

## South Tarawa Water Supply Project

### Basic Information

**GEF ID**

10593

**Countries**

Kiribati

**Project Title**

South Tarawa Water Supply Project

**GEF Agency(ies)**

ADB

**Agency ID**

**GEF Focal Area(s)**

Climate Change

**Program Manager**

Fareeha Iqbal

## CEO Approval Request

## Part I – Project Information

**1. Focal area elements. Is the project aligned with the relevant GEF focal area elements as indicated in Table A and as defined by the GEF 7 Programming Directions?**

**Secretariat comment at CEO Endorsement Request**

Yes.

**Agency Response**

**2. Project description summary. Is the project structure/ design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?**

**Secretariat comment at CEO Endorsement Request**

10/23/2020:

Yes. Cleared.

10/15/2020:

Not yet.

1) As this is a child project that will go to Council for review, please note that in addition to a comprehensive online Portal entry (CEO Endorsement Request), we require submission of the agency's Project Document that is in the form submitted to the agency's internal approving authorities. The agency may remove material that is strictly confidential. Please provide the updated Project Document and include all the relevant annexes (Gender Action Plan/Assessment, Budget, CEO Endorsement-stage indicators, ToRs, climate risk screening/vulnerability assessment, ToC, etc.), so that there is a single document with all relevant information annexed within it, that may be shared with the LDCF/SCCF Council. Thank you.

2) Please remove inflation costs from the budget.

9/8/2020:

Not yet. Please see below two comments from PPO:

1) The Agency is requested to please put all the different sections in a single document (the Project Document). Currently, all the different GEF requirements (Gender, Core Indicators, Implementation arrangements, Budget, TORs, etc.) are not in one single document but in

different documents uploaded in Portal. This will be a challenge for Council Members when they will receive the documents for the 4-week circulation period.

2) The project budget is not detailed, hence it is not possible to understand what budget items are charged to which specific source (M&E, PMC, project components, etc.). The Agency is requested to present the budget in a form that clarifies what item/activity is charged to which source (please note that if the project's staff is charged to project's components, TORs are required describing the contribution of the project staff to the respective project component).

9/8/2020:

Not yet. Please see 3 comments from PPO in the section on whether the project is being recommended for CEO Endorsement.

7/10/20:

Cleared.

FI, 6/9/20:

Please specify the executing partner in the 'Project Information' section.

## **Agency Response**

### **ADB Response 23 October 2020**

1) The relevant internal Agency project documents have been compiled into a single file titled "Consolidated Attachments" and uploaded on 22 October 2020.

2) The inflation costs included in budget have been removed> This is in the actual Alternative Scenario (as Annex H embedded in the CER) and also in the Budget Section of the Portal. Please disregard ANNEX K in the Roadmap as this is an outdated file which we could not remove due to the Portal restrictions.

### **ADB Response: 05 October 2020**

1) Several of the original annexes have been integrated into the main project document narrative on the Portal (Annexes H, I and J). Other original annexes have been uploaded as "Evidence" in the relevant sections. We note three things however: i) some annexes cannot be integrated such as the OFP LOE, the ADB loan documentation etc., and ii) there is a limit on the number of "Evidence" documents that can be uploaded, so some will remain as annexes, and iii) we cannot delete existing annexes which have previously been uploaded.

2) The Budget has been elaborated in the relevant Portal Section. This includes i) output 1 cost estimates which will be based on an options analysis during project implementation, ii) PMC cost breakdown, and iii) M&E Budget which also corresponds with Section 9 of the CER narrative on the Portal. Please disregard Annex K - which we cannot delete from our initial submission. Further, the personnel TORs are in Annex I - which has been integrated into the Institutional Arrangements and Coordination section of the CER on the Portal

are in Annex C – which has been integrated into the Institutional Arrangements and Coordination section of the CER on the Portal.

**3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?**

Secretariat comment at CEO Endorsement Request N/A

**Agency Response**

**4. Co-financing. Are the confirmed amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, consistent with the requirements of the Co-Financing Policy and Guidelines?**

Secretariat comment at CEO Endorsement Request

8/7/20:  
Cleared.

7/10/20:  
As for GEF's co-finance Attachment 2 mentions USD 28,613,020. Number in the Table C seem to be rounded. These need to match. In addition, please provide a link to each 'evidence' under 'Evidence' column of Table C.

