for all trees, crops and building structures approved by Cabinet. The rates will apply in settings where coconut tree(s) need to be removed. No other trees of values were sighted at any of the proposed sites. The compensation rates provide three different values for coconut trees: AUD \$80 for fruit bearing, \$40 for non-fruit bearing with trunk and \$2 for non-fruit bearing without trunk top.

Disclosure

As part of the requirements of national laws and AF ESS policy, the ESMP is to be publicly disclosed by MISE who will ensure the ESMP is disclosed in hard copy and online, in a

manner that can be easily downloaded with existing network bandwidth and the accessibility that people currently have to the internet. A public flyer and/or radio advert will alert the public to the disclosure of the instruments. Likewise, MISE will ensure that several copies of all prepared safeguard instruments are available locally at the relevant outer island offices and easily accessible to affected groups and local non-governmental Organizations (NGOs).

The ESMP will be reviewed, updated, and approved if necessary. For each approved updated version of this ESMP, MISE will be responsible for disclosure through the above channel

Stakeholder Engagement

Stakeholders will require engagement across the project, for physical investments, management planning, policy development and other aspects.

Stakeholder Identification

A stakeholder is defined as a person or group who has an interest in a particular decision or activity relating to the project, either as an individual or as a representative of a group. This includes people who can influence a decision, or can influence actions, as well as those affected by it.

For this project, stakeholder groups will vary across the project activities, islands, and sites. Stakeholders have been and will continue to be identified on an ongoing basis by:

- Identifying the various categories of parties who may be affected by or interested in the project; and
- Identifying specific individuals or organizations within each of these categories considering:
 - The expected impact area of the project is the geographic area over which it may cause impacts (both positive and negative) over its lifetime, and therefore the localities within which people and businesses could be affected.
 - The nature of the impacts that could arise and therefore the types of government bodies, NGOs, academic and research institutes, and other bodies who may have an interest in these issues.

Stakeholder Groups

Stakeholder groups applicable to the project are listed and described below.

Category	Group	Relevance
National Government	Ministry of Finance and Economic Development / Climate Finance Division	Responsible for coordinating the development of climate adaptation projects proposed for the Republic of Kiribati. Responsible for engaging with the IE and the Government of Kiribati throughout the planning phase through to project approval.
	Ministry of Infrastructure and Sustainable Energy	The Executing Entity for the proposed project and the Ministry in charge of the management and distribution of water resources with a Water Technical present on each outer island.
	Ministry of Women, Youth and Social Affairs	Coordinates efforts to engage and empower women and youth with representatives in each of the outer islands.
	Ministry of Health	Responsible for public health related water quality monitoring on outer islands.

Category	Group	Relevance
	Ministry of Culture Internal Affairs / Local Government Division	Coordinates local government representation and consultations on outer islands through Island Councils.
	Ministry of Environment, Land and Agricultural Development / Lands Department	Responsible for implementing and enforcing the national environment safeguards requirements, the management of land leasing processes, land surveying and payment of land leases to landowners.
Island Representatives	Island Council	The Islands Councils carry out the work of the local government on the islands including management of water resources at the island level.
	Mayor	The elected leader of the Island Council
	Island Council Clerk	Often the main point of contact on the islands for project teams to facilitate site visits and coordinate meetings on island. Also, a key player in the communication chain in relation to reporting.
	Old Men's Group	The elders who play a critical role in guiding the communities towards decision making and are a key support to the Island Council in implementing any activities at the community level. The support of the Old Men's Group is necessary for successful project implementation. This group are also holders of traditional and historical knowledge on the islands.
	Women's Interest Workers	Each island has a Women's Interest Worker (WIW) from the MWYSA and they coordinate activities which empower women into decision making and support income development
	Youth Affairs Representatives	Each island has a youth's representative from the MWYSA, and they coordinate activities which integrate the youth into the decision making and knowledge sharing space in the Island Council. A key stakeholder given the level of reliance on the islands for the physical manpower of the youth.
	Water Technician	A skilled paid employee of the MISE responsible for the maintenance and installation of water extraction infrastructure on each of the islands.
	Social Affairs Representatives	Each island has a female social affairs representative from the MWYSA, and they coordinate activities which empower women and support social development.
Local Groups and NGOs	UNICEF	Based in Tarawa with extensive and ongoing activities in the outer islands related to WASH programs. Many of the UNICEF activities align with the proposed activities of this project and therefore close consultation will help to maximise results, incorporate

Category	Group	Relevance
		lesson learnt and reduce duplication across shared activities.
	Disabled Persons Organisations	Te Toa Mataoa is a DPO based on Tarawa but represents disabled people on the outer islands of Kiribati and are a key stakeholder when considering equitable access to water resources for people with mobility issues.
	Women's Groups	These groups are often associated with their churches and are an important representative of women at the community level.
	Island Church Groups	Important representatives of the communities, and often have a role in play in hosting and managing distribution of some communal water harvesting systems.
Project Affected Communities and Individuals	Local Communities	The construction phase is likely to have minor short-term impacts on the communities in and around the project sites (works, ancillary and haulage routes). The operational phase of the project is likely to have long term positive impacts on the community. Consultation for both phases will be critical.
	Landowners	Owners of sites selected for water infrastructure upgrade/installation under this project are critical stakeholders are their (and their heirs) cooperation during the land leasing process is a key determiner for project success.

Stakeholder Engagement and Consultation Plan (SECP)

The SECP needs to be implemented, updated and refined throughout the lifecycle of the Project. During this process the focus and scope of the SECP will change to reflect the varying stages of project implementation and to encompass any changes to project design. The implementation plan is included in Table 29.

The mode of consultation will vary according to the participants, but in all cases will promote participation by ensuring that the venue is culturally appropriate and accessible for all groups, the timing convenient and the manner of conduct of the consultation socially and culturally appropriate. It shall be necessary to ensure that key consultations are held outside of the Maneaba system to encourage meaningful participation from those not traditionally able to talk in a Maneaba system. Consultations will be announced to give sufficient notice for participants to prepare and provide input to project design.

Minutes will be recorded for all consultation meetings. Consultations undertaken prior to finalisation of the ESMP have been addressed and incorporated into project design and/or management measures where appropriate throughout the ESMP. For subsequent consultations, the EE will be responsible for taking any comments forward to either the IE or

the Contractor for incorporation. Minutes of consultations and actions taken based on those comments will be included in project reporting.

Implementation Plan

The Implementation Plan (Table 29) for the Project constitutes the following components:

Activity: the various operational consultation activities that will be undertaken as part of the SECP

Objective: the target that each activity needs to reach

Stakeholder: the various stakeholders to be targeted during implementation of the SECP activity; and

Medium: the method by which the engagement or consultation will be done

The EE PCU will be responsible for facilitating and undertaking consultations with representatives.

Table 29: Stakeholder Engagement and Consultation Implementation Plan

No	Project Activity	Timetable	Objective	Stakeholders	Medium
A: Water Security Interventions					
A1	Disclosure of the ESMP	On completion of ESMP	To disclose ESMP	All identified	Public flyer, radio announcement, Maneaba and Island Council meetings, hard copies on islands and website.
A2	Selection of 'low hanging fruit' activities	During first 6 months of project scoping	Engage with communities on the proposed site selection for installation or upgrades of 'low hanging fruit'	All identified.	Community meeting with refreshments (separate meetings each for women and youth) Structured local government group meeting with refreshments Informal household interviews
A2	Final selection of project water security and sanitation interventions	Once draft designs have been completed	Seek direction and/or approval from islands on the proposed solutions for the individual islands water supply systems.	All identified.	Community meetings with refreshments (separate meetings each for women and youth) Structured local government group

No	Project Activity	Timetable	Objective	Stakeholders	Medium
			Seek direction and/or approval from the island communities on proposed sanitation piloting schemes including technology to be used and sites for installation.		meetings with refreshments. Informal household interviews
A3	Commencement of Works	Two weeks before commencement of any works.	To reconfirm ongoing consultation, feedback and GRM processes	Island Councils Women's Groups Youth Groups Community Landowners	Community Notice Boards Community Meeting
A4	During Works	Midway through construction per island	To identify any risks to successful implementation and ensure that communities are satisfied with the project	All identified	Community meeting with refreshments (separate meetings each for women and youth) Structured local government group meeting with refreshments Informal household interviews Technical capacity building sessions

Resources and Responsibilities

The implementation of the SECP will be the overall responsibility of the EE, with support from the Island Councils and Contractors as required. The EE Communications and Outreach Officer and Gender Officer will be responsible for arranging and facilitating the meetings as is appropriate and they will also be the focal points for all stakeholder queries and contacts in relation to the implementation of the SECP or the GRM.

It is also the responsibility of the Gender Officer to ensure that gender balance is achieved throughout the implementation of the SECP and should ensure culturally appropriate strategies are used to achieve this such as separate meetings for males and females or targeting female input through women's groups.

Consultation To Date

Consultations of key stakeholders at national, island and public levels and has been undertaken as part of the development of the detailed project plan. The following meetings were held during the September 2019 project planning site visit.

Island	Community	Government	NGO / Projects
South Tarawa	n/a	<ul style="list-style-type: none"> • Office of the President / Climate Change Unit • Ministry of Finance and Economic Development (MFED) • Climate Finance Division, MFED • Ministry of Infrastructure and Sustainable Energy • Ministry of Women, Youth and Social Affairs (MWYSA) • Ministry of Health (MoH) • Ministry of Environment • Ministry of Culture and Internal Affairs / Local Government Division (MCIA) • Ministry of Internal Affairs / Rural Planning Development • Kiribati Meteorological Services (KMS) • Ministry of Environment / Land and Agriculture Development, Environment & Conservation Division (MELAD) 	UNICEF KIRIWATSAN Project (SPC)
Kuria	Island Council Mayor Island Council Clerk Old Men's Group Women's Groups Youth representative Women Interest Workers (x 4) Social Welfare Group (ASWO)	Water Technician	USAID Drought Management Project
Abaiang	Island Council Mayor Island Council Clerk Old Men's Group Women's Groups Youth representative	Water Technician	n/a
Maiana	Island Council	Water Technician	n/a

	Mayor Island Council Clerk Old Men's Group Women's Groups Youth representative		
Makin	Separate FGD for: Island Councils and Mayor Community Leaders Adults Youth Women's Group	Water Technician	n/a

Key recurring themes during the consultations are described below. The input of the communities has been incorporated into project design wherever feasible, otherwise they have been incorporated through the mitigation planning of this ESMP. Full minutes of the community and stakeholder consultations have been included in Appendix 1 and in the Project Proposal Document (for Makin Island).

Land

Almost all previous water investments are on private land. Several of the previous water infrastructure projects on the outer islands have not secured any formal agreements or leases between the private landowner and government for the installation sites. This means that there are many sites on the outer island where the water supply for communities or for several households are dependent on the landowner and his heirs abiding by this arrangement. This brings about an inherent vulnerability and risk to the long-term secure access to this water by the dependant households. It also means that the landowners can claim ownership of all infrastructure installed on the land.

It is critical that this uncertainty is avoided by this project by requiring all infrastructure installations only occur on land that has been formally secured by the processes described in the meeting notes with LNR.

The ESMP details the process to be followed to ensure secure land.

Community Engagement

It has become clear from the site visits and consultations that an important lesson to be learned from previous water security projects is that poor community engagement leads to poor implementation of the Project. Communities have become disengaged from previous water supply projects which has had a detrimental impact especially where significant elements of the projects have required voluntary community contributions through labour and aggregate material. A lack of adequate and considerate consultations which are well planned has also prevented women and youth being able to contribute to the project in any meaningful way. A further negative impact from inadequate consultations has been a general feeling among the communities consulted during this mission that the solutions

delivered by previous projects have not met the actual needs of the people on those islands and have been unsuitably designed, located or installed.

Meaningful consultations will be an important part of this project throughout the entire project cycle and the ESMP will contain a Community Engagement Plan which will be implemented by trained a trained Communications Officer and a Gender Officer based in the PMU. The project budget ensures that the PMU can undertake the various consultations that will be required as part of the ESMP.

Equitable Access

One of the Adaptation Fund Safeguard Principles focuses on Equitable Access of project benefits to all, especially marginalised and vulnerable groups. In the context of this project, the benefits can be expected to be freshwater security, improved sanitation and capacity building. There are several areas in the Project design where equitable access could be at risk if not carefully designed. Some of the key risk areas are: no formal agreement between landowner and MISE for installation sites; assets being installed on land leased by other institutions such as churches, schools, clinics, etc; lack of involvement of women, youth and other vulnerable groups in the development of the design solutions or trainings; and, failure to provide a back-up system to any solar pumps installed.

GRM

Any parties wishing to raise grievances caused by or associated with the project will be able to do so. In the first instance grievances will be managed by the EE Project Management Unit.

A grievance redress mechanism (GRM) is presented below to uphold the project's social and environmental safeguards performance. The purpose of the GRM is to record and address any complaints that may arise during the implementation phase of the project and/or any future operational issues that have the potential to be designed out during implementation phase. It should address concerns and complaints promptly and transparently with no impacts (cost, discrimination) for any reports made by project affected people (APs). The GRM works within existing legal and cultural frameworks, providing an additional opportunity to resolve grievances at the local, project level.

The key objectives of the GRM are:

- Record, categorize and prioritize the grievances.
- Settle the grievances via consultation with all stakeholders (and inform those stakeholders of the solutions);
- Forward any unresolved cases to the relevant authority.

Community level grievances are most likely with the proposed project.

The following process will be used to address the issues and concerns that an affected party (AP) may have. The key point of contact for the AP will be the Island Council who will likely liaise directly with the Contractor, Supervisor or PCU directly. The party receiving the complaint will receive and document all matters and issues of concern from the local community and forward copies of all grievances to the Project Manager.

At all times it is the responsibility of the Project Manager to record, manage and close all grievances. Management of grievances may include issuing instructions to the relevant party to resolve the matter. If the Contractor receives the grievance and is able to effectively resolve the matter to the satisfaction of the AP, the Contractor will provide the Project Manager with the details who will then record the matter.

For concerns such as damage to non-land assets, etc., the AP will discuss this with the council, who will then raise the matter immediately with the offending party or their supervisors, if unresolved at the project site. If the concern can be addressed without delay, and the outcome is satisfactory to the AP, the matter is closed. The Contractor will provide a report to the Project Manager as soon as the complaint has been resolved.

For more extensive complaints such as damage to buildings or land issues such project/Contractor's encroachment on someone's land, the Project Manager will document and record the grievance and manage the response process. APs can submit these types of complaints through any number of channels including via the village council or other third party; directly to the Contractor or project team; in writing; anonymously; verbally; etc. The complaint must be acknowledged within 24 hours of it being lodged. The timing and manner in which it will be resolved will be conveyed to the AP within 48 hours. The delegated party will provide a corrective action report to the Project Manager as soon as the action has been taken.

Should the complainant remain unsatisfied with the response of the delegated party, the complaint will be referred by the Project Manager to the IE, SPREP.

