United Nations Development Programme

Terminal Evaluation of UNDP/GEF Project: *Enhancing national food security in the context of global climate change* (LDCF-FSCC Kiribati Project)

(GEF Project ID: 5414; UNDP PIMS ID: 4570)

Terminal Evaluation Report

Mission Members:

Mr. Roland Wong, International Evaluator

Mr. Kiali Molu, National Evaluator

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ACKNOWLEDGEMENTS

The Evaluators wish to acknowledge with gratitude the time and effort expended by all project participants and stakeholders during the course of the LDCF-FSCC Kiribati Project Terminal Evaluation. In particular, we wish to thank the UNDP Fiji MCO, the Project Management Unit, personnel from the Ministry of Environment, Lands and Agriculture Development and the Ministry of Fisheries and Marine Resources Development, Project consultants and beneficiaries for their time and effort to recall details of their time during the Project. We sincerely hope that this report contributes to sustainable food sources and future for all villages in Kiribati.

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EXECUTIVE SUMMARY

E-1. This report summarizes the findings of the Terminal Evaluation Mission conducted during the 13 February-3 March 2023 period for the UNDP-GEF Project entitled: "*Enhancing national food security in the context of global climate change"* (hereby referred to as the, LDCF-FSCC Kiribati Project or

the LDCF-FSCC Project or the Project) that received a US$4,446,210 grant from the LDCF-FSCC of the Global Environmental Facility (GEF) in January 2015.

Project Description

E-2. Kiribati is a Small Island Developing State (SIDS) and one of the Least Developed Countries in the world. The country's international economy is reliant on ODA with 25% of GDP and US$ 15 million annually received from an Australian trust fund, and fees from EEZ tuna licenses (42% of GDP), remittances and copra (coconut) export. According to the 2019 Human Development Index, Kiribati ranks 134 from 188 evaluated nations with one of the world's lowest GDP, ranked 194 out of 197 globally. The nation's primary work force depends upon a combination of remittances, fishing and limited agriculture for both food security and limited income. Two commodities, bonefish and coconut, dominate the diets of rural Kiribati with very little hunger and nutrition levels generally considered quite good. Although figures do not exist, unemployment and under-employment are considered to be very high with the Government of Kiribati (GoK) employing 35% of the work force.

E-3. Kiribati is situated in the Central Pacific Ocean, comprising 33 islands arranged in three groups: The Line, Phoenix, and Gilbert islands. With only 771 km^2 of land with a population of 116,000, 21 islands are inhabited with a very large exclusive economic zone (EEZ) of 3.5 million km^2, roughly the size of Australia with Kiritimati (Christmas) island having by far the most land at 384 km^2. The remaining 32 islands average 17 km^2 or less of land. All of Kiribati's atolls are long, narrow and less than 4 meters above mean sea level with immense distances between islands and transportation extremely limited. An estimated 50% of the population lives within Tarawa, the capital city (with a population density of 3,500 persons per km^2) with Christmas Island having a population of 8,000 and remaining outer islands with populations between 2,500 and 4,000 persons.

E-4. Kiribati is a democratic nation with a President serving as the Head of State and Government that has adopted a number of germane laws and policies, including the Environmental Act of 1999. Almost all land is privately owned with ownership being generally hereditary and highly complex. Exceptions to this are a few atolls such as Christmas Island and the Phoenix Islands that are owned primarily by the government and where the government leases property to individuals and businesses.

E-5. Agriculture in Kiribati consists of a few crops such as pandanus, bwabwai, breadfruit, banana, and coconut that are grown organically. Coconuts are highly important for both subsistence and commerce where dried coconut is a major export subsidized by the government. The understory is often densely vegetated, very positive both in terms of food security, land degradation and climate resilience. The dense understory promotes groundwater retention and contributes greatly to the stabilization of coastal zones. Livestock is generally limited to a few household pigs.

E-6. However, agriculture is challenged and limited by the scarcity of land and poor soils. Droughts are prolonged and fresh water is lacking and limited to rain or brackish groundwater. The soil is high in alkaline coral, and very porous with generally no surface water. The limited groundwater is already threatened by increased salinity and pollution from human and domestic livestock waste. Climate change will cause substantial shifts in rainfall events and associated unreliability of water systems will further diminish the resilience of already weak agricultural systems. Although coconut is a relatively resilient crop, other produce upon which islanders depend on for added nutritional value, requires fresh water to produce and will be threatened.

E-7. Kiribati's marine biodiversity is significant. Coastal fisheries are the backbone of the nation's domestic livelihood and food security with subsistence fishing being the primary food source for nearly all of rural Kiribati. With bonefish being by far the most popular and important food source for Kiribati, nearly every islander relies upon marine wealth for their survival, highly entwining food security and ecological integrity. With each person consuming 115 kg fish annually amongst hundreds of marine species, biodiversity located close to any inhabited islands is generally not afforded substantial protection and tends to be highly exploited based upon open resource access regimes. Climate change compounded with the current unsustainable management practices may collapse the coastal zone fisheries. Alterations to water temperature, water levels, currents and marine food chains from climate change will almost certainly negatively impact the integrity of coastal zone ecosystems. Increased sea temperatures will cause stresses on coral reefs and fish species, hindering coral reef recovery from coral bleaching.

E-8. Though there is very little tourism to Kiribati, a "major" tourism location is Christmas Island that is easily accessible from Hawaii and Fiji as a destination for international sport fishing, primarily catch and release fly-fishing targeting bonefish and trevally. With specific numbers not available, recreational fisheries represent a significant and growing revenue stream for this island with government estimates that tourism provides an estimated 20% of the GDP.