6/9/2020:

Further information is requested.

a) Please provide the conversion factor applied for SDR to USD. The WB document shows that SDR 11 M will be provided as cofinance, whereas the CEO Endorsement Table C shows a value of USD 12.96.

b) Please explain where we may find documentation supporting the Table C in-kind cofinance shown of USD 7.74 M.

**Agency Response**

ADB Response: 19 July 2020

The co-financing has been confirmed at USD 28,631,020 as per the Evidence indicated from the GCF. Other documents such as the ADB RRP have rounded this - and this is out of our control. We have used the exact amount as per the GCF supporting document. Table C has been adjusted accordingly.

\*\*\*\*\*

Kindly refer to responses below:

a) WB's total financing to the baseline project is \$15m of which \$12.96 is joint cofinancing with ADB, hence the latter figure is captured in ADB approval documentation (see Attachment 1 to the signed co-financing memo).

Attachment 3 to the signed co-financing memo captures WB's total contribution of \$15m, equivalent to SDR 11.1 million. The conversion factor is US\$1.36331 = SDR 1, per September 30, 2019 exchange rate.

b) Approved ADB RRP for the baseline project (Attachment 1 to the signed cofinancing memo) shows in para 20 and Table 2 (a) government's cash contribution of \$1.49m and (b) in-kind contribution through taxes and duties exemptions of \$5.75m, totalling \$7.24m. The cash contribution is also captured in para (C) of the WB grant agreement (Attachment 3 to the signed cofinancing memo). For the LDCF project, the proposal reflects (in the table under 1A.5) a proposed in-kind contribution from the government in the form of taxes and duties exemption amounting to \$0.5m. Thus the total contribution of \$7.74m (7.24 + 0.5)

**5. GEF resource availability. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):**

**Secretariat comment at CEO Endorsement Request**

Yes.

**Agency Response**

**STAR allocation?**

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Focal Area allocation?

Secretariat comment at CEO Endorsement Request N/A

Agency Response

LDCF under the principle of equitable access?

Secretariat comment at CEO Endorsement Request Yes.

Agency Response

SCCF (Adaptation or Tech Transfer)?

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Focal Area Set Aside?

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Impact Program Incentive?

Secretariat comment at CEO Endorsement Request N/A

Agency Response

6. Project Preparation Grant. If PPG is requested in Table E.1, has its advanced programming and utilized been accounted for in Annex C of the document?

Secretariat comment at CEO Endorsement Request PPG has not been requested.

Agency Response

**7. Non-Grant Instrument. If this an NGI, are the expected reflows indicated in Annex D?**

**Secretariat comment at CEO Endorsement Request** N/A

**Agency Response**

**8. Core Indicators. Are the targeted core indicators in Table E calculated using the methodology in the prescribed guidelines? (GEF/C.54/Infxxx)**

**Secretariat comment at CEO Endorsement Request** Yes, CEO endorsement stage information for the GEF-7 CCA results framework indicators has been provided. The project is expected to ultimately benefit nearly 90,000 people over time (over 50 percent women), mainstream climate change adaptation in two development plans/policies, and train 1,000 people.

**Agency Response**

**9. Project taxonomy. Is the project properly tagged with the appropriate keywords as in Table G?**

**Secretariat comment at CEO Endorsement Request**

7/10/20:  
Cleared.

FI, 6/9/20:

Please also select keywords relating to water supply or water sector resilience, and small islands.

**Agency Response** These have been included in Table G.. See also revised ANNEX G.

## **Part II – Project Justification**

**1. Project Description. Is there sufficient elaboration on how the global environmental/ adaptation problems, including the root causes and barriers, are going to be addressed?**

**Secretariat comment at CEO Endorsement Request FI, 6/9/20:**

Yes, the constraints to sustainable water supply in Tarawa have been well-presented, as well as the manner in which climate change will exacerbate stresses and introduce new ones. Climate change is expected to affect water supply as well as demand.