All grievances received and handled will be reported by MISE to SPREP as the IE via periodic reporting. SPREP will review the handling of grievances to ensure they have been handled correctly.

The five-step grievance management process will be applied to the project by the following process:

Table 30: Grievance Redress process in tabulated form

Step	Application/How	Responsibility
Publicize the process	Develop a procedure which explains how the grievance mechanism will work on the specific project site	SPREP, MISE
	Present the grievance mechanism at a public meeting help with affected communities	MISE PCU
Receive and register	Identify locations to receive grievances and ensure accessibility to all affected stakeholders	Receiving authorities (Island Councils, Village Leaders, Construction Supervisors), MISE PCU
	Recognize that some grievances may be submitted in writing while others will be communicated verbally. All grievances are to be treated with the same level of seriousness and respect.	
	Log all complaints into a database	
Review and investigate grievances	Review and investigate grievances	MISE PCU
	Explain the process and the timeframe for the GRM process	
	Appoint an appropriate person to obtain information and investigate.	
Develop resolution options, response to grievances and closeout	Develop a proposed resolution process, involving communities where appropriate	MISE PCU
	Implement the agreed solution	

	Follow-up with complainant to ensure satisfaction	MISE PCU and Receiving Authority
	If unsatisfied: Discuss further options. Identify local partners who might be able to assist in finding solutions	
	If still unresolved, refer matter to third-party mediation or external review.	
Monitor and evaluate	Regularly monitor the number and type of grievances received, resolved and outstanding	MISE, SPREP
	Evaluate trends over time and stages of project development	
	Report all grievances to the SPREP via relevant periodic reporting	MISE

SPREP will also maintain an email-based grievance mechanism, so that the public can also lodge grievances directly to SPREP, should they wish to do so. Lodgment of grievances will follow the processes set out in the SPREP Fraud Manual (See website here: <http://www.sprep.org/corporate-documents/sprep-fraud-manual>).

Environmental and Social Screening

Introduction

During project planning, the proposed activities were screened against the 15 Environmental and Social Principles of the AF.

As part of their IE status SPREP’s internal Environmental and Social Management System (ESMS) has been assessed by the AF and is used to implement all projects for which SPREP is the IE.

The SPREP ESMS screening tool consists of two sections and identifies which of the AF ESPs are triggered by the project, and if so, to undertake an assessment of the extent of risk associated with that Principle.

For any USPS the Executing Entity (MISE) will undertake initial screening of project activities and any using the SPREP ESS Screening Checklist. MISE will also lead the implementation and day-to-day monitoring of safeguard measures. SPREP, as the Implementing Entity, will conduct technical reviews, provide oversight, and approve ESMPs prior to implementation.

Screening Methodology

Part 1

This part is used to identify the potential risks and impacts related to the AF Principles using the SPREP ESMS. Project activities are screened for their inherent risks before applying mitigation and management measures to form a clear picture of potential inherent risks in the event that mitigation measures are not implemented or fail. Part 1 considers all Project activities with potential direct and indirect risks and impacts across the Project’s Area of Influence. A Safeguard may be ‘triggered’ when a low, medium, or high risk is identified through the Part 1 questions. For low-risk activities, professional judgement is used to determine whether the safeguard is triggered, however in all cases a medium or high risk will trigger the Safeguard. Safeguards 1-3 are mandatory, but 4-10 are only triggered after consideration of each question below.

When determining the inherent risk, the risk framework described below is used:

Consequence	Likelihood				
	Not Likely	Slight	Moderately Likely	Highly Likely	Expected
Critical	High Risk				
Severe	Medium Risk				
Moderate	Low Risk				
Minor					
Negligible					

Consequence is determine using the definitions below.

Consequence	Definition
Critical	Significant adverse impacts on human populations and/or the environment. Adverse impacts high in magnitude and/or spatial extent (e.g. large geographic area; large number of people affected; transboundary impacts; cumulative impacts) and duration (e.g. long-term, permanent, and/or irreversible); areas impacted include areas of high value and sensitivity (e.g. priority ecosystems; critical habitats; critical cultural heritage sites; legally protected areas); adverse impacts to rights, land ⁵⁷ , resources and territories of Indigenous Peoples; involve significant displacement or resettlement; generates significant quantities of greenhouse gas emissions; impacts may give rise to social conflict.
Severe	Adverse impacts on people and/or environment of medium to large magnitude, spatial extent and duration more limited than critical (e.g. predictable, mostly temporary and reversible). The potential risk impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of Indigenous Peoples at a minimum potentially severe.
Moderate	Impacts of low magnitude, limited in scale (site-specific) and duration (temporary) can be avoided, managed and/or mitigated with relatively uncomplicated accepted measures.
Minor	Very limited impacts in terms of magnitude (e.g. small, affected area, very low number of people affected) and duration (short), may be easily avoided, managed or mitigated.

The full results of the Project Part 1 screening are reported below in Section 5.4

Part 2

This part categorizes the project and determines the type of environmental and social assessment required. Drawing on the responses to Part 1, Part 2 provides guidance to assist in determining the Category.

Results of the Part 2 categorization is reported below in Section 5.3.

⁵⁷ In connection with restrictions on use of land, "land" is taken to mean both terrestrial and aquatic resources (e.g. coastal fishing grounds).

Part 1: Screening Results

		Inherent Risks and Impacts		Risk Rating		
		Yes, No, n/a, TBD	Where applicable describe potential issues, and specify activities causing this	Likelihood	Consequence	Risk Significance
SPREP Principle 1 Human Rights						
1	Could the project lead to adverse impacts on enjoyment of the human rights of the affected population and particularly of marginalized groups?	N		Not likely	Negligible	
2	Is there a likelihood that the project would have inequitable or discriminatory adverse impacts on affected populations, particularly vulnerable or marginalized groups?	Y	Lessons learned from the community consultations identified that inappropriate site selection (schools, churches) for interventions could inadvertently lead to limited or lack of access to water supply systems for some groups or individuals.	Highly likely	Minor	
3	Is there a risk that potentially affected stakeholders might be prevented from participating fully in decisions that may affect them?	Y	Project activities are related to developing island levels assessment, strategies, and plans which, if developed without community involvement, may lead to outcomes which are not best suited for the communities needs and priorities.	Highly likely	Moderate	
4	Is there a risk from not having local communities or individuals, given the opportunity, raised concerns regarding the project during the stakeholder engagement process?	Y	Community engagement has not informed activity design and impact assessment to date.	Highly likely	Moderate	
5	Is there a risk that the project could exacerbate conflicts among and/or the risk of violence to projected affected communities or individuals?	N		Not likely	Negligible	
Triggered AF Equivalent Principles: Principle 2: Access and Equity						

Principle 3: Marginalized and Vulnerable Groups						
SPREP Principle 2: Gender Equality						
1	Is there a likelihood that the project would have adverse impacts on gender equality, and/or the situation of women and girls?	Y	If women are not meaningfully engaged during the activity design and implementation, project implementation may result in increased burden of women, lack of gender consideration in the design and will undermine the empowerment of women in their island level decision making processes.	Slight	Minor	
2	Have women's groups/leaders raised gender equality concerns regarding the project during the stakeholder engagement process?	N	Community has not been informed activity design and impact assessment to date.	Highly likely	Minor	
3	Could the project potentially limit women's ability to access or used natural resources upon which they depend for a livelihood?	N		Not likely	Negligible	
Triggered AF Equivalent Principles:						
Principle 5: Gender Equality and Women's Empowerment						
SPREP Principle 3: Child Protection						
1	Is the project expected to require direct interaction with children?	N		Not likely	Negligible	
2	Is there a risk that security checks have not been conducted for the executing partner?	N		Not likely	Negligible	
SPREP Principle 4: Climate Change						
1	Could the project adversely contribute to climate change impacts, or ability to adapt to climate change, or be otherwise impacted by climate change?	N		Not likely	Negligible	
SPREP Principle 5: Biodiversity and Ecosystem Services						
1	Could the project lead to adverse impacts on biodiversity and priority ecosystem services?	Y	New sites for new installation may require land clearance and may remove terrestrial biodiversity.	Slight	Negligible	
SPREP Principle 6: Waste Management						

1	Could the project lead to adverse impacts associated with waste generation or disposal?	Y	Waste will be generated by project activities such as repair and installation of water supply systems.	Slight	Minor	
Triggered AF Equivalent Principles:						
Principle 12: Pollution Prevention and Resource Efficiency						
SPREP Safeguard 1: Assessment and Management of Environmental and Social Risks and Impacts						
AF Equivalent: Environmental and Social Policy & Principle 1: Compliance with the Law						
1	Is it likely that sufficient management and human and financial resources will not be available to the project on an ongoing basis to achieve effective and continuous environmental and social performance?	TBD	Ongoing maintenance costs will be required from MISE. Failure to budget for this could see the water supply systems failing and communities unable to access water in the intended manner.	Slight	Minor	
2	Are the relevant government agencies fully involved in assisting SPREP to assess the environmental and social risks and potential impacts?	Y				
Triggered AF Equivalent Principles:						
Principle 2: Access and Equity						
SPREP Safeguard 2: Public Participation and Information Disclosure						
1	Is there a risk that not all relevant stakeholders have been identified and given opportunities to contribute to project design and implementation arrangements?	Y	Not all targeted stakeholders turn up or participate in the consultation.	Moderately likely	Moderate	
2	Is relevant project documentation on environmental and social implications of the project not readily accessible in the project area?	N				
SPREP Safeguard 3: Accountability, Grievance and Conflict Resolution						
1	Has any potential source of environmental or social concern or conflict associated with the project been identified at this stage?	Y				
2	Has the national environment agency (or other relevant government agency) not been involved in determining the environmental and social risks at this stage?	N				
3	Is there a risk if the national government involved doesn't have an effective grievance	Y		Not likely	Minor	

	mechanism and conflict resolution procedure already in place?					
4	Is there a risk if SPREP's corporate level grievance mechanism is not in place and operating effectively?	N				
SPREP Safeguard 4: Labour and Working Conditions						
1	Will the project potentially require migrant workers to construct or implement works?	N		Not likely	negligible	
2	Will the project be required to provide accommodation services for workers?	N		Not likely	negligible	
3	Is there a risk that the host country has not allowed union activity and permitted workers to bargain collectively?	N		Not likely	negligible	
4	Is there potential that the project could apply adverse discriminatory practices?	N		Not likely	negligible	
5	Will the project involve the employment of children?	N		Not likely	negligible	
6	Is there a risk of child exploitation or abuse linked to the project?	N		Not likely	negligible	
7	Is it likely that the project could present unsafe or unhealthy working conditions?	N		Not likely	negligible	
	<i>Is the safeguard triggered?</i>	<i>N</i>				
SPREP Safeguard 5: Resource Efficiency and Pollution Prevention						
AF Equivalent: Principle 12 Pollution Prevention and Resource Efficiency						
1	Is the project likely to release pollutants?	Y	Project activities could require small amounts of concrete production which would generate wastewater and caustic slurry.	Slight	Minor	
2	Could hazardous waste materials be generated by the project?	Y	Fuel, lubricants for the construction work machinery can potentially generate hazardous wastes	Slight	Minor	
3	Are chemical pesticides likely to be used by the project?	N		Not likely	negligible	
4	Is the project likely to source materials from sensitive areas such as coastline?	Y	Aggregates for construction material	Moderate likely	Minor	

	<i>Is the safeguard/principle triggered?</i>	Y				
Triggered AF Equivalent Principles:						
Principle 12: Pollution Prevention and Resource Efficiency						
SPREP Safeguard 6: Community Health, Safety and Security						
1	Will the project require the construction or rehabilitation or any structural components which could pose a risk to affected communities?	Y	Component 4 will require construction, however the scale, location and therefore likely impact will be determined during project implementation.	Expected	Minor	
2	Does the project involve the construction or rehabilitation of a dam or weir?	N		Not likely	Negligible	
3	Is the project likely to increase community exposure to disease (water borne, water based, water related and vector borne diseases as well as communicable diseases)?	Y	Poor land management around water supply and poor practices from community during water extraction could lead to pollution of ground water supply and/or contamination of water scoops/buckets.	Slightly	Minor	
4	If the project retains security workers, is there a risk that security personnel could be responsible for unlawful and abusive acts against affected communities?	n/a				
	<i>Is the safeguard triggered?</i>	Y				
Triggered AF Equivalent Principles:						
Principle 13: Public Health						
SPREP Safeguard 7: Involuntary Resettlement						
1	Could the project involve physical relocation of people?	N		Not likely	Negligible	
2	Could the project require expropriation to resettle people?	N		Not likely	Negligible	
3	Is it likely that the project will need to acquire land from individuals and households, causing them to experience economic displacement?	N		Not likely	Negligible	
4	Will the project restrict access to natural resources and areas used by affected communities resulting in economic displacement?	N		Not likely	Negligible	
	<i>Is the safeguard triggered?</i>	Y				

Triggered AF Equivalent Principles:						
Principle 8: Involuntary Resettlement						
SPREP Safeguard 8: Biodiversity Conservation and Sustainable Management of Living Natural Resources						
1	Is the project likely to affect biodiversity or ecosystem services?	Y	Land clearance for sites for water supply system	Slight	Minor	
2	Is the project expected to impact natural habitats but there are no plans in place to ensure no net loss of biodiversity?	N		Not likely	Negligible	
3	Is the project expected to affect critical habitat?	N		Not likely	Negligible	
4	Is the project located in a legally protected area or internationally recognised area?	N		Not likely	Negligible	
5	Is the project likely to introduce invasive alien species to the project area?	N		Not likely	Negligible	
6	Could the project impact on priority ecosystem services?	N		Not likely	Negligible	
	<i>Is the safeguard triggered?</i>	<i>Y</i>				
SPREP Safeguard 9: Indigenous Peoples						
1	Is the project likely to affect Indigenous Peoples?	N		Not likely	Negligible	
2	Is the project likely to: a) Be located on or commercially develop natural resources on lands traditionally owned by Indigenous Peoples, with adverse impacts anticipated? b) Require the relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or customary use? c) Significantly impact critical cultural heritage for indigenous peoples? d) Use such cultural heritage for commercial purposes?	N		Not likely	Negligible	
	<i>Is the safeguard triggered?</i>	<i>N</i>				
SPREP Safeguard 10: Cultural Heritage						
1	Is the project likely to affect cultural heritage?	Y	Sites including access to water supply system may encroach onto taboo sites.	Slight	Minor	

2	Is the project located in a legally protected cultural heritage area or is it likely to impact critical cultural heritage?	N		Not likely	Negligible	
	<i>Is the safeguard triggered?</i>	<i>Y</i>				

Part 2: Confirmation of Category

Name and location of the project:		Kiribati Water Security Project		
Brief summary:		Climate resilient water security project funded by AF		
Screening carried out by:		Environmental & Social Specialist for SPREP		
Result of screening: Category A / High		Category B / Medium	X	Category C / Low
<p>The overall project design, as well as the proposed activities at community level, have been screened using the SPREP ESMS screening tool. The screening tool indicates a medium degree of concern for inherent risks/impacts, i.e., Category B.</p> <p>There is a risk that some of the activities at community level could lead to minimal negative environmental or social impacts, but these can be avoided or minimized as per the measures in this Environmental and Social Management Plan.</p>				

Identified potential environmental and social Impacts.

