



## Scaling Up Pacific Adaptation (GCCA+ SUPA)

Enhancing sustainable water security measures to adapt to climate change and disasters in vulnerable remote islet communities in Kiribati



Completed fit-for-purpose building to house reverse osmosis plants and additional water storage capacity.



**Project focus:** Water sector



**Project timeframe:** 1 January 2019- 30 June 2023



**Project site:** Banaba Island and Beru Island



**National implementing agencies:**  
Ministry of Infrastructure and Sustainable Energy, Office of the Beretitenti



**Beneficiaries**

Direct benefit: **2,051 persons**

Indirect benefit: **110, 136 persons**

### Project synopsis

The 'Scaling up of sustainable water security measures to adapt to climate change and disasters in vulnerable remote islet communities in Kiribati's project focused on enhancing the supply of potable water to residents of Banaba Island, one of Kiribati's most remote islands.

### How did this project address climate change adaptation in Kiribati?

- Given the low elevation of its coral atolls, Kiribati is especially vulnerable to the effects of rising sea levels, which include loss of land, flooding, and saltwater intrusion into groundwater lenses. Beru Island and Banaba Island receive very low rainfall and are very prone to drought leading to crop failures and contamination of ground water sources. In March 2021, Banaba Island faced an extreme drought and water crisis. The island had been almost a year without substantial rain. These conditions are being exacerbated by climate change.
- Focusing on the people living in the remote atolls, the project has adopted a people centred approach that addressed the vulnerabilities and the rights of all residents. Skills in climate resilience has been enhanced, particularly for island council members and community leaders.
- The project focused on increasing the availability of potable water for the communities living in Banaba Island by scaling up the existing infrastructure for water storage and supply on the island. The measures included "fit-for-purpose" infrastructure to house existing solar-powered desalination systems, additional storage for potable water and additional rainwater harvesting systems.

### How did this project scale up climate change adaptation in Kiribati?

- Scaling up previous measures that had elements of sustainability:** The project scaled up the measures from the KIRIWATSAN I and II project and the Kiribati Disaster Fund, 2019 -2020 which purchased and installed small-scale desalination plants for the selected outer islands. Scaling up was achieved by constructing a new, fit-for-purpose building and facility for the desalination units with access for the water truck; additionally small scale including solar pumps were provided to Beru Island.
- Link to national priorities:** The project was linked to Kiribati Development Plan 2016-2019 and Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management.
- Socio-economic benefits for communities and the most vulnerable groups:** The project applied a people-centred approach and prioritised the needs of the most vulnerable groups in Banaba Island, one of the most remote islands in Kiribati..
- Maintenance of the newly scaled up infrastructure:** Maintenance of the fit-for-purpose infrastructure is the responsibility of the Government of Kiribati and the Island Council in Banaba Island. A memorandum of understanding was signed between the Ministry of Infrastructure and Sustainable Energy (MISE) and the Island Council.

# CLIMATE CHANGE ADAPTATION IN KIRIBATI



Barge carrying plastic water storage tanks arriving in Banaba, Kiribati



Community groups and island leaders meeting in December 2021 to discuss measures to be conducted by the GCCA+ SUPA project

## Key Project Highlights

### Increasing access to potable water

- Conducting consultations with the Banaba Island Council, NGOs and community groups to inform the design of water security measures in Banaba Island.
- Designing and constructing fit-for-purpose infrastructure to house existing solar-powered desalination systems, provide additional storage for the desalinated water and expand community rainwater harvesting systems.
- Installing a rain gauge in Banaba Island so that data can be sent to the Kiribati Meteorological Services in real time and provide for improved drought management.
- Providing solar pumps to Beru Island to pipe the water from existing water storage sources directly to community buildings.
- Providing training to the communities in Banaba Island on the operations of the desalination systems and the maintenance of the new infrastructure. Community members acquired on-the-job training in maintenance as they were involved in the construction of the new infrastructure.

### Building community resilience

- Conducting a needs analysis and raising awareness about climate resilience for local area stakeholders in Beru Island.
- Involving community members in the assessment of existing rainwater storage measures in Beru Island.
- Adopting a people centred approach throughout the project's implementation, for example, accounting to the people of Beru the reasons for the change in the scope of the project.
- Integrating climate change and disaster risk into local area sustainable development plans.

### Activities meet the following SDGs:



### About the GCCA+ SUPA project

The Global Climate Change Alliance Plus Scaling up Pacific Adaptation (GCCA+ SUPA) project is about scaling up climate change adaptation measures in specific sectors supported by knowledge management and capacity building. The 4.5 -year project (2019- June 2023) is funded with €14.89 million from the European Union (EU) and implemented by the Pacific Community (SPC) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) and The University of the South Pacific (USP), in collaboration with the governments and peoples of Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga and Tuvalu.

The **Overall Objective** of the GCCA+ SUPA project is to enhance climate change adaptation and resilience within ten Pacific island countries.

The **Specific Objective** is to strengthen the implementation of sector-based, but integrated, climate change and disaster risk management strategies and plans.