**Agency Response**

**2. Project Description. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?**

**Secretariat comment at CEO Endorsement Request** Yes. The baseline scenario is well described. The water supply network in South Tarawa, accessed by 69% of its population, is insufficient to even meet basic demand levels; people receive water for roughly two hours every two days. Delivered water is generally unfit for consumption and needs to be boiled. A major climate change concern is the risk over 'over-topping', whereby wind, waves and tidal surge combine to enable seawater to flow onto the island and eventually percolate into groundwater lenses. In terms of the baseline project, the ADB is working with the GCF on a large desalination plant project, but there are several adaptation gaps that the LDCF project will address.

**Agency Response**

**3. Project Description. Is there an elaboration on the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there more clarity on the expected outcomes and components of the project and a description on the project is**

**aiming to achieve them?**

**Secretariat comment at CEO Endorsement Request FI, 6/9/20:**

Yes, the alternative scenario has been well-presented on (i) ADB/GCF project relative to baseline situation and (ii) adaptation benefits that will ensue from the LDCF project, relative to the baseline situation and co-financing. The LDCF project will support options analysis to determine the costs and benefits in terms of climate change adaptation of strengthening the Stewart Causeway, Anderson Causeway and the Nanikai – Bairiki Causeway causeway, including an assessment of ecosystem based measures (maintaining and enhancing beach and natural crest berms on protection lines). These main water transmission lines along the sea are threatened by increased shoreline movement and coastal erosion. The LDCF components will also contribute to upgrading of the water supply network, notably in the eastern areas of Buota, Bikenibeu and Bangantebure, which is at increasing risk from flooding and tidal damage. Further information on these elements is included in Annex H. Additional knowledge-generation, institutional strengthening and capacity building measures will also be supported by the LDCF grant, as well as assessments of climate change impacts on the water network.

**Agency Response**

**4. Project Description. Is there an elaboration on how the project is aligned with focal area/impact program strategies?**

**Secretariat comment at CEO Endorsement Request** Yes, alignment with GEF-7 CCA Strategy is clear; it is aligned with CCA objectives 1 and 2.

**Agency Response**

**5. Project Description. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?**

**Secretariat comment at CEO Endorsement Request** Yes. The additional adaptation benefits expected to ensue from the LDCF project have been clearly specified.

## Agency Response

**6. Project Description. Is there a better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?**

**Secretariat comment at CEO Endorsement Request** Yes, for adaptation benefits.

## Agency Response

**7. Project Description. Is there a better elaboration to show that the project is innovative and sustainable including the potential for scaling up?**

## Secretariat comment at CEO Endorsement Request

FI, 6/15/2020:

Yes. It is innovative in (a) proposing to establish a common data/information platform to provide management and decision making support to multiple stakeholders; and (ii) proposing strategic use of asset management as a tool to achieve climate resilience, which at the city level is a relatively new approach. This will be the first time that Pacific Island country has attempted to use asset management as a tool to achieve climate resilience.

Sustainability has also been considered. Infrastructure outputs and activities will be designed with a planning horizon of 2041, take into account the impacts of climate change on water supply and demand, and will be 'climate-proofed'; in terms of building standards. Institutional strengthening and sustainability are also important aspects (governance, management, O&M), as is capacity building.

In terms of potential for scale up, the hard and soft measures to be supported are expected to be replicable on other islands and countries, with some measures specific to atolls, others across the Pacific, and others generally across all SIDS and coastal areas.

## Agency Response

**8. Project Map and Coordinates. Is there an accurate and confirmed geo-referenced information where the project intervention will take place?**

Secretariat comment at CEO Endorsement Request Yes.

## Agency Response

**9. Child Project. If this is a child project, an adequate reflection of how it contributes to the overall program impact?**

Secretariat comment at CEO Endorsement Request

7/10/20:  
Cleared.

FI, 6/9/20:

Further information is requested.

Please provide more information on how this project can contribute to regional adaptation benefits, or benefits from the regional approach, under the Program.

**Agency Response** Additional information is provided in section 1.A.7 (Scaling up) and Section 8 (Knowledge management). These are in yellow highlight for ease of reference.

**10. Stakeholders. Does the project include detailed report on stakeholders engaged during the design phase? Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?**

**Secretariat comment at CEO Endorsement Request FI, 6/16/2020:**

Yes. Stakeholders consulted have been identified, along with their roles, including civil society. A Stakeholder Management Engagement Plan has been submitted, and priority stakeholder groups have been identified.