The screening tool indicates a medium degree of concern for inherent risks/impacts, i.e., Category B. There is a risk that some of the activities at island and community level could lead to minimal negative environmental or social impacts and only during design and construction stage only. These can be avoided or minimized as per the measures in the Environmental and Social Management Plan. In this section, based on the initial screening, the following potential environmental and social risks are identified along with mitigating measures.

Potential environmental risks

Impact on biodiversity and ecosystem system.

The new sites for water supply systems may require land clearance including the removal of vegetations. With the scope of the project, it is expected that there is no vegetation to be removed. In case of clearing, vegetations with highly significant values, threatened or endangered, must be identified and avoided.

Waste generation.

Solid waste is likely to be generated from the construction of the water supply systems. Packing materials for the equipment and the construction materials such as cardboard, Styrofoam, plastics would be generated. These materials should be well kept and contained on site for regular proper disposal at the appropriate sites.

Waste slurry water from concrete work for the water supply system installations is also likely to be generated. All wastewater discharge shall be directed away from sensitive areas such as the coastline, underground water well vicinity and crop plantations.

Overburdening of islands existing solid waste systems and pollution (from leachate into ground water or direct dumping of waste into marine environment) stemming from poor solid waste management practices.

Construction of water security investments will create opportunities for pollution of water and soils from concrete slurry.

With the installation of solar desalination systems, the generation and discharge of brine water from the system is another source of liquid waste. Brine water is the waste product of desalination systems which are high in temperature and saline content. Management of brine water should be integrated as part of the system's operational design.

Pollution

One potential source of pollution is noise and carbon emission from the operation of construction machinery for the water supply system. It is imperative that the construction machinery to be procured for the project construction components are new with low noise level. In addition, any construction work should be undertaken in the daytime only.

Ground contamination from the discharge of hydrocarbons including fuel and oil leak from construction machinery is another source of pollution. It is advisable that any fuel or oil required for the construction must be properly stored in a sheltered place with a concrete

paved floor and construction materials (cement mixer etc.) be checked regularly for any leakages. All refueling must be done on a concrete paved area.

Some methods of collecting water from well heads have the potential to contaminate both the water collected and the water in the well. If the collecting scoop is stored on the ground around the well, it has the potential to collect pathogens or contaminants from the soil surrounding the well head. This then has the potential to transfer into ground water or into the water that has been collected creating a public health risk.

Solar or electrical pumps are often used to extract water from wells without having to 'touch' the water with a contaminated bucket or scoop. Pumps introduce a risk to the use of the well as they will inevitably break down and are often not able to be replaced or repaired in the Pacific Islands meaning communities will revert to the bucket or scoop.

Uncovered wells allow for manual bucket collection of water but increase the risk of well contamination from run off, mosquitos and contamination from debris and detritus.

Coastal erosion/land degradation

It is likely that the needed construction materials such as sand and gravel for the installation of water supply systems would be sourced locally. This may trigger sourcing these materials from the coastline/beach front or from land through mining or excavation. Mining of sand and aggregates from the beach front may exacerbate coastal erosion especially to already prone or sensitive coastal areas and mining from land can degrade the natural physical stage of certain locations. To mitigate the issues, it is imperative that a proper coastal assessment is undertaken to proposed mining sites for their suitability. Mining on land should not be encouraged.

Potential social risks.

Project Design

Is there a risk that not all relevant stakeholders including communities are consulted or given the opportunities to contribute to project design and implementation arrangements. This may cause disagreement by local communities with how the project is designed and operated.

Water Infrastructure Site Selection

Installation of any physical interventions on privately owned land carries the risk of limiting access if the landowner chooses to query or dispute the use of his land once the Project is completed.

In addition to this, any interventions which involve community access to improved ground water wells on private land carry with it the need for landowner to agree to long term management of the land surrounding the wells to avoid contamination of the water source. For example, placement of pig pens, waste collection pit latrines, etc., placed near the well head has the potential to introduce contaminated leachate into the water source.

The project may acquire land to store construction materials and for the equipment and machinery laydown area and for water system installations. This may restrict or limit the original use of the land by community members. Acquiring land for the project shall be dealt with under the relevant national legislation and any vegetation removed shall be compensated in accordance with the relevant national compensation policy.

Community Health and Safety

Project construction work such as digging and civil works for the water infrastructure could potentially pose safety risks to the community members including children passing by the construction sites. In the event where the project requires a foreign contractor or technical specialist for the duration of construction. There is potential for conflict in the form of physical violence between foreign workers and the local laborers/community and risks of transmissible diseases.

Workers Health and Safety

The construction of the water infrastructure will potentially involve health and safety risks to local contractors or local skilled laborers. Civil works may be associated with manual handling and operation of machinery and other safety hazards such as cut by sharp objects, hit by hard object, and falling into trenches.

Cultural Site

There is a potential that any new sites for the water system installation may encroach onto the cultural site. It is important that a survey for cultural heritage sites and assets is undertaken for any new sites.

Environmental and Social Management Plan

Introduction

Sections 7.2 below contains the required management plan for the Project. The management plan includes measures to satisfy both SPREP's and as well as the Adaption Fund safeguard policies. They describe the issues or impact identified, the proposed mitigation measures required, the applicable project phase, the responsible entity, and how SPREP and AF environmental and social standards and principles are addressed.

Environmental and Social Management Plan

Project phase	Impacts/issues identified	Mitigation measures	Risk level. (with mitigation)	Responsibility	SPREP Standards	AF Standards
Design	The project design is not accepted by local communities because they are not consulted or given the opportunities to contribute to project design.	<ul style="list-style-type: none"> Communities of targeted villages on Makin, Aranuka and Tab-south must be all consulted on the final project design. Schedule for village consultation must consider the availability of members of the community in terms of days and time. 	Low-medium	MISE/SPREP	Principle 1 & 2 - Human Right and Gender Equality and Women's empowerment Safeguard 2: Stakeholder Engagement and Information Disclosure	Principle 4 – Human Rights Principle 5: Gender equality and women's empowerment.
Planning/pre-construction	Land acquisition	<ul style="list-style-type: none"> Any land to be acquired for the project must be dealt with under the relevant national legislation and policy. Any trees to be removed must be compensated in accordance with the national compensation policy. 	Low-medium	MISE	Safeguard 7: Land acquisition and involuntary resettlement.	Principle 8: Involuntary resettlement
	Source of aggregates/costal erosion	<ul style="list-style-type: none"> The site for sourcing aggregates must be properly assessed for 	Low-Medium.	MISE	Safeguard 5: Resource efficiency.	Principle 15: Land and soil conservation.

		<p>environmental and social risks and suitability.</p> <ul style="list-style-type: none"> • Consult landowners/resource owners and compensate if necessary. • The environmental permit for sourcing aggregates must be obtained from the concerned national authorities. 			Principle 4: Climate change	Principle 11: Climate Change
Construction	Impact on biodiversity and ecosystem system	<ul style="list-style-type: none"> • Vegetations with highly significant values, threatened or endangered, must be identified and avoided. 	Low	Contractor	Safeguard 8: Biodiversity Conservation and sustainable management of living natural resources.	<p>Principle 10: Conservation of biological diversity.</p> <p>Principle 9: Protection of Natural Habitats</p>
	Waste generation.	<ul style="list-style-type: none"> • Packing materials for the equipment and the construction materials such as cardboard, Styrofoam, plastics must be well kept and contained on site for regular proper disposal at the appropriate sites. • All wastewater discharge shall be directed away from sensitive areas such as the coastline, 	Low	Cardboard	Safeguard 5: Pollution prevention	Principle 12: Pollution Prevention and Resource Efficiency

		<p>underground water well vicinity and crop plantations.</p> <ul style="list-style-type: none"> • Management of brine water from any installed desalination system should be integrated as part of the system's operational design. 				
	<p>Pollution</p> <ul style="list-style-type: none"> • Pollution from noise and carbon emission from the operation of construction machinery for the water supply system. • Ground contamination from the discharge of hydrocarbon including fuel and oil leak from construction machinery is another source of pollution 	<ul style="list-style-type: none"> • Construction machinery for the project construction components must all be new with a low noise level. • Construction work should be undertaken during the daytime only. • Any fuel or oil required for the construction must be properly stored in a sheltered place with a concrete paved floor and construction machinery (cement mixer etc.) be regularly checked for any leakages. • All refueling must be done on a concrete paved area. • Make available of spill kits on site. 	Low-moderate	Contractor	Safeguard 5: Pollution prevention	Principle 12: Pollution Prevention and Resource Efficiency
	Community Health and Safety	<ul style="list-style-type: none"> • Appoint someone to direct and manage the movement of pedestrians, and to erect and use 	Low	Contractor	Safeguard 6: Community Health, Safety and Security	Principle 13: Public Health

	<ul style="list-style-type: none"> Project construction work such as digging and civil works for the water infrastructure could potentially pose safety risks to the community members including children passing by the construction sites. There is potential for conflict in the form of physical violence between foreign workers and the local labors/community . 	<p>appropriate walk safety signs, among other measures.</p>				
	<p>Workers Health and Safety</p> <ul style="list-style-type: none"> The civil works may be associated with manual handling and operation of machinery and other safety hazards such as cut by sharp objects, hit by hard object, and falling into trenches. 	<ul style="list-style-type: none"> Provide provisions of personal protection equipment (PPE) to local contractors or local skilled labors. 	<p>Low</p>	<p>Contractor</p>	<p>Safeguard 4: Labor and Working Conditions</p>	<p>Principle 13: Public Health</p>

	<p>Cultural Site</p> <ul style="list-style-type: none"> • Disturbance to culturally sensitive places and properties in particular, Te Bangota, Te Maneaba, Churches, and graveyards. 	<ul style="list-style-type: none"> • Contractor to pay attention to village/community meetings held at Maneabas to ensure that the project civil works are not disturbing or create noise. • Survey for cultural heritage sites and assets is undertaken for any new sites and avoid. 	Low	Contractor	Safeguard 10: Cultural heritage	Principle 14: Physical and Cultural Heritage
Operation	<p>Underground water quality</p> <ul style="list-style-type: none"> • The use of desalination solar or electrical pumps can overdraw the water and make it brackish. 	<ul style="list-style-type: none"> • The design and operation of the water supply system must consider the sustainable yield of the underground water. • Conduct regular water quality monitoring on salinity level. 	Low-moderate	MISE	Safeguard 5: Pollution prevention.	

Site Selection for Water Security Interventions

Some guiding principles for the site selection for these activities are:

- Sites will be primarily selected based on evidence-based recommendations presented to the national and island governments by international experts.
- Any toilets should be sited so that they can be used safely by all members of the local community, including children, older people and pregnant women and so that eliminate threats to security of users especially women and girls, day and night.
- Sites should be selected to ensure fair and equitable access for all members of the community especially women.
- Ensure that all toilets have hand washing facilities.
- Women must be consulted on the design and location of water security interventions.

Another important thing to consider is contamination risk. Table 31 below provides some similar 'rules of thumb' for minimizing the risk of water contamination.

Table 31: Minimum distances from sources of pollution⁵⁸

Feature	Minimum distance from water source
Community-level solid waste dump	100m
Storage (or dumps) of petroleum, fertilisers or pesticides	100m
Places where animals are slaughtered	50m
Cemetery	50m
Toilets / latrines (open pit)	30m
Household waste dump	30m
Animal pens	30m
Laundry place	20m
Large trees with extensive root system	20m
Dwellings	10m

Land Lease Process

There are two methods for formally securing land. Either one of these methods (as follows) shall be used in all instances:

- Lease Agreements

⁵⁸ Environmental assessment and risk screening for rural water supply. Consortium for Sustainable Water, Sanitation & Hygiene in Fragile Contexts, 2015.

1. Consultations with correctly identified landowner to get agreement over leasing identified land. Identify correct landowner with the clerks on the outer islands.
 2. The landowner and the islands magistrate undertake boundary determination of the site together.
 3. The Court Clerk minutes the boundary determination and writes to the lands office on Tarawa to request a land survey.
 4. Lands survey team is sent from Tarawa to undertake a formal survey of the identified subdivision. This is normally paid for by the Island Council, but the process can be expedited if the project pays for the survey and travel costs. Survey fee is \$33.75 per subdivision plus logistics.
 5. The survey data is passed to the cartographers at the central Lands Office to map and the lease is issued based on this map. The lease will be certified in the islands court and returned to the central Lands Office to be registered.
 6. The Lands Payment Clerk calculates the rate to pay and centralized payment from the Lands Office is made to the landowner each January.
- Voluntary Donation of Land
 1. Steps 1 to 4 is the same as for the Lease Agreement process above.
 2. The survey data is passed to the cartographers at the central Lands Office to map and a modified lease agreement is issued based on this map.
 3. The modified lease agreement is returned to the Island Court and registered by the Court Clerk on the island.

Management of ESS Risks for Undefined Activities

Some activities and direct interventions will be further defined through community-led planning once the project implementation has started. These activities will also be screened using the methodology described Section 5.2 of this report.

The Executing Entity (MISE) will undertake initial screening of project activities and any USPs using the SPREP ESS Screening Checklist. MISE will also lead the implementation and day-to-day monitoring of safeguard measures. SPREP, as the Implementing Entity, will conduct technical reviews, provide oversight, and approve ESMPs prior to implementation.

SPREP will be responsible for undertaking the ESS screening with support from an International Safeguards Specialist if required. In line with the Category B status of this Project, only medium or low impact activities will be accepted for implementation.

To ensure robust environmental and social risk management, the following procedures will apply:

Identification and Prioritisation of USPs

- USPs will be identified through participatory engagement with communities, local councils, and technical assessments facilitated by the Water and Sanitation Engineering Division (WSED) under the Ministry of Infrastructure and Sustainable Energy (MISE), in collaboration with SPREP as the Implementing Entity.
- Final selection of USP sites will be informed by climate vulnerability, water insecurity, population size, and evidence of need.

Screening and Categorisation

- All USPs will undergo environmental and social screening prior to implementation, following the process and screening form provided in **Annex A** of this ESMP.
- Screening will be led by the Project Management Unit (PMU) with oversight from SPREP's Safeguards Adviser. Results will determine the risk category (A, B, or C) in accordance with the Adaptation Fund's ESP and SPREP's internal Environmental and Social Safeguard System (ESSS).

Risk Management and Mitigation

- For USPs classified as Category B or higher, an activity-specific Environmental and Social Management Plan (mini-ESMP) will be prepared, reviewed, and cleared by SPREP.
- Risks related to land access, indigenous rights, biodiversity, waste management, and community health will be considered and mitigated as per the safeguards guidance and checklist tools.
- Additional thematic safeguard plans (e.g., gender action, GBV prevention, grievance redress) will be applied to USPs as needed.