**Agency Response**

**11. Gender equality and women's empowerment. Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?**

**Secretariat comment at CEO Endorsement Request**

FI, 6/16/2020:

Yes, the project is classified by ADB as an 'effective gender mainstreaming' project. A gender assessment was undertaken during project development and a Gender Action Plan (GAP) prepared, which has been submitted. The GAP addresses potential gender inequality risks and promotes women as project beneficiaries through participation in community discussions and in consultations on the design and implementation of water supply improvements; participation in project related capacity building activities; employment of females in constructing/operationalizing project related infrastructure; and training on GAP implementation and gender awareness, among other items. For each project output, the GAP provides gender-specific indicators, targets, activities and related roles/responsibilities.

**Agency Response**

**12. Private sector engagement. If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?**

**Secretariat comment at CEO Endorsement Request FI, 6/16/2020:**

Yes. Private sector operators will be engaged in water supply services and capacity building of key government agencies. The Government will explore measures to attract future private sector co-financing to water sector development, which will be supported by the project. A key project objective is to make water supply financially viable, which provides a basis for private sector involvement in the sector in the future. The project efforts to improve management and governance will also contribute to private sector engagement.

**Agency Response**

**13. Risk. Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?**

**Secretariat comment at CEO Endorsement Request FI 6/16/2020:**

Yes. Implementation risks relating to Covid-19 have also been discussed, and environmental and social safeguard related information has been submitted.

**Agency Response**

**14. Coordination. Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?**

**Secretariat comment at CEO Endorsement Request FI, 6/15/2020:**

Yes, coordination arrangements have been adequately described, including with the baseline ADB-GCF project. It will also coordinate with other relevant GEF and non-GEF initiatives in the country.

## Agency Response

**15. Consistency with national priorities. Has the project described the consistency of the project with identified national strategies and plans or reports and assessments under the relevant conventions?**

**Secretariat comment at CEO Endorsement Request** Yes. The Kiribati NAPA identified the water resources sector as a priority for adaptation. In addition, the project is aligned with priorities of the 'Tarawa Water Master Plan 2010-2030' and the 'Tarawa Water and Sanitation Roadmap 2011-2030'.

## Agency Response

**16. Knowledge management. Is the proposed “Knowledge Management Approach” for the project adequately elaborated with a timeline and a set of deliverables?**

**Secretariat comment at CEO Endorsement Request** FI, 6/9/2020:

Yes. Lessons emerging from this project will be shared with other Pacific countries, as well as with all key stakeholders in Kiribati. The CER describes the types of knowledge that will be shared and the various avenues for its dissemination. An example of an expected knowledge product is on best practice for infrastructure threatened by sea level rise, for use across Kiribati and other atoll islands.

## Agency Response

**17. Monitoring and Evaluation. Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?**

## Secretariat comment at CEO Endorsement Request

10/6/2020:

Cleared.

9/8/2020:

Please note PPO comment:

In absence of specific M&E items in the budget, it is not possible to compare the information with the version of the M&E Plan in Portal - if one understands correctly, USD 7.3m will be used to pay the staff of the PMU, which seems to be excessive. Also, while there is mention of the categories MTR and TE, the use of funds is represented in International vs National consultants. The Agency is requested to please clarify the USD 7.3m amount and also to use the categories MTR and TE to allocate funds, as well as to include the M&E Plan in the budget (to be contained in the Project document).

8/7/20:

Cleared.

7/10/20:

It is unclear where budgeted M&E Plan has been submitted. Please explain where we may find pertaining information.

6/9/2020:

Please submit a budgeted M&E Plan.

## Agency Response

### ADB Response 22 September 2020

The M&E budget details had been provided in attachments to the proposal and annexes. This has now been clarified and brought into the main text. The reference to USD 7.3 million is not clear. This is possibly based on a possible misunderstanding of the GEF and Agency (ADB) budgets in the original presentation.

In order to clarify further: the total PMU costs are USD 2.5 million. This includes many items, as well all project and technical monitoring (i.e. of equipment). The total GEF/LDCF contribution to the costs of the PMU are \$110,000. Of this, \$54,000 will support M&E - specifically to cover GEF M+E needs such as reporting on global climate issues, reporting to GEF, and contribution to mid-term and final evaluation of GEF/LDCF-related activities. The remaining \$ 50,000 will support the Global Climate Reporting Office (with inputs from national and international experts), as detailed in the Annex (*'Terms of Reference for all LDCF/GEF financed positions'*), , whose tasks will also include contribution to the mid-term and final evaluation.