Approval and Implementation

- No USP may commence implementation until the screening is complete and SPREP has reviewed and approved the risk classification and mitigation plans.
- Approved USPs will be monitored during implementation to ensure compliance with mitigation measures, with results reported back to SPREP and included in periodic project reporting to the Adaptation Fund.

Documentation and Disclosure

- A USP register will be maintained by the PMU detailing screening outcomes, risk categories, safeguards applied, and implementation status.
- All screening outcomes and safeguards documentation will be publicly disclosed through SPREP and MISE channels, ensuring transparency and accountability.

Technical Assistance and Policy Development

Policy, Regulations and Plan Development

Any development of policies or programs will follow this ESMP and the Gender Action Plan to ensure that all affected parties are engaged in the process of development and that broader impacts on gender, environment, etc. are considered.

Gender Mainstreaming

The design of the Project requires equal and active participation, however, there is a risk that gender may not be mainstreamed into long term water resources management plans developed under this project.

In order to ensure these activities fully incorporates the AF Gender Policy, the PMU Gender Officer supported by an international gender specialist should undertake a gender-sensitive

review of any policy frameworks and plans. The specialist should refer to experiences and tools from previous Climate Change Adaptation and Disaster Risk Management projects in the Pacific Islands, e.g. PACC, GCCA, IWRM, Pacific Gender & Climate Change Toolkit as well as the Adaptation Fund's Gender Policy and Action Plan and the associated guidelines for this plan. The findings from the review will be used to inform and strengthen the final outputs of these activities.

Consultants

Consultants will be required for the technical water assessment and design elements of the Project. They may also be required for activities which depend on behavioral change strategies such as sanitation activities. TORs for any consultants will require the consultant to comply with the ESMP and the AF safeguards and gender policies.

For all technical assistance consultants this ESMP will be included in the TOR and final contract.

Capacity Building and Materials Development

Awareness materials will be developed and awareness raising activities will be undertaken under the Project aimed at the general public for raising awareness on climate change. Gender balance shall be considered during the activities to ensure that women are equally represented.

Environmental and Social Monitoring Report.

Routine monitoring on the implementation of the ESMP shall be undertaken by the EE on a 6-monthly basis and reported through an agreed monitoring and reporting template. Reports are submitted to the national government and the implementing entity.

SPREP as an IE may engage its own internal environmental auditing team or external auditors to conduct routine and/or extraordinary environmental audits of the project ESMP performance.

Annexes

Annex 1: Minutes of Consultations

PROJECT PLANNING MEETING 10/0919

- Confirmation of final submission in December 2019.
- Office of President looking for a form of accountability system included in the outputs. Communities need some level of accountability for the upkeep of the infrastructure once it is handed over.
- MIF interested to know if there a way of having standardised method of managing water across all islands. MISE does have some standardisations in design and specs for hand pumps, solar pumps and desalination plants. MISE would like this project to use the same pumps, pipe systems, etc to make it easier for maintenance and procurement, etc. Previous projects haven't procured according to the MISE specs which has caused problems with construction and maintenance.
- MISE helps with or leads the water assessments. Construction works can either be contracted out or done with a MOA with the community for them to contribute the labour. MISE really wants to supervise the work through their outer island water technicians.
- (NB: No talk during the meeting of building in redundancy into the solar pump systems with a manual pump for time of solar pump outage)
- MIF is aware that GoK needs the ability to forecast rainfall, but we need to be mindful that this is a water project, so the balance needs to reflect that.
- MoH: Environmental services within MoH is mandated to undertake water quality monitoring and has recently been expanded to include chemicals. Outer island monitoring is already undertaken on the KIRIWATSAT sites. They also have baseline data for the islands. Budget is severely limited for outer island visiting and there is no scope on the island for the MoH rep to undertake e-coli testing or to take samples and send back to the lab on Tarawa.
- Sea level rise and climate data is already collected but improved methodology from this project could benefit other departments.
- Water technicians on outer islands collect salinity once a month and report back to MISE. Good potential to link up with MoH but the challenge is bringing the water back to the lab on Tarawa. Need to look up whether there is a simple and affordable field test kit – low tech.
- MoE do water quality testing but mostly around landfills. Then they link up with MISE and MoH monitoring for coastal water quality for poor sanitation, but this is hampered by budget.
- MISE has trailed field test kits and they are good, but they can be expensive. MISE would like to explore this, and it is on their horizon. The mandates for different monitoring parameters of water quality is spread across different ministries. Need to be mindful of stepping on toes.
- Office of President sees the value in coordinating these efforts. Possibility that a subcommittee can be formed, and OP is trying to set up water quality subcommittee. This would then feed into a central database which is already in existence.
- MIF would like to see this integration of water quality monitoring trialled on this project as a basis for upscaling.
- **Accountability:** On the completion of the Project, the infrastructure is handed over to the community who take ownership of the system. On handover it belongs to the community. There is currently no reporting or monitoring requirements back by the community once project is completed. There is a signed agreement between government and communities but there isn't a follow up. Links into sustainability of the Project. OP thinks there might be value in looking at some sort of performance ranking of communities to feed back into GoK decision making criteria when assessing which communities to provide future funding opportunities.

- **Maintenance:** Currently the community must source funds to maintain the equipment under the MOA. It is difficult to ascertain if this works. They need trainings in keeping their commitments. The current system in place is inadequate. Maintenance relies heavily on financial support. MISE is trying to move away from that. Desal project on Tarawa is proposing to pay to collect water but it is difficult on the outer islands – different scale of cash economies. Pay per use is putting equitable access at risk. An innovative system which can be trailed is the idea to barter/trade with fish or copra bought to Tarawa for sale to fund maintenance.
- **Behavioural Change:** UNICEF are doing behavioural change for WASH but just in schools on the outer island. KIRWATSAN didn't do this very well. Needs a strong strategy. Implement little games, jingles, slogans, etc. Link in with UNICEF and women and youth ministry which had a program in the past but ran out of resources. UNICEF might have a handle on what is needed, where their gaps are. Min of Women are in perfect place to provide linkage).

ABAIANG ISLAND STAKEHOLDER MEETING 11/09/09

- KIRIWATSAN II always had delayed implementation. Big delay between getting the materials from Tarawa to the island. Delays were also from the community side related to motivation of community to provide free labour which takes them away from their work and other priorities at home.
- 50% of KIRIWATSAN II projects are not yet started due to the lack of labour so now that the project has finished, the materials have been left with the communities.
- An MOU was signed by the chairperson of the village agreeing to the free labour, but implementation was difficult to do as there was resistance from the workers. (perhaps no buy in from the youth during consultation – the old men make the decision and expect the youth to do the work).
- No villages have any completed water extraction under KIRIWATSAN II.
- Another reason for lack of motivation was using ground water from a village with a good lens to supply a village with a poor lens means that the work had to be undertaken in the village with the good lens and those workers weren't as motivated as the recipient village as they didn't have an urgent need and there was no pay.
- Materials stored very poorly on Tarawa, so cement had hardened, and some materials were missing.
- The KIRIWATSAN II supervision structure was poorly designed with one supervisor for the whole island and they weren't based on the island. They would come, give instructions and go. Often when they came back the work hadn't been done properly and so they would have to demolish and start again. Supervisor didn't provide correct training. There was no upskilling of the community through this project.
- The community would like the workers on this project to be paid.
- There is a need to find a way to supervise from within the community.
- Digging wells in areas of hard rock is difficult and creates injury which is another factor in lack of motivation for this unpaid work.
- Community would like to have a mechanical tool to help them, maybe a petrol driven jack hammer?
- Compost toilets have been installed in one out of 6 planned villages. They were built and completed but are not used. They have been built in a very public location between the road and the maneaba, so it is very visible when someone must go to the toilet which is not culturally appropriate.
- Suggestion from the floor is for there to be multiple supervisors which can work in several villages at the same time – this will create a competitive atmosphere to push forward completion. This worked on an outer island clinic building project in the past.

- The Committee for Sanitation also don't want to handle the compost materials to transfer it to the secondary container. Not culturally appropriate to handle other people's waste material.
- 2015 USAID water project on Abaiang was very successfully completed – it was a pilot project in 4 sites, just on this island. It was installation of water tanks with their own catchment and installation of Tamana pumps along with covering the wells. No solar pumps were installed. This project is a good success. A drought management plan for Abaiang was also written for this project (USAID and SPREP)
- For water infrastructure, maintenance requests come to the Island Council and delegates it to the water technician for repairs.
- KIRICAN installed rainwater catchments for 3 villages which are used for drinking and cooking.
- Mosquitos do get into water tanks and people either boil or filter larvae out of the water.
- No separate consultations were held for women or youth under KIRIWATSAN II. They need to hold consultations outside the maneaba system.
- Men fish, women glean, women cook, both genders collect water.
- Fishing generates income by sales on island or sales to the CBBL (central sales fisheries project)
- Women can co-share land, but men have decision making roles over the land as per their traditions
- Women tend to let men lead but they can raise their voices if they feel they need to. Traditional roles are starting to shift, and women are now starting to be able to go and represent their husbands (or their families if there is no husband) at meetings.
- There is a tradition and water policy which has a stated 30m set back area from wells (land use management). Water technician and health rep advise on the placement of the well and land use around it. There is no follow up monitoring on the land use management.
- Villagers boil well water, but they don't boil rainwater.
- For privately owned wells, there are informal arrangements which allow those without water to access it. No formal arrangements in place, just these agreements. If there are problems down the line, then the community can see the need for a lease.
- Formal agreement should be in place prior to any installation.
- Some of the KIRIWATSAN II installations were on private land where the informal agreement was with the land's caretaker rather than the landowner so after the project finished the landowner was going to take ownership of the well. KIRIWATSAN wouldn't let the community select a different site to avoid the conflict. Critical to work with the landowner rather than a caretaker.
- Schools and churches have communal tanks which are used in times of drought. In 2018 one village ran out of drinking water – this lens is thin. The villages over thick lens only had a small saline impact and is still drinkable. There are 3 villages in the vulnerable thin lens zone.
- Emergency water is transported in buckets on bikes, some people have trailer or truck transport. There are hand and motorbike trailers.
- Application is in for rainwater tanks for emergency use in all village schools and churches. Application is in with the president's office under the disaster fund.
- KIRICAN did free labour with the promise of a bonus on completion. Project completed but no bonus ever appeared.
- A good thing to try and pilot would be to bring in potential candidates for supervisors from future islands to join any training and upskill them before the GCF funding rolls out.
- The procurement for KIRIWATSAN was very disorganised.
- Chartering cargo vessels is a better option than relying on the government ferry to transport materials.
- Laydown sites for storage are the responsibility of each community.
- Cargo is transferred to shore by tender.
- Supervisors tend to be contracted rather than MISE staff.

- Community needs to be able to nominate the supervisor or foreman.
- Aggregates sometimes need transporting so advance notice is needed to coordinate trucks. There are around 20 trucks on the island. Aggregates are donated as a community contribution. Hand tools for extracting aggregates are in shortage and must be shared with other villages. Communities need: generators, hand tools, etc. KIRIWATSAN put a lot of emphasis on community contribution.
- Funds for maintenance works come from the community rather than having a budget allocation from the Island Council.
- If community can't raise funds, then they escalate to IC and if they can't help then they escalate to MISE.
- Community needs to be included at steering committee or national level. We need to capture their input.
- Island Council has taken on the role of overseeing the leftover KIRIWATSAN projects therefore IC need to be consulted throughout implementation. We must leave behind a strong capacity to build and supervise otherwise wasted opportunity and not sustainable.
- Leaves in the gutters contaminate water and people are getting sick so they boil that contaminated water. Cleaning the gutters is complicated and involves breaking guttering apart.
- Most wells on Abaiang have Tamana pumps and are covered so the water is good.
- Each house on the USAID project was given materials for Tamana pump and well covered. If the house didn't have a well then, they had to dig it first.
- Tamana pump can abstract from a good distance.
- Solar pump has problems because it keeps pumping regardless of water lens conditions. Tamana pump can be more easily managed.
- Manual vs solar: Community would prefer hand pumps to overhead tanks and then gravity fed.
- 'Abaiang' pump can be used as a backup if the solar pump is broken.
- MISE has the designs for Tamana and 'Abaiang' pump.
- Prioritise wards within villages which have weaker lenses (some villages are split over a varying lens)
- Previous projects allocated solutions which were not the expectation of the communities e.g. people with good freshwater given tanks when another village with bad lens didn't get tanks.

MAIANA 12/9/19 ISLAND STAKEHOLDER MEETING

- 10 community members, 9 of them women
- Maiana has 1 main village with 12 wards.
- KIRIWATSAN I undertook water assessments and installed some rainwater tanks. 10 were planned and only 2 haven't been completed.
- Under KIRIWATSAN II 9 wards were targeted and only 5 have been completed.
- There is one construction supervisor, but he is not based on the island and this has slowed down the construction progress.
- There has also been a problem with some materials being taken from the island's stockpile site and being used for other things. It has taken time to get the missing items back so that has also contributed to the delays.
- 10 villages were identified for composting toilets, but most have not been completed as they are still working on the water systems as the priority.
- There needs to be more foremen on the island, there is only one.
- There were consultations during the design phase. The expectation was for more foremen to be recruited. Mostly consultations were about the community donations but not on other aspects of the project or the designs.

- As a priority they would like ground water in places of good water lens and rainwater catchment installed in places with poor ground water resources.
- Ideally the island community would prefer a desalination plant.
- Hand pumps are preferable to solar pumps for the community members
- There is a solar pump that was installed by MISE and it was working well.
- KIRIWATSAN II also installed a solar pump but it different brand and specs to the one that MISE installed so there is no institutional knowledge over how this pump will perform.
- 3 wards were not covered by KIRWATSAN II. 2 of these 3 wards currently get water from a bush well but this is on another wards land, so they share resources. This is working OK now but, in the future, there is no guarantee that they landowners or their children may be looking for this to be leased as there will be increased pressure on water resources. There is no long-term security over access to the water.
- For repairs to the hand pumps, this is easy and cheap to do and is the responsibility of the community. The solar pump comes under the remit of the water technician and MISE arranges and funds the repair of that.
- The cash economy on Maiana is fish, copra and handicrafts.
- The mayor of the island is female. She can make decisions for the island council and then they then send these decisions to the old men organisation for discussion and 'approval' and then the maneaba issues the instructions to the community to follow these decisions. The mayor cannot make decisions in the maneaba but can influence them.
- There wouldn't be a problem with women being foremen/supervisors on this island.
- For the project and any consultations, it is important to follow the correct protocol which is first the Island Council and then the communities (including old men) and have separate consultations for women and for youth.
- LDS church have also installed a rainwater catchment system on the island in 3 wards in 2016. It is a community water source with its own catchment system. Community assisted with the construction.
- They have had outbreaks of diarrhea in July this year, eye infections after heavy rains and skin diseased – all linked to water borne disease.
- There is an Island Project Officer engaged by the mayor and paid for by MCIA. Possibly train women to undertake safeguards monitoring and coordinate through the IPO and mayor for reporting.
- Manual labour is suitable for men, and other types of non-physical work for women.
- In terms of sanitation, a septic tank system is preferred and is based on the information they got from KIRWATSAN I UNICEF sanitation work.
- SCT have been completed in some wards but are never used.
- The 30m well head buffer is well known about and used to be adhered to but not so much anymore.
- UNICEF WASH project was carried out in schools but was not extended into villages so good sanitation practices are not followed up at home.
- Areas of good ground water lens have their own wells per household, areas with poorer resources share wells between a few houses. They would like to have the project consider interventions at the household level rather than just the community level. They would like each house to have their own tap access to water (preferably a covered well and hand pump).
- During times of drought the wards have the option to go to the furthest ward which has a very good lens and take their water from there. They haven't yet reached the stage where they have needed to do that.
- KIRIWATSAN did install new wells on private lands with no formal agreement with the landowner in place.
- The KIRWATSAN project installed a solar pump system on a new well – concrete cast well with gallery system. The well is uncovered. No hand pump back up on the solar pump in case the pump fails. The tank is on a tower so there is no way to tell what the water level on the tank is, but a float switch has been installed so the tank won't

overflow. The pump is different to what is normally used so it is untested in this context. The tank has enough pressure to feed 7 taps. Land issue isn't dealt with, system is on private land and there is no agreement in place with the landowner over permanent access.

- The KIRIWATSAN rainwater catchment designs are very poor quality and isn't properly done.
- Complaints from the community about being expected to provide unpaid labour when they have their own income generating work to do.
- Maiana has a much more traditional system of leadership compared to Abaiang therefore it is easy to neglect the communities' input. More difficult to get them to speak confidently as there is a greater influence of the maneaba.

KURIA 13/9/14 – INTRODUCTORY MEETING

- KIRIWATSAN I installed 6 x 10,000l rainwater harvesting systems on the island, one per ward. These systems are working well.
- The island is currently in a 2.5-month long drought, the coastal edge of the lens has become saline but the lens in the centre of the island is still good.
- People have started relocating to their land in the centre of the island to live close to the secure water resource. People can only move inland if they have land there.
- There are several ponds in the middle of the island, some large but most are small. The large pond is brackish and was created from aggregate extraction for the runway. The smaller ponds are old plantations, but they are brackish now.
- Fishing and Copra are the main cash generators.
- The community's preference is to have ground water distributed from the centre of the island out to the coastal wards.
- There is a more progressive governance system like Abaiang than Manaiia.
- The Sodis project outreach is a joint awareness project between MISE and MoH

KURIA 14/9/19 – ISLAND STAKEHOLDER MEETING

- One island/village with 6 wards.
- Currently in the community's rainwater is the primary source of water and ground water is secondary.
- The fresh ground water is in the middle of the island, but most people live in the coastal area.
- KIRICAN designed a system on the island which is extracting water from one well in the middle of the island, pumping it to a header tank and distributing it to houses via gravity. So far this is connected to 4 homes but there are about 40 houses in the ward. There is no back up hand pump built into the system. No training was provided to the community. The materials arrived onto Kuria, but the project team didn't come so after several months the community mobilised to build and install the system themselves, with no training.
- KIRICAN didn't develop the project through MISE or the water technician.
- Community are waiting on the arrival of more materials before they can connect more houses to the tank but there haven't been any calculations done on how many houses the tank can feed with the pressure it generates.
- MISE has an improved standardised version of this header tank system which used multiple header tanks to move water to the coastal areas and gravity to move the

water between the tanks. Good way to transport water across distances and only relies on one pump at the well.

- Only a few houses in Kuria have roofs suitable for catchment. KIRIWATSAN I installed one tank per village which isn't enough.
- If the rainwater gets contaminated from leaves, or other matter then the rainwater is emptied, and the tank cleared. Waste of very valuable water.
- Other villages drink 'dirty' rainwater and don't get sick so maybe they have some 'immunity'.
- In the past a well set back from 300m the village used to provide good water during dry spells. About 4 years ago that well became brackish and now the community needs to walk an addition 200m to good ground water lens.
- Previous water projects have come and put tanks on churches, but this has led to control measures imposed by the church over when the water can be accessed and by whom. No equitable access if you use the churches.
- The KIRICAN solar system has an informal involuntary agreement with landowner. There was a plan for a formal agreement to be signed however as the project managers didn't come to Kuria to install the system, after waiting 5-6 months the community went ahead and constructed without KIRICAN and therefore without the agreement in place.
- One ward does have a communal area on which they built a maneaba but that seems to be in on the island for communal areas.
- Other projects have installed water tanks etc on government leased land such as schools, but this usually comes with obligations (e.g. pay for water to raise money for school) so it isn't equitable access.
- Men fish and women/children collect water but if the men aren't fishing then they collect water too.
- There is the potential to empower women through activities like safeguard monitoring, but the more technical/maintenance roles are more traditionally male.
- If there is a husband in the family, then he will represent the house but a woman without a husband has a voice.
- Woman have a role is collecting and cutting copra. The price of copra has been doubled by the government, so it become a significant industry in the outer islands.
- Training: there is a demand for training on how communities can effectively manage their water from the source through to storage at home linked into hygiene and water safety.
- Tamana pump training is also desirable: building, installing, fixing, and covering well training for both men and women. The water technician has this knowledge already so we can come and train to build capacity and then the water technician can supervise the implementation at ward and household level.
- Ole men and youth work well together.
- Women and old men training to share water knowledge and training. The old men don't hoard knowledge.
- KAPIII installed a Tamana pump in one ward for 20 houses but it from the coastal wells not from the inland. Some of these wells are good for drinking, some just good for laundry.
- The community mostly practice open defecation, but they are aware of the potential contamination and are interested in exploring options.
- There is one composting toilet built at a school, but it is not used as there was no training. It is understood that the compost can eventually be used but this is culturally taboo, so it isn't appropriate. Burying it seems to be acceptable to the community. It is also potentially acceptable for moving the materials from the chamber to the secondary unit. The community are willing to explore the options of composting toilets. Location of toilet can't be in the community areas.
- UNICEF KIRIWATSAN II introduced the concept of dry pit toilets using ash. At least one family built one under their own motivation and it was working well. There was no smell. They stopped using it when they got a flush toilet.

- UNICEF WASH primary school program is planning on rolling out on Kuria in the future.
- Q: There is an interest in learning more about the composting toilets, but they have concern about placement as they are often put in inappropriate places. A: community have full say in selecting final options and sites. Project team provide options based on science and community makes final selection.
- Youth representative requested that there is no limitation placed on numbers of participants for trainings as when this happens, it is always the youth who miss out on the places and people in the trainings often don't share the knowledge they have learned.
- To Kuria, the success of the project would be that everyone has access to clean water leading to a reduction in the instances of water borne diseases and a good system in place for the maintenance to ensure sustainability. Improving the health of kids in school and the community.

SOUTH TARAWA DEPARTMENT OF LANDS AND NATURAL RESOURCES 17/9/19

- GoK land rates are set and reviewed every 3 years.
- Process for getting lease is:
 1. Identification of correct landowner with the Island Councils Court Clerk
 2. Consultations with landowner.
 3. Landowner works with the islands magistrate to determine the boundary of the land to be leased.
 4. Court Clerk minute the boundary determination and Island Council writes to LNR to request a land survey.
 5. Land surveyors sent to the island to do the survey on the identified subdivision (AUD\$34 per landowner parcel). The survey is normally paid for by the landowner but MISE or the project can expedite the survey process by paying for the survey team travel and daily allowance (pre-determined rate set by LNR) and the survey itself.
 6. Land surveyors also record all food bearing trees on the subdivision which might be removed as part of the construction. LNR has the set rate for the different species.
 7. Survey team pass the coordinates to the cartography to produce map.
 8. Lease is issued for signing and needs to be sent to the Island Council to be certified and returned to LNR to be lodged.
 9. Land payment clerks calculate lease rate and enter into automated system for annual payment to the landowner.
- Once the survey team returns to LNR, it normally takes 2-3 weeks to process but it is best for the project to allocate around 4 months from the time the survey team arrives on the island for the whole process, just to be sure.
- The same lease process applies to MISE if they want to establish a water reserve.
- Best to maximise efficiency by getting the survey team out when all required boundaries have been defined so the survey team can do all of them in one go.
- Island councils can also lease lands. Island Councils can enter into lease agreements for public spaces such as sports fields. Use the same process as described above but the lease holder is the Island Council and they pay the rates.
- Retrospective leases that were discussed in parliament for water security leases are the responsibility of MISE to process and must go through the same process.
- Voluntary donation has been done formally for water security before through KAPIII in North Tarawa. Same process as above but at the 'lease issued' stage, there is a

modified agreement (maybe like an easement?) signed instead. It would still need to be formally signed and lodged, maybe with the Island Council Court Clerk. Check with the WB KAPill project to see the actual template they used for the voluntary donation agreement.

- The water reserve in South Tarawa is a paid lease system rather than voluntary donation.

UNICEF KIRIBATI AND UNICEF NZ 19/9/19

- UNICEF led the sanitation elements of KIRIWATSAT I which we have heard good things about in the outer islands during this mission.
- The main approach they adopted was to create triggers within the community and with individuals so that the community can identify their own problem areas that need solutions.
- Triggering was done by mapping areas of open defecation that families use in relation to their household to demonstrate that people were using a very large area to defecate. They also used walking transects on the beach to record human faeces.
- These are very important and very visual tools for helping to open people's eyes to the reality of the extent of the problem.
- After seeing the extent of the problem and being triggered to solve it, UNICEF sat with the community to come up with action plans.
- Liked the mapping and transects to food and water contamination through some very emotive experiments that triggered disgust at the current situation which is critical to starting to achieve behavioural change.
- UNICEF then provided the communities with chainsaws and local engineers made their own designs for toilets.
- They gave the communities the tools and the knowledge to create their own toilets.
- Community action plan also includes hand washing basin in the toilet areas
- After 3 to 4 months of use by extended family, the pit latrines start to fill up, so they need to dig another one. After a year or two, without continual support and follow up from the project, they slipped back into their old habits.
- Colour coding and environmental parameter tools were provided to help the communities select the appropriate solution for them.
- Some villages realised that composting toilets were the only option for them, but this brings about a lot of questions and potential failures.
- There is a preference for pit toilets with a pour flush system.
- For this project there was a suite of tools produced: toilet risk management tools, rainwater harvesting, etc.
- Engagement was undertaken on all these manuals – they didn't realise that their rainwater harvesting system was a 'living' system.
- Some communities started to develop their own rainwater committees. This led to them starting to make rules about management of rainwater during times of drought – e.g. no bucket collection, only teapots.
- UNICEF were also involved with KIRIWATSAN II in training. Lesson learned from that project is continuous training and engagement is critical. Follow up is needed and must be continual.
- Training for SCT on Xmas island but after 10 years only one of those toilets is still in use. No person was mandated to follow up on them. Behaviour change must be continually followed up on.
- Lesson is that they weren't there to support the community throughout implementation.
- Sanitation change needs someone to have this role and responsibility on each island.
- Using leaves as the bulking agent on some islands.

- New project is branching out to other support systems and is using a 3 start criteria rating, one of which is no open defecation and WASH governance run through the Island Council. Trying to establish focal point on the islands to fill that gap in responsibility.
- There is a Pacific WASH Resilience Guidelines which have just been launched in Suva. Water Safety Plan tool
- MoH/GEF on Kiribati have a joint project which has seen 3 porta-labs purchased to support Public Health
- UNICEF have a small component about bringing various ministries water quality monitoring together.
- UNICEF are doing some retraining with MoH.
- UNICEF are also setting up a steering committee with many of the same members as ours would have.
- There are online tools that we can access for this project: Community Led Total Sanitation and Water & Faeces Tools

Annex 2: Gender and Social Inclusion Strategy and Action Plan

ENHANCING THE RESILIENCE OF THE OUTER ISLANDS IN KIRIBATI



Photo: Kate Walker

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ANNEX 1: List of Stakeholders 1

Abbreviations

ADB	Asian Development Bank
AF	Adaptation Fund
CEDAW	Commission on Elimination of Discrimination Against Women
EE	Executing Entities
GAP	Gender Action Plan
IE	Implementing Entities
IPPC	Intergovernmental Panel on Climate Change (IPCC)
KIEP	Kiribati Integrated Environment Policy
KJIP	Kiribati Joint Implementation Plan
KNAP	Kiribati National Adaptation Plan
KV20	Kiribati 20 Years Development Vision
MELAD	Ministry of Environment, Lands and Agriculture Development
MFED	Ministry of Finance and Economic Development
MIA	Ministry of Internal Affairs
MWYSA	Ministry of Women Youth and Social Affairs
NAP	National Adaptation Plan
NAPA	National Adaptation Program of Action
OB	Office TeBeretitenti (Office of the President) Operating plans guidelines
PWD	People with Disabilities
SDG	Sustainable Development Goals
SPC	Secretariat of the Pacific Community
UNDP	United Nations Development Program
UNICEF	United Nations Emergency Fund
WASH	Water, Sanitation and Hygiene

Introduction

This Adaptation Fund (AF) project targets strengthening the resilience of targeted outer island communities in Makin, Aranuka and Tabiteuea South to adapt to the threats of climate change across five result areas. The project will ensure that the island communities of Makin, Tabiteuea South, and Aranuka) will have reliable, equitable, and sustainable access to water for drinking and other household uses under anticipated climate change variants. It supports health security through reducing the risk of water borne diseases.

This gender assessment documents research regarding gender norms, gaps and opportunities in the ‘water sector’ in Kiribati with focus on existing gender relations, barriers, cultural and social norms and biases; as well as positive platforms to be maximized to ensure gender equity in the project. Community and stakeholder group consultations were conducted in Makin, Tabiteuea South and Aranuka; as well as with stakeholders at government and non-government level. The analysis is informed by gender research, reports and statistical information from government and other research and reports, including the authors own experience.

Women and men are differently impacted by climate change and water access in Kiribati, and this Gender and Social Inclusion Strategy and Action Plan documents the systematic inclusion of women and other vulnerable groups in the project; across decision making, training, implementation and monitoring. Gender inclusive stakeholder collaboration and community consultations have been integrated across project interventions relating to WASH. This will ensure that project activities are supported by all sectors of the community, that people have ownership of interventions implemented and there is accountability by communities, especially women and other vulnerable groups on the implementation, monitoring and sustainability of intervention and activities undertaken.

This project aligns with the 1992 Rio Declaration on Environment and Development, Principle 20 on women’s “vital role in environmental management and development”, and Chapter 24 of Agenda 21 focuses on women’s considerable knowledge and experience in managing and conserving natural resources: in this context in using and managing scarce water resources in the outer islands of Kiribati. Women play a key role in the acquisition, management and use of water for basic household needs and know where to source water from in times of drought and other hazards. Women have significant knowledge of water sources and use that is fundamental to water security and access.