The section "*9. Monitoring and Evaluation*" of the Proposal has been modified/clarified to include the above-mentioned information. See notably the table at the end of section 9.

ADB Response: 19 July 2020

A narrative on M&E has been provided in the appropriate Section 9 of the main project narrative. This includes M&E plan and budget allocations references. Budget is also indicated in the Annexed project budget worksheet.

\*\*\*\*\*

Kindly reference Section 9 of the CER which incorporates some additional narrative on M&E.

**18. Benefits. Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?**

**Secretariat comment at CEO Endorsement Request** Yes, socio-economic benefits have been adequately discussed.

**Agency Response**

**19. Annexes:**  
**Are all the required annexes attached and adequately responded to?**

**Secretariat comment at CEO Endorsement Request**

**Agency Response**

**20. Environmental and Social Safeguard (ESS):**  
**Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?**

Secretariat comment at CEO Endorsement Request

Agency Response

## Project Results Framework

Secretariat comment at CEO Endorsement Request Yes, this has been provided.

Agency Response

## GEF Secretariat comments

Secretariat comment at CEO Endorsement Request Yes.

Agency Response

## Council comments

Secretariat comment at CEO Endorsement Request

7/10/20:  
Cleared.

6/9/2020:

Please also address comments provided by Germany and the US at PFD approval stage (PFD ID 10173). If responses have already been provided, please let us know where we can locate these.

**Agency Response** ANNEX B in the CER provides responses to comments from USG, Germany and others.

## **STAP comments**

**Secretariat comment at CEO Endorsement Request** Yes.

**Agency Response**

## **Convention Secretariat comments**

**Secretariat comment at CEO Endorsement Request** N/A

**Agency Response**

## **Other Agencies comments**

**Secretariat comment at CEO Endorsement Request** N/A

Agency Response

CSOs comments

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Status of PPG utilization

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Calendar of expected reflows (if NGI is used)

Secretariat comment at CEO Endorsement Request N/A

Agency Response

Project maps and coordinates

Secretariat comment at CEO Endorsement Request Yes.

Agency Response

### Part III – Country and Agency Endorsements

1. Country endorsements. Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?

Secretariat comment at CEO Endorsement Request Yes.

Agency Response

### Termsheet, reflow table and agency capacity in NGI Projects

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat comment at CEO Endorsement Request

N / A

## Agency Response

### GEFSEC DECISION

#### 1. RECOMMENDATION.

Is CEO endorsement/ approval recommended?

##### Secretariat comment at CEO Endorsement Request

10/23/2020:

Yes, cleared.

10/5/2020:

Not yet. Please see comments for item 2 of Part I of the review sheet.

9/8/2020:

Not yet. Please see PPO comments below:

1- The Agency is requested to please put all the different sections in a single document (the Project Document). Currently, all the different GEF requirements (Gender, Core Indicators, Implementation arrangements, Budget, TORs, etc.) are not in one single document but in different documents uploaded in Portal. This will be a challenge for Council Members when they will receive the documents for the 4-week circulation period.

2- In absence of specific M&E items in the budget, it is not possible to compare the information with the version of the M&E Plan in Portal - if one understands correctly, USD 7.3m will be used to pay the staff of the PMU, which seems to be excessive. Also, while there is mention of the categories MTR and TE, the use of funds is represented in International vs National consultants. The Agency is requested to please clarify the USD 7.3m amount and also to use the categories MTR and TE to allocate funds, as well as to include the M&E Plan in the budget (to be contained in the Project document).

3- The project budget is not detailed at all – hence, it is not possible to understand what budget items are charged to which specific source (M&E, PMC, project components, etc.). The Agency is requested to present the budget in a form that clarifies what item/activity is charged to which source (please note that if the project's staff is charged to project's components, TORs are required describing the contribution of the project staff to the respective project component).

8/17/2020:

Yes, this is recommended for technical clearance.

7/10/2020:

Not yet. Please address review comments for item 4 of Part I of the review, and for item 17 of Part II of the review.