Gender Mainstreaming Approach

Mainstreaming gender equity and equality in access to and improving water and sanitation amenities and supply will improve health, living conditions and welfare for all community members including women, men, youth, elders, single mothers and other vulnerable people in targeted outer islands. This involves purposeful and intentional intersectional gender analysis and translating community co-design consultations into project activities and results.

The Adaptation Fund’s principles-based Gender Policy (GP) and its accompanying Gender Action Plan (GAP) aim at mainstreaming gender and ensuring that Fund supported projects and programs provide women and men with equal opportunities to build resilience, address gender differentiated vulnerabilities and empower women and girls in their capability to adapt to climate change impacts. This Gender Mainstreaming Strategy and Action Plan systematically integrates key principles of access and equity, marginalized and vulnerable

groups, and human rights, as well as women's empowerment. It is integrated into project social safeguards in terms of ensuring long term sustainability, accountability and resilience for the people.

Gender Mainstreaming Strategy and Gender Action Plan

The Gender Mainstreaming Strategy aligns with Kiribati priorities and builds on the existing gender policies and actions plans of other climate funds. The Key strategies for promoting gender equity through the project include the:

collection of sex, age and disability disaggregated data,

regular revisiting the findings from baseline consultations (qualitative information),

training and capacity building,

empowering women's voice in leadership and decision-making forums, and

empowerment of vulnerable groups and addressing cultural and social discrimination.

Background

Policy, legal enabling mechanisms and commitments

The GOK is a strong advocate for gender equity and equality across the nexus of multilateral environmental agreements including the Convention on Biodiversity and UNFCCC and the Paris Agreement, as evidenced by adhering to Convention requirements (eg reporting against GAPs) and promoting Pacific SIDS positions on gender equality in COP negotiations and subsequent decisions.

At the global and regional level, the Government of Kiribati's (GOK's) obligations for the active involvement of women in environmental decision making at all levels and the integration of gender concerns and perspectives in policies and programmes for sustainable development is reflected in commitments including the Beijing Declaration and Platform for Action; CEDAW; the Sustainable Development Goals (SDGs); the Pacific Platform for Action on Advancing Women's Human Rights, the revitalised Pacific Leaders Gender Equality Declaration. The agreed conclusions from the Commission on the Status of Women commit governments to provide adequate resources to ensure women's full and equal participation in decision-making at all levels on environmental issues, on strategies related to climate change and the lives of women and girls.

At the national level, legal and policy mechanisms requiring gender equity and equality integration include the National Adaptation Program of Action (NAPA) with specific gender inclusive approaches identified, and the Plan on Climate Change and Disaster Risk Management (KJIP). The National Gender Policy sets the platform for gender inclusive work and mainstreaming across all government sectors.

Approach and methodology

The Gender Mainstreaming Strategy and Gender Action Plan were developed through the literature review and gender assessment, research fieldwork and community co-design consultations in the three outer islands to identify people-centred priorities and needs to

formulate strategic interventions to empower women and other vulnerable members of communities. The literature or 'desk review' included harvesting lessons learned on previous and ongoing projects related to WASH in the outer islands of Kiribati. The desk review of reports on projects already undertaken on water and sanitation in the Outer Islands of Kiribati included that from previous fieldwork by the project to three different islands that were initially chosen.

The fieldwork (community consultations) was conducted by local consultants, as vernacular language predominates. This involved utilising participatory engagement tools and approaches to ensure the full participation of all community members, to capture the priorities of women, youth and vulnerable groups. Groups targeted were women heads of households and excluded populations, e.g. PWDs; children (boys & girls) and unemployed youth with consultations conducted safely for conducive engagement with these different stakeholder groups to enable gender responsive feedback and inputs.

Initial community consultation/information sessions for the formulation of GAP presented all engineering, social and environmental design features of the proposed Project components, including the installation of taps and water meters. These will be continued throughout implementation and will be widely advertised community meetings with presentations by project engineers using maps, modelling and other explanatory diagrams etc. where required.

Fieldwork

Participatory co-design

Participatory tools including time use inventories (to identify productive hours of men and women), social and resource mapping (to understand social structures, resources, and relationships) were used in fieldwork. These and other participatory activities identified barriers to women's full inclusion and project interventions to address these, including:

A gender approach will be used in all training modules and capacity building, skills training sessions.

Inclusion of a gender approach in every adaptation plan implemented at community level, which are incorporated into district level development plans.

A target to increase capacity to manage climate risks for 50% of women headed households.

Increased participation of women, youth and other vulnerable people through targeted training of project staff in different gender mainstreaming areas.

Participatory engagement ensured inputs from all community members, including meetings where women and men equally participated, and organising separate groups for discussions. Standard procedures and protocols were applied across the design consultations in the outer islands, including finding the best times and most suitable places for women, youths and other vulnerable members of the communities to participate meetings. This ensured during meetings and discussions women, young people and other vulnerable members of communities were able to speak freely and can contribute meaningfully to discussions and activities. The institutional arrangements and protocols in the outer island consultations included logistics and administrative arrangements through

appropriate government and local government agencies as well as ensuring local NGO and CSO stakeholders were engaged.

The Stakeholder Mapping and Analysis identified all stakeholders at national, outer Islands and community level. Through this process Women NGOs, CSOs that work with women and youths and FBOs and especially women's faith based groups were included at community level. The Stakeholder Engagement plan was developed during fieldwork to be developed further during project implementation to ensure that all beneficiaries of the project are involved, and how women, men, youths and other diversities are part of any consultations undertaken.

Institutional Arrangements and Stakeholder Mapping

The Project Management Unit will include the Social safeguards staff (gender, social inclusion) and Outer Island Coordinators (3). The Steering Committee will comprise at least 30% women as representatives from entities which including the Association of Mayors, MISA, MIA, MELAD, UNICEF, Ministry of Public Health, KILGA, KNEG, Kiribati Met Service, SPREP, Climate Finance Division of Ministry of Finance. Island level institutional arrangements will include the Mayors/Deputy Mayors, Island Action Group, Women's Group, Youth Group, Island Council, Old Men's Group (unimawne), and Water Technicians. Apart from representation through the Women's Group, women will also be represented under land owning units, as farmers, caregivers and other community representation.

The Ministry of Women, Youth and Social Affairs (MWYSA) is responsible for the implementation of national policy priorities including gender equality (including gender mainstreaming), elimination of gender-based violence, and women's economic empowerment; as well as social protection. MWYSA officers in all atolls in Kiribati work at local level to support policy implementation with local women associations, women groups and NGOs. Ministry of Internal Affairs (MIA) is responsible for Rural Development, any form of development in outer islands, and looks after the Local Governments or the Councils in the 20 outer atolls/islands.

Rural development and climate change adaptation work involves ministries including the MELAD, Ministry of Water, Health Ministry, Climate Finance Unit and Ministry of Infrastructure. Coordination between these ministries is vital for development work in outer islands.

The Kiribati Climate Change and Disaster Risk Finance Assessment identified key areas for gender integration and inclusion in government work and these include the incorporation of the recommendations from the 2017 Global NAP Network⁵⁹ report on strengthening gender considerations, development of Gender Social Inclusion plans, the MWYSA to establish gender focal points in each ministry and that GSI training be provided for staff in MWYSA,

⁵⁹ Global NAP Network. 2019. How Integrated Vulnerability Assessments Support NAP Processes in the Pacific Region. Global NAP Network.

OB, MFED, MELAD and the wider KNEG.⁶⁰ Thus gender training work planned for this project is in line with line with Government gender inclusion work in the different sectors.

The Stakeholder Mapping identified institutions, groups, CSOs at community level to work with and stakeholders identified through the Mapping Exercise are listed in Annex 1. There is slight variation in stakeholders and ways of working across the three atoll communities

Community Consultations

Consultations with stakeholders representatives from ministries of women, gender focal points of relevant national sector ministries or local governments, non-governmental and grassroots groups focused on promoting women's rights and gender equality. The consultations and processes differed in the three islands and composition of the community groups and dynamics involved in the meetings were also different. This highlighted the existence of cultural diversity that determined the gender responses, participation and especially the inclusion of women in public meetings. Differences in views on water resource and needs by men and women were evident during discussions. Research into these cultural diversity and nuances will provide insights into changes and entry points into adaptation work.

Culture was consistently raised as a root cause of the inability of women, youth and other members of communities to be part of decision making and to be included in development discussions, as meeting places (Maneaba) were for elderly men only. Gender strategic needs will be met through specific training of women leaders, the Community consultations away from the Maneaba, the traditional meeting house as women, youth and other vulnerable groups will not speak freely in these settings. Council of elders and vulnerable members of the community to be active players in water supply assessment, maintenance, management and monitoring.

Training will be at times suitable for women when they are free from household chores so there is more gender equal participation. Meetings in communities will target at least 50% participation by women and youth and have women facilitators for women only groups discussions.

Focus Group Discussions

Participants in focus group discussions included men, women, youths, leaders/influential in the community/resource people such as members of village or island groups (including faith groups), unimwane⁶¹, government extension workers, teachers, village resource people leaders, elected community representatives which also included government workers and representatives of the Island Council and women groups.

⁶⁰ Deutsche Gesellschaft für Internationale Zusammenarbeit, the Pacific Community, Pacific Islands Forum Secretariat and the Asian Development Bank, 2020. Climate Change and Disaster Risk Finance Assessment,

Approximately 135 people were consulted via the focus groups, 62 women and 73 men. Interviewees from the focus group discussions held in Makin and Tabiteuea South included 27 youths, 30 adults, 32 village resource people and leaders, and 14 representatives from the Island Councils and 2 representatives from the Women Organizations, totalling 105 and this included 48 women and 57 men. Targeted participants from Aranuka included in this summary would have been about 30 with 16 men and 14 women given its smaller population. A challenge convening focus group consultations is the need for early invitations and information that reaches young people and women so they can organise themselves to attend the session.

The time and location of consultation meetings were planned for when women and other vulnerable groups were free to attend. The location for meetings were away from Maneabas to ensure women and young people meaningful participation because culturally women and young people are not allowed to speak in the maneaba, in front of the island elders.

Beneficiary Profile

Direct beneficiaries include the total population on Tabiteuea South is 1,357 (2020 census report) of which 674 are males and 683 are female and a total of 274 households. The population of Makin in the 2020 census was 1914, and 347 households in Makin. Aranuka has 1,223 people (2020 census) with 267 households. These direct beneficiaries are men, women, and youth will be engaged with the activities to improve the water supply, use and sustainability of the water resource. Island protocols will be adhered to with coordination of the project activities to be operated through the Island Councils and unimwane / unaine (men and women elders). In addition, groups such as churches, schools and health clinics will be active participants in both water infrastructure and educational and awareness programs.

At the national level, indirect beneficiaries are Government Ministries engaged in the project, the Island Councils and other outer islands, as lessons learnt from this project will help strengthen future water accessibility projects. Repairing of tanks and water facilities will benefit women, youths and other diverse groups from all three target outer islands. Benefits will be in access to safe clean water, the repair of existing water facilities and the improvement of health in all the islands (Component 1&2).

Churches on the outer islands play an important role in water resource management as many of the churches are used as rainwater harvesting areas and therefore the custodians of island water supply. Church members are direct beneficiaries of the project. Church leaders will therefore be engaged in the decision-making processes to determine (a) the prioritization of the rapid response assessment to undertake repairs or replacement of existing water infrastructure and (b) for new technology options (Component 1 and 4); participation in discussions involving access to water and water safety particularly for those facilities which are located on church grounds, and; are important conduits in the education and training in water safety and water usage (Component 3 and 5). Men, women, young members of churches also are beneficiaries through provision of clean and safe water.

The project will work with schools, teachers, and students through Component 3 and 5, in participating in educational trainings associated with the promotion of water safety and hygiene. This will be undertaken through the UNICEF WASH programs, and will include activities such as sports activities, roadshows, competitions and awards to help promote the messages.

Health clinics on the three targeted outer islands play an important role in monitoring and recording health data linked to water borne diseases, and in promoting health and hygiene messages. Health workers, care givers who are mostly women, and people that are sick from contaminated water are also direct beneficiaries of the project. Health workers will provide health clinic data to support Outcome 1.2 on the monitoring of water borne diseases (Component 1), and Outcome 5.1 in activities on hygiene and health messaging (Component 5).

GENDER ASSESSMENT: KEY FINDINGS

Kiribati ratified CEDAW, the Convention on Elimination on Discrimination Against Women, in March 2004, has put in place legislations and policies to meet and monitor the implementation and reporting of its obligations under ratified international conventions, including the 1948 Universal Declaration of Human Rights the Convention on the Rights of the Child (CRC), the Convention on the Rights of Persons with Disabilities (CRPD), the Pacific Platform for Action on Gender Equality and Women’s Human Rights (2018–2030), and the revitalised Pacific Leaders Gender Equality Declaration (2012 and 2023).

The Kiribati 20-Year Vision 2016-2036⁶² acknowledges the importance of gender, youth, vulnerable groups, disability, equity and partnership as crosscutting principles and Governance under Section 3, clearly outlining a strong commitment to addressing gender inequality. The Gender Equality and Women Development policy priorities are for equal opportunities, equal human rights, and equal access to services so that everyone can reach their potential in economic, political, cultural and social life, and highlights existing legal mechanisms and policies to support gender mainstreaming.

The MWYSA Department of Women is responsible for developing, implementing and monitoring gender policies, has officers in all outer islands in Kiribati and they work in Island issues with local women associations, women groups and NGOs and could be trained to “provide technical support and capacity building on gender” to local communities and stakeholders as needed.

Kiribati society is still predominantly patriarchal with defined gender roles, thus, there exist distinct cultural norms and beliefs which influence women’s roles, their time use when compared to men, their involvement in development projects. Based on power imbalances in traditional settings, i-Kiribati women have limited roles in community decision-making forums, such as those traditionally held in community meeting houses or the maneabas. At the local level, only seven out of 142 Island Councillors are women (5% of Island Councillors).⁶³ Men dominate island councils, which are local government institutions elected every four years. In 2015, only 5 per cent of councillors were women⁶⁴. The Council of Elders focusses on the decision making by elderly men and this also leaves out the inclusion of other men and youths.

62 KV20. 2016. Kiribati 20-year vision 2016–2036.
[http://www.mfed.gov.ki/sites/default/files/KV20%20 VISION.pdf](http://www.mfed.gov.ki/sites/default/files/KV20%20VISION.pdf)

63 Kiribati National Statistics Office. 2017, *ibid*

64 KNSO (2018). Kiribati Gender Statistics Abstract 2017. Kiribati National Statistics Office, Ministry of Finance and Economic Development. Bairiki, Tarawa

Kiribati society is generally patriarchal, and women perform most of the unpaid reproductive and domestic work, and are primarily responsible for the care of children, the ill and the elderly⁶⁵. While the gender division of labour is complimentary in many ways, women are disadvantaged as they have to shoulder domestic chores, plus other food gathering activities and community engagement and obligations. Prevailing social norms, gender stereotypes and cultural expectations, results in climate change having different impacts on men and women as well as their ability to adapt to the impacts.

Kiribati women play significant roles in the country's economic and development processes. The formal labour force participation rate for women is below that for men and unemployment among women is also higher⁶⁶. Of the 7,029 workers reported in the 'agriculture, forestry and fishing' industry in 2020, 85 percent were males and the average (mean) age was one of the youngest of all industries at 36 years old.⁶⁷

In Volume 2 of the 2015 Census Report, women represented 59.6% of the rate of labour force most involved in unpaid work, caring for children, elders and household chores⁶⁸, 47% of older women are unemployed while 73% of young women are unemployed. Women have a consistently lower rate of labour force participation and a higher unemployment rate, and are concentrated into informal sector activities to a greater extent than men⁶⁹. With most women unemployed, especially in outer islands, and with an increasing number of women headed households, women are more vulnerable to challenges of climate change and the need for basic water and food sources. Land on the three outer islands is owned and inherited by family, or leased from government. Women have access to land, however, decision making under traditional institutions largely rests on men, especially the elderly men.

Nationally just under one in five households is headed by a female, and women make up 49% of those falling below the poverty line⁷⁰. This is contributing to increased hardship in the community and inability to meet higher health service costs, which are borne by women. Poverty was slightly higher in South Tarawa (24%) than the national average and as high as

65 GREEN CLIMATE FUNDS, 2019. Gender Assessment. FP091: South Tarawa Water Supply Project, GCF.

66 World Bank, 2020. Republic of Kiribati, In support of the Statistical Innovation and Capacity Building in Pacific Islands Program. Kiribati Project, January 21, 2020. World Bank

67 Pacific Community, 2022.

68 National Statistics Office, Ministry of Finance. (2016). 2015 Population and Housing Census. Volume 1: Management report and basic tables. Bairiki, Tarawa. Retrieved from http://www.mfed.gov.ki/statistics/documents/2015_Population_Census_Report_Volume_1final_211016.pdf

69 UNCTAD, 2020. Women producers of Kiribati and their participation in Inter island and international trade

70 National Statistics Office, Ministry of Finance. (2016). 2015 Population and Housing Census. Volume 1: Management report and basic tables. Bairiki, Tarawa. Retrieved from http://www.mfed.gov.ki/statistics/documents/2015_Population_Census_Report_Volume_1final_211016.pdf

36% in the Southern Gilbert islands, which are among the most remote and mostly smallest islands in Kiribati.⁷¹

Kiribati faces a double burden of disease, with high mortality and morbidity from both communicable and non-communicable diseases (NCDs). NCDs, in particular heart disease, hypertension, diabetes and cancer are becoming more prevalent. Kiribati's under-five mortality rate is among the highest in the Pacific at 61 per 1,000 live births, more than double the rate in most Pacific island countries. A broad range of reproductive health services are available but culture, tradition and religious views are a major barrier of women's access, particularly in outer islands⁷².

The most frequently reported issues raised in focus group discussions related to water scarcity (quality and quantity), reduced agricultural activity, disease, and increased burden to fetch water, especially for women. Women were also considered the most vulnerable to have to carry baskets and containers for long distances or look for transportation from other people to go to uncontaminated wells for water. Increasing hardship, droughts and lack of access to safe and dependable water supply overburden women, who are responsible for household water needs and management. The major cause of water borne diseases on the project islands is contaminated water: and with women managing most of household water consumption, they are more at risk to water borne disease. Lack of access to safe and clean water, and a broad range of health and reproductive health services are available but culture, tradition and religious views are a major barrier of women's access, particularly in outer islands⁷³.

Systematic sex disaggregated data collection on gender participation in climate related projects, or specific mitigation or adaptation interventions is needed to ensure that these inequalities are addressed through projects to be implemented. ⁷⁴ Sex-disaggregated data will be collected and used to monitor GAP implementation and impact, and reported during quarterly and mid-term reviews.

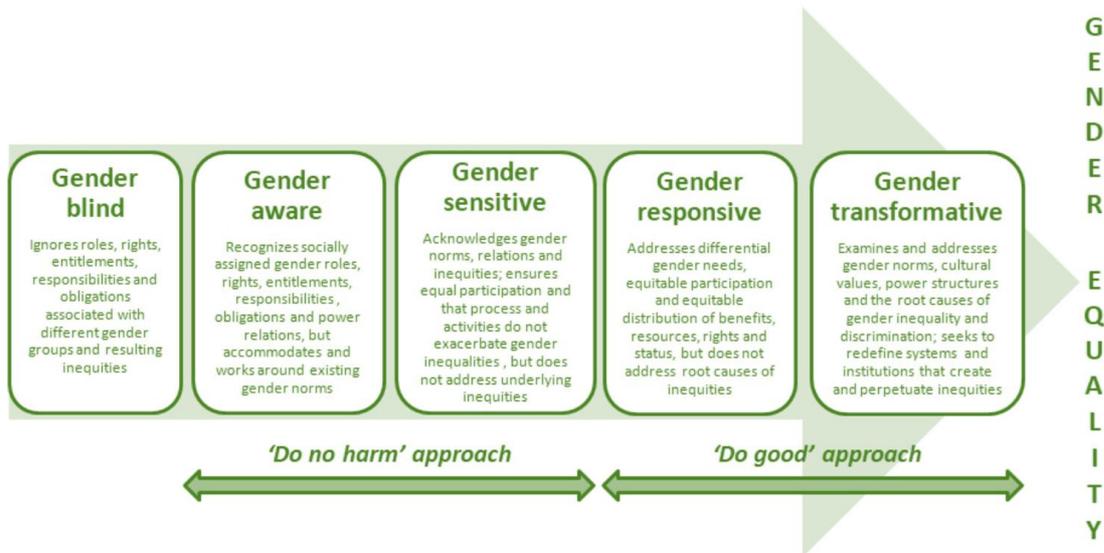
Figure 13: The Adaptation Fund Gender Continuum

71 AusAid. (2012). Kiribati country case study: AusAid Pacific social protection series, Commonwealth of Australia. Canberra.

72 GCF,2019. FP091: South Tarawa Water Supply Project, GCF.

73 . Secretariat of the Pacific Community, 2022. Island Diagnostic Analysis Report for Kiribati. GEF International Waters Ridge to Reef Program. Secretariat of the Pacific Community U.N.Women. 2018. More Coordinated Services for Women and Girl Survivors of Domestic violence. U.N Women

74 DEKENS, j.2017. Strengthening Gender Considerations in Kiribati's National Adaptation Plan (NAP) Process. Nap Global Network. Government of Kiribati.



Source: Adaptation Fund, 2021.

On the Gender Continuum (Figure 13), most work undertaken in the gender space in Kiribati has moved from the gender aware to gender sensitive approaches. There is increased awareness of gender and human rights, and there is wider acknowledgement of the numerous cultural and social stereotypes that inhibit women's progress. In the outer islands where traditional norms and practices are still strongly influential, gender progress has moved away from the gender blind stage, the gender aware stage to the gender sensitive stage. This project will work at the gender responsive interventions and will include responsive and interactive interventions that build the capacity of women, youth and other vulnerable groups at community and other levels of engagement.

Gender Mainstreaming Strategy and Action Plan

Purpose and Scope of the Gender Mainstreaming Strategy

The purpose of this strategy is to guide gender mainstreaming work into all phases of the project cycle on the provision of water and improved sanitation to Makin, Aranuka and Tabiteuea South in Kiribati. The scope of the work covers the planning and development, implementation, monitoring and evaluation stage. At the outer islands level, the work targets achieving gender inclusion in activities with, Island Councils, NGOs, CSOs and community groups with men, women, youths and the most vulnerable. The Unimawne (Council of Elders) and other traditional groups will also be included in their different capacities. Other stakeholders like the church and church groups, schools, Women's groups, Youth Groups all have different roles that are key to creating pathways for working in communities.

The Gender Mainstreaming Strategy sets out entry points for gender mainstreaming initiatives, key steps to ensure gender responsive interventions, identification of key outputs and outcomes and proposed indicators for success. Part of the proposed strategies is the management of potential risks and the promotion of gender equality and the empowerment of women.

Objectives

The overall objective is that all community members: women, men, boys, girls, including those with disabilities and other vulnerabilities; have access to reliable, equitable, and sustainable access to water and better health outcomes. The climate change impacts on water access and availability have different impacts on women, youth, children and require different interventions. The components of this objective are:

Ensuring that women and men's voices are heard and acted on in decision making forums at community level.

Ensuring that the needs and priorities of women, men, youth and other vulnerable groups in communities are addressed in all interventions.

Systematically collecting and analysing sex, age and disability-disaggregated data across all project activities.

Ensuring inclusive capacity building and training benefit women and other vulnerable groups.

Documenting lessons learned for future projects in other outer islands and to inform gender mainstreaming work in the outer islands of Kiribati.

In sum, given the unique cultural and governance context of the three targeted outer islands, the Project will adopt an inclusive approach focusing on all community groups – women, men, youth and other vulnerable groups – to ensure the whole of community benefits from the project's interventions. The gender mainstreaming strategy will rely on a strong community engagement and be assessed bi-annually to further support gender and social inclusion across the project's activities.

Project Components and Strategies

COMPONENT 1: Repair and replacement to existing water supply systems in the targeted villages.

This component looks at rapid assessment and community prioritization for the repair and replacement of existing water supply systems in the targeted villages. Repair and replacement of existing water supply systems in the targeted villages based on community prioritization.

Output 1.1. Rapid assessment and response of existing water supply systems in the targeted villages on the three islands

Strategic Entry Points:

Site assessments will address gender differentiated vulnerability to climate change and water needs in an intersectional manner.

The results from the assessments will be discussed with the island councils, community. Women's groups will be actively involved discussions and decision making on the roll-out of the repair work as to whether to conduct the work across all three islands at the same time (with three separate response teams) or to conduct the work sequentially over a period of approximately one year.

Rapid assessment of existing water supply systems include women/youth in the assessment activities.

Gender responsive awareness raising activities will consider the priorities and needs of women, youth and vulnerable groups (PWDs, older persons, women-headed households).

Output 1.2 Implementation of water treatment systems to existing water supply systems

Strategic Entry Points:

Inclusive selection of the most suitable of water treatment options by all community members and groups including women.

Water quality monitoring undertaken in the target communities in partnership with Government ministries and island communities to include women, youth and other vulnerable groups.

Working with existing institutions to ensure support for sociocultural and institutional change among stakeholders to support and sustain gender equality mainstreaming in the long term.

COMPONENT 2: Building long-term options for water resource management and use

Output 2.1 Building long-term options for water resource management and use

Strategic Entry Points:

Work on mapping of groundwater quantity/quality is gender and youth inclusive.

Projected impact of climate change scenarios on water availability and quality on the islands' groundwater resources and potential coastal inundation to include gender considerations.

Ensure equity in representation of men, women, youth, PWD on the project Steering Committees in the different islands.

Building the gender capacity of MISE in water resource assessments and climate modelling for decision-making.

Output 2.1.2 Long-term sustainability plans for water resources on the three islands and climate change adaptation

Strategic Entry Points:

Technical, social, environmental, and economic assessments of multiple options to ensure provision of sustained access to safe drinking water for all communities on the three islands- are inclusive of gender considerations.

Promote gender equality and the empowerment of women and girls, youths through training in assessment work.

COMPONENT 3: Strengthening coordination mechanisms and community participation for water resource management

Output 3.1 Practices of the target outer island communities are consistent with the protection and sustainable and equitable use of water- with gender and social inclusion included in all practices.

Strategic Entry Points:

Long-term sustainable management plans developed for the islands' water supplies systematically gender and social considerations into account.

Women, youth and vulnerable groups actively participate in the development of island water supply sustainability plans.

Agreement with the national government on future funding arrangements takes into account gender mainstreaming and equitable use of resources.

Output 3.1.2: Equitable and efficient coordination arrangements for water supply at all levels, from the household to the national government levels

Strategic Entry Points:

Increase women's and youth's voices in joint decision-making with government at the community level. Working in complementarity with the island cultural norms, the project will endeavour to increase the participation of women and youth in the decision-making related to water infrastructure and treatment, water usage and conservation and water safety and drought management plans.

Coordination arrangements to set quotas for affirmative actions for women's engagement in water supply planning from households/communities.

COMPONENT 4: Construction of new water infrastructure to adapt to future climate impacts

Output 4.1: Completion of new infrastructure and water treatment systems designed to fill in the current supply gaps, are gender inclusive and assessment of potential new technologies takes into account gender priorities.

Strategic Entry Points:

Design and costing of preferred options to fill in gaps in the current water supply systems takes into account gendered priorities and needs.

Construction of new water supply infrastructure and water treatment systems takes into account gender needs.

Supply and safe storage of spare parts and maintenance equipment and tools, and training of local technicians in basic water supply repairs is gender responsive ensuring women and youth participation in training.

COMPONENT 5: Education, awareness raising and knowledge management enables gender equality and social inclusion.

Strategic Entry Points

Implementing approaches related to long-term changes in behaviours and practices in water, sanitation, and hygiene, must ensure that the immediate and strategic needs and concerns of women, youth and other vulnerable groups are addressed.

Awareness raising and education on the importance of water conservation under drought conditions, safe sanitation practices and protection of fragile water sources on the three islands enables gender equality and social inclusion.

Risks and Management

The Gender Action Plan outlines strategies and activities plus timelines, deliverables, partners to work with and indicators. There are however, risks that have to be expected and below are a list of potential risks and possible management strategies. The project identifies actions and procedures that ensure that projects/programs are gender responsive, including the management of potential risks to the promotion of gender equality and the empowerment of women. The Project will mitigate against potential project/program risks for women and girls, men and boys and other gender sub-groups in relation to concrete adaptation actions financed by the Fund (GP, para. 11(b)), the mandate to “do no harm”.

Table 32: Risk and Management

Risk	Management Strategy
The need for change in attitude – behaviour change takes time; acceptance of gender inequity as normal.	Gender socialisation and awareness work on gendered roles to be part of trainings and empowerment work in communities. NGOs can assist in this work. Behaviour change evident in gender relationships at community level.
Women dominant roles as care givers and engagement in unpaid work in communities, take up women’s time and little time for engagement in training, workshops, etc.	Trainings and meetings will be at times when women are free to attend.
Gender stereotypes continue to undermine gender mainstreaming work.	Gender awareness training and capacity building to be part of all skills and health training undertaken.
The implementation of gender responsive interventions challenged by little support from men and other groups in communities.	Have specific gender activities that will ensure gender responsive interventions.
Lack of data to support work to be done.	Sex, age and disability-disaggregated data to be collected as a core part of interventions.
Social cultural norms that can undermine long term sustainability of the work to be done.	Use within positive cultural norms and practices.
Households reached do not follow sustainable water use and safe sanitation messages.	Gender-specific safe water use and sanitation messages are understood and heeded by most households.
Community and leadership preparedness and willingness to engage.	Leaders to be part of any training undertaken in communities to ensure awareness and support for project implementation.
Traditional practices of water use and lack of sanitary knowledge could result in the minimal evidence of decline in water borne diseases.	Sex-disaggregated data collection will continue throughout the project cycle and changes in water use, decline in sick people reported will be part of the monitoring work of the project.
Existing stereotypes could prohibit women being part of the repairs and maintenance team for existing water facilities.	Inclusion of women at the planning and development stages of the work, and participation in training and capacity building will ensure women participation and addressing of existing stereotypes.