FI, 6/16/2020:

Not yet. Please address review comments for items 2, 4 and 9 of Part I of the review, and for items 9 and 17 of Part II of the review. Please also discuss how PFD-approval stage comments from Germany and the US were addressed during project preparation.

## Review Dates

	1SMSP CEO Approval	Response to Secretariat comments
First Review	6/9/2020	
Additional Review (as necessary)	7/10/2020	
Additional Review (as necessary)	8/17/2020	
Additional Review (as necessary)	9/8/2020	
Additional Review (as necessary)	10/15/2020	

## CEO Recommendation

### Brief reasoning for CEO Recommendations

CONTEXT:

This child project under the 'Climate Resilient Urban Development in the Pacific' program will be implemented in South Tarawa, the capital of Kiribati. Kiribati is a highly vulnerable LDC SIDS that faces immense challenges due to its geographical remoteness and vulnerability to

climate change. It is one of the world's smallest, most remote and geographically dispersed nations; its 33 atoll islands cover a total land area of 810 sqkm that are scattered across 3.5 million sqkm of ocean.

The project will focus on enhancing the climate resilience of South Tarawa's water supply sector. South Tarawa has a land area of only 15.72 sqkm and its highest point is only 3 meters above sea level, making it extremely vulnerable to wave and wind impacts of coastal storms. A major climate change concern is the risk over 'over-topping', whereby wind, waves and tidal surge combine to enable seawater to flow onto the island and eventually percolate into groundwater lenses.

#### COMPONENTS and RESULTS:

The water supply network in South Tarawa, accessed by 69% of its population, delivers water for roughly two hours every two days, which needs to be boiled to be fit for consumption. The ADB is working with the GCF on a desalination plant project. LDCF resources will be applied in parallel, in a coordinated manner with the GCF project, to address the following critical adaptation gaps:

- It will support options analysis to determine the costs and benefits in terms of climate change adaptation of strengthening the Stewart Causeway, Anderson Causeway and the Nanikai–Bairiki Causeway. These causeways, which house the critical infrastructure of water transmission lines, are highly exposed to high tide, storm surge and wave action, and are also threatened by increased shoreline movement and coastal erosion. The options analysis will include an assessment of ecosystem based measures (maintaining and enhancing beach and natural crest berms on protection lines).
- The LDCF components will contribute to upgrading of the water supply network, notably in the eastern areas of Buota, Bikenibeu and Bangantebure, which are at increasing risk from flooding and tidal damage.
- Knowledge-generation, institutional strengthening and capacity building measures will be supported by the LDCF grant, as well as assessments of climate change impacts on the water network. It will also strengthen cross sectoral mechanisms to mainstream climate resilience.

The LDCF project is expected to directly benefit nearly 90,000 people, and to train 1,000 people about climate risks and adaptation measures.

#### INNOVATION, SUSTAINABILITY, SCALE-UP & GENDER:

This project takes an innovative approach in proposing to establish a common data/information platform to provide management and decision making support to multiple stakeholders, as well as in proposing strategic use of asset management as a tool to achieve climate resilience, which at the city level is a relatively new approach.

Infrastructure outputs and activities will be designed with a planning horizon of 2041, take into account the impacts of climate change on water supply and demand and will be 'climate-proofed' in terms of building standards. Institutional strengthening and sustainability are also

water supply and demand, and will be climate proofed, in terms of building standards. Institutional strengthening and sustainability are also

important aspects (governance, management, O&M), as is capacity building.

The hard and soft measures that will be supported are expected to be replicable on other islands and countries, with some measures specific to atolls, others across the Pacific, and others generally across all SIDS and coastal areas.

A Gender Action Plan (GAP) has been prepared for the project, which addresses potential gender inequality risks and promotes women as project beneficiaries through participation in community discussions and in consultations on the design and implementation of water supply improvements; participation in project related capacity building activities; employment of females in constructing/operationalizing project related infrastructure; and training on GAP implementation and gender awareness.

The project is aligned with country priorities in Kiribati and is being designed to fully coordinate with the GCF desalination project in the country. Risks and opportunities to deliver benefits amidst a Covid situation have been taken into account. The LDCF resources will be accompanied by over \$54 million in grant cofinance from the GCF, ADB and World Bank.