The IE may not have the necessary gender expertise to conduct training for other partners or to conduct the gender work as stated in the proposal.

IE gender focal point to be assessed (and gaps in knowledge addressed through preparatory workshops/training sessions).

The Gender Action Plan

The Gender Action Plan identifies gender inclusion in proposed interventions, outputs, outcomes and gender indicators will guide the progress of gender interventions gender inclusion in the monitoring of projects implemented. The GMS and the GAP is aligned to the AF policy ensuring that:

Women and men are provided with an equal opportunity to build resilience, address their differentiated vulnerabilities, and increase their capacity to adapt to climate change impacts; recognizing the need for targeted efforts in order to ensure women’s participation;

Potential project/program risks for women and men in relation to concrete actions financed by the AF will be addressed and mitigated against.

Knowledge and data gaps on gender-related vulnerabilities will be addressed and learning about effective gender-equal adaptation measures and strategies accelerated.

To consult with affected women and men actively, considering their experiences, capabilities and knowledge of resources and their communities.

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
Component 1. Repair and replacement to existing water supply systems in the targeted villages					
Outcome 1.1 The selected three island communities have repaired and/or replaced water supplies and safe drinking water taking gender priorities into account, and clean freshwater for other water uses	Output 1.1.1 Rapid assessment and response of existing water supply systems in the targeted villages on the three islands include women/youth participation.	Year 1	Women, men, other diverse groups make up 50% of those targeted in all capacity building, skills training undertaken.	Assessment carried out identify gender priorities	Sufficient repaired and/or replaced water supplies for the three communities- have included gender considerations and priorities.

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
	Activity 1.1.1.1 Women and youths participate in Rapid assessment and community prioritization for the repair and replacement of existing water supply systems in the targeted villages.		Number of women and youth from the 3 outer islands trained, upskilled actively involved in community prioritization for repair and replacement of existing water supply systems	Women/youths, disabled, children prioritized needs identified.	All community/gender prioritization met.
	Activity 1.1.1.2 Repair and replacement of existing water supply systems in the targeted villages based on community needs and prioritization of gender needs.		Percentage of repairs and replacement that include women/children/ disabled friendly features/prioritization.	Prioritization by women, youths on number of existing water supply systems that need repair and replacement completed and available.	Repairs and replacement of existing water supply systems are gender inclusive.
Outcome 1.2 <i>Improved health outcomes on the three islands from increased reliable safe drinking water through climate-resilient water treatment solutions</i>	Output 1.2.1 Implementation of water treatment systems to existing water supply systems take into account the different needs of women, men, the disabled. Monitoring of water borne diseases include collection of sex-disaggregated data.	Year 2	50% of participants for gender inclusion, awareness raising and education on the importance of safe sanitation practices and protection of water sources on the three islands are women, youths and other vulnerable groups. Sex-disaggregated data collected for monitoring of water borne diseases.	Sex-disaggregated numbers of those affected by water borne diseases available for all villages targeted.	Evident decline in incidence of water borne diseases on women, men, youth, the disabled in the three target sites.

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
	Activity 1.2.1.1 Selection of the most suitable water treatment options include gender considerations.		Meeting spaces, tools used, and times set for trainings on water treatment systems take into account gender inequalities and specifically include gender considerations.	Most suitable water treatment options are Identified and gender inclusive.	Incidence of water borne diseases on the three islands well below national levels.
	Activity 1.2.1.2 Water quality monitoring undertaken in the target communities in partnership with Government ministries and island communities is gender inclusive with specific gender indicators.		Water quality improvement in communities' target women, youths and other vulnerable groups – and this equate to 50% decline in prevalence of water borne diseases in women, youths and the most vulnerable.	Women, youths and all vulnerable members of communities have access to good water quality.	Women, men and all sectors of communities have access to clean, safe water. Increase in water quality equate to decline in prevalence of water borne diseases for women and other vulnerable groups.

Component 2: Building long-term options for water resource management and use

Outcome 2.1 Government of Kiribati and the island communities are mainstreaming the use of evidence to inform water security policies and	Output 2.1.1: Comprehensive assessment of safe drinking water sources are gender and socially inclusive, and agreed supply options to fill gaps in supply for all water uses,	Year 1	50% of all assessment teams are women and youths and other vulnerable groups	Assessments conducted have taken gender considerations into account	Communities, inclusive of women, youths, the disabled are mainstreaming the use of evidence to
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Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
practical solutions to enhance resilience under future climate in the target islands. All resilience targets are gender inclusive.	under a range of climate change scenarios				inform water security policies
	Activity 2.1.1.1 Mapping of groundwater resource quantity and quality on the three islands is gender balanced with participation of different men and women groups.		50% of representation on the Steering Committee of the mapping projects in the different islands are women, youths and other vulnerable groups.	Mapping of groundwater resource quality and quantity is gender segregated.	Gender equal representation in the steering committees. Mapping conducted with gender segregated information included.
	Activity 2.1.1.2 Projected impact of climate change scenarios on water availability and quality on the islands' groundwater resources and potential coastal inundation take into account different gendered impacts.		Gendered impacts of climate change on water availability and quality is identified and documented.	Gender segregated impacts of climate change on water availability and quality is available.	Gendered mitigation measures to address climate change impacts on water availability/quality are developed
	Activity 2.1.1.3 Building the capacity of MISE in water resource assessments and		MISE actively participate in water resource assessments	Gender focal point in MISE part of the	MISE has gender focal points that are skilled and

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
	climate modelling for decision-making in future water security planning takes into account capacity building of women staff.		and climate modelling for decision making.	capacity building work done.	trained in conducting assessments and modelling work.
Outcome 2.2. Long-term sustainable supplies of safe drinking water, clean freshwater for other water uses-is gender inclusive.	Output 2.1.2: Long-term sustainability plans for water resources on the three islands and climate change adaptation under future scenarios-takes gender considerations into account.		Number of women/youth included in specific trainings and awareness sessions on long term plans for safe drinking water.	Gender inclusive sustainability plans for water resources developed.	Equitable and gender responsive access to safe drinking water in all three communities, including under drought conditions.
	Activity 2.1.2.1 Technical, social, environmental, and economic assessment of multiple options to ensure provision of sustained access to safe drinking water for all communities on the three islands, considers gender differentiated needs.		Number of women included in technical, social and economic assessment of options to ensure sustained access to safe drinking water to all communities targeted.	Assessments of options available to ensure provision of sustained access to safe drinking water is gender and socially inclusive.	Gender responsive options to ensure sustained access to safe drinking water is completed.
Component 3: Strengthening coordination mechanisms and community participation for water resource management					
Outcome 3.1. There is gender equitable access to safe drinking water and clean freshwater for other	Output 3.1.1: Practices of the target outer island communities, are gender responsive and are consistent	Year 2-3	50% of women, youths and other vulnerable groups have equal access to educational and awareness programs and	There is gender equitable access to	Equitable and efficient coordination arrangements for

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
water uses is in place in the selected island communities.	with the protection and sustainable and equitable use of water.		are part of committees responsible for equitable access to safe drinking water.	drinking water for all 3 target islands.	water supply at all levels, from the household to the national government levels is gender inclusive.
	Activity 3.1.1.1 Development of long-term sustainable management plans for the islands' water supplies is gender inclusive.		50% of the steering committees in the target sites are women/youths and vulnerable groups.	Gender equitable and accessible water management plans available.	Women are part of decision making forums/committees for sustainable water supply.
	Activity 3.1.1.2 Development of island water supply sustainability plans including water safety plans and drought response plans are gender and socially inclusive.		Quotas set out for women/youth participation in coordination arrangements for water supply at all levels, from the household to the national government levels.	Gender inclusive water safety plans and drought response plans are in place.	Specific women/youth quotas in coordination arrangements on drought response plans and water safety plans.
	Activity 3.1.1.3 Agreement with the national government on future funding arrangements for the sustainable management plans-include specific gender targets.		Sustainable water management plans at all levels have gender specific interventions and targets.	Gender responsive sustainable water management plans developed.	Sustainable water management plans developed at all levels have specific gender interventions and targets.

Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
	Output 3.1.2: Equitable and efficient coordination arrangements for water supply at all levels, from the household to the national government levels take into account all sectors of the community including women, youth and other vulnerable members of community.		Coordination arrangements at all levels include women, youth and other vulnerable members of communities.	All coordination arrangements are gender inclusive with gender interventions and gender targets.	Gender equitable and socially inclusive coordination arrangements for water supply at all levels.
	Activity 3.1.2.1 Empowering community and government in joint decision-making.		Community and gender empowerment training in joint decision making conducted at all levels in all three outer islands.	Gender inclusive training and capacity building on joint decision making held in the target outer islands.	Joint decision making processes which include women, youth and other vulnerable members of the communities are in place.

Component 4: Construction of new water infrastructure to adapt to future climate impacts

Outcome 4.1. There is gender and social inclusion into all aspects of availability of long-term sustainable supplies of safe drinking water, clean freshwater for other water uses, and effective, affordable	Output 4.1.1: Completion of new infrastructure and water treatment systems include new infrastructure and water treatment systems that are climate resilient and have		Equitable participation of women, youth and vulnerable groups in new water and sanitation infrastructure developments that adapt to climate change.	New infrastructure systems introduced include gender targets and considerations.	There is gender and social inclusion into all aspects of new water infrastructure adopted to adapt to climate impacts.
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Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
maintenance arrangements are in place in the three targeted island communities.	taken gender considerations into account.				
	Activity 4.1.1.1 Design and costing of preferred options to fill in gaps in the current water supply systems meet gender identified priorities.		Gender priorities included in all design and costings of preferred options.	Design and costings of preferred options take into account specific gendered needs.	New water infrastructure design and costings meet gender specific needs.
	Activity 4.1.1.2 Construction of new water supply infrastructure and water treatment systems take into account gender priorities and needs in future climate impacts.		New infrastructure constructed include specific gendered priorities to meet future climate impacts needs for women, youths and other vulnerable members of communities.	New water supply infrastructure constructed have specific gendered needs included.	All new water supply infrastructure constructed take into account gender needs and priorities.
	Activity 4.1.1.3 Supply and safe storage of spare parts and maintenance equipment and tools Training of local technicians, is gender inclusive.		All training sessions of local technicians for supply and safe storage of spare parts and maintenance equipment are gender inclusive.	Gender inclusive trainings on supply and safe storage of spare parts conducted	All training conducted to have participation of women, youths.

Component 5: Education, awareness raising and knowledge management

Outcome 5.1. Practices of the target outer island	Output 5.1.1: The sustainable water use and safe sanitation		50% of those included in Capacity building, knowledge	Gender inclusive knowledge	Enhance the capacity of
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Project Outcome	GEDSI Responsive Output/ Activity	Timeline	Indicator	Baseline	Target
communities are consistent with the protection and sustainable and equitable use of water	practices knowledge disseminated to the three selected island communities include gender specific knowledge products.		sharing, and communication are women, youths and other vulnerable groups.	management tools developed.	stakeholders to develop gender-responsive strategies, capacity building and equitable access to information.
	Activity 5.1.1.1 Implementing approaches aimed at inducing long-term changes to behaviours and practices in water, sanitation, and hygiene for women, men, youths and all community members.		Approaches and communication strategies take into account differences in access and power by women and men.		A gender approach in all training modules & equitable access to awareness raising, knowledge management.
	Activity 5.1.1.2 Gender responsive awareness raising and education on the importance of water conservation under drought conditions, safe sanitation practices and protection of fragile water sources on the three islands are carried out.		Capacity of stakeholders to develop gender-responsive strategies, capacity building and equitable access to information is enhanced.		Gender responsive awareness raising and training carried out in all three outer islands.

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ANNEX 1: List of Stakeholders

Stakeholders (organisations), roles and responsibilities are summarised as:

Organisation	Role	Roles in Adaptation work
Aia Mwaea Ainen Kiribati (AMAK) was established as a non-government organization in 1982 to serve as an umbrella organization for the various church affiliated women’s organizations.	Work with women organizations in Kiribati including Outer Islands	The Umbrella Organization for Women have membership from all outer islands and can be instrumental in mobilizing of women for training and for other activities.
Women’s Church Groups	The two major church groups- have women associations in almost all atolls	The church groups can be platforms for women only discussions and information dissemination to community members.
Women Groups in outer islands	All atolls have women groups and associations and have their reach into all outer islands.	These women organizations provide the support to members and could be instrumental in spearheading interventions that are especially targeted to women.
Island Women Association		
MIA	Work in close association with all Island Councils	Have Island officers who work with community groups.
MWYSA	Women Interest Officer in outer islands	Can be the liaison person for all gender interventions, and can be part of gender trainings and monitoring, reporting.
Youth Associations	Most outer islands have youth groups and associations who are beneficiaries and will be relied on to implement some of the activities to be done.	Will be part of the Implementing of projects and should be part of training on maintenance, data collection, monitoring. Can be part of the cconstruction of the “gap filling” water supply infrastructure, providing local community labour
Island Councils- Local government.	The Councils are the Local Government in outer islands and	Will be responsible for most of the work to be done in the outer islands- working with community groups and external stakeholders. The island council in its role as an

Organisation	Role	Roles in Adaptation work
	Representatives of the National Government.	executive body on the island make by-laws for the island.
Unemane- Council of Elders	Decision making body in all outer islands.	Can be instrumental in supporting work that needs to be done at the community level. They will be key stakeholders for consultations and community agreement on long-term sustainable management plans for the islands' water supplies; The villages through meetings in the maneaba make village constitutions and regulations that only effective in that particular village. For example, restricting the use of small fishing nets to catch small and undersized fish. "Karaoaki taian oi-n-tua – kauntira".
Ministry of Health	Work on sanitation interventions	Technical expertise on sanitation and can be responsible for women and youth inclusion in training/awareness on sanitation. Awareness raising and education on the importance of safe sanitation practices and protection of water sources on the three islands will be in collaboration with the MoH.
Department of Environment MELAD	Monitoring oversight relating to chemical composition and bacteria and water quality respectively	Will have information and expertise in water quality work in Tarawa and outer islands.
Climate Finance Unit	Looks after all climate financed projects	Provide government contribution on project proposals and projects approved for implementation.
Office of the President	Climate Change Unit – that oversee Implementation of Climate related projects	Policies that support any work on climate change and political support for climate change work.
National Statistics Office	Data collection and statistical information	Could assist with data analysis and data management.
MISE	Monitoring water reserves	Staff mostly monitor water reserves thus have good knowledge of water resources.