E-9. The impacts of climate change will be particularly evident for coastal zones that already suffer from over-exploitation of fish stocks and pollution from nearby communities. The ecological integrity of key habitats (coral reefs, mangroves, sea-grasses and intertidal flats) will be diminished. Climate variability may increase probability and severity of storm surges and associated adverse effects such as erosion. Though local residents currently do not face food security challenges, residents will face severe future challenges if current trends are not reversed.

E-10. With Kiribati extremely vulnerable to climate change, the LDCF-FSCC Project was undertaken to strengthen resilience to significant potential negative impacts on the country's tenuous ecosystem integrity and associated food production system. With Kiribati being highly dependent upon coastal zone fisheries for both subsistence and commerce, increased population along with shifting economic demands and environmental degradation are all converging to deplete lagoon fisheries and impact agriculture. This situation, when combined with the impacts of climate change, poses a very high risk to both food security.

E-11. The LDCF-FSCC Project was designed to "build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change" through the following intended outcomes:

- Intended Outcome 1: Institutional capacity development to reduce vulnerability to climate change-induced food shortages; and
- Intended Outcome 2: Implementation of community adaptation measures to increase food security.

Project Summary Table

Project Title:	*Enhancing national food security in the context of global climate change (LDCF-FSCC Kiribati Project*			
GEF Project ID:	5414		*at endorsement (Million US$)*	*at terminal (Million US$) as of 28 February 2023*
UNDP Project ID:	4570	GEF financing:	4,446,210	4,446,210
Country:	Kiribati	IA/EA own:	140,000	140,000
Region:	PAC	Government:	7,000,000	581,080
Focal Area:	Multi-Focal Area	Other:	0.000	6,942,801
FA Objectives, (OP/SP):	**LDCF Objective 1** on reducing vulnerabilities **LDCF Outcome 1.2:** Reduced vulnerability to climate change in development sectors (e.g., fisheries). **LDCF Output 1.2.1:** Urgent action support to mitigate impacts of climate change and variability on vulnerable natural assets – particularly land and coastal fisheries	Total cofinancing:	7,140,000	7,663,881
Implementing Partner:	Ministry of Environment, Lands and Agriculture Development (MELAD)	Total Project Cost (GEF+Cofinance):	11,586,210	12,110,091
Other Partners involved:	Ministry of Fisheries and Marine Resources Development (MFMRD)	ProDoc Signature (date project began):		20 January 2016
		(Operational) Closing Date:	Proposed: 20 January 2021	Actual: 17 January 2023

Project Title:	*Enhancing national food security in the context of global climate change (LDCF-FSCC Kiribati Project*			
GEF Project ID:	5517		*at endorsement (Million US$)*	*at terminal (Million US$) as of 28 February 2023*
UNDP Project ID:	5179	GEF financing:	4.446	4.446
Country:	Kiribati	IA/EA own:	0.140	0.140
Region:	PAC	Government:	7.000	0.581
Focal Area:	Multi-Focal Area	Other:	0.000	6.942

FA Objectives, (OP/SP):	**LDCF Objective 1** on reducing vulnerabilities **LDCF Outcome 1.2:** Reduced vulnerability to climate change in development sectors (e.g., fisheries). **LDCF Output 1.2.1:** Urgent action support to mitigate impacts of climate change and variability on vulnerable natural assets – particularly land and coastal fisheries	Total cofinancing:	7.140	7.663
Implementing Partner:	Ministry of Environment, Lands and Agriculture Development (MELAD)	Total Project Cost:	11.586	12.109
Other Partners involved:	Ministry of Fisheries and Marine Resources Development (MFMRD)	ProDoc Signature (date project began):		20 January 2016
		(Operational) Closing Date:	Proposed: 20 January 2021	Actual: 17 January 2023

Project Results

E-12. The objective and intended outcomes of the LDCF-FSCC Project have been achieved according to Table A against intended outcomes in the LDCF-FSCC Strategic Results Framework (SRF). The Project is bringing positive impacts to the livelihood of 30,000 people in Maiana, Abemama and Nonouti in their capacities to be more resilient to climate impacts. Government personnel have played a key role in assisting with community transition to climate resilient activities (Paras 132-133). However, the only barriers that may prevent progress towards building adaptive capacity of vulnerable Kiribati communities in ensuring food security under conditions of climate change is:

- funding of capacity building of all stakeholders;
- sharing of climate resilient knowledge of the 3 pilot islands with other islands in Kiribati; and
- convincing a certain dissatisfied segment of the population that Project-backed MELAD and MFMRD activities are beneficial to them in terms of climate change resilience (Para 134).

Table A: Comparison of Intended Project Outcomes from Revised SRF of March 2017 to Actual Outcomes

Intended outcomes in PRF of 2015	Actual Outcomes as of February 2023 as observed by Terminal Evaluators

Project Objective: *To build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change*	**Actual achievement of Project objective**: The adaptive capacities of vulnerable Kiribati communities has been built through the strengthening the capacity of MELAD and MFMRD extension officers and personnel from Island Councils to provide training and knowledge transfers to vulnerable communities. Adaptive capacities have been built for these communities through knowledge transfers, and communities feel they have stable and increased levels of food security and resilience against climate
Intended outcomes in PRF of 2015	**Actual Outcomes as of February 2023 as observed by Terminal Evaluators**
	change, though the extent of this condition is not known on the pilot islands of Nonouti, Abemama, Maiana.
Outcome 1: *Institutional capacity development to reduce vulnerability to climate change-induced food shortages*	**Actual Outcome 1**: Institutional capacities were developed for personnel from MELAD, MFMRD, MIA and the Department of Culture and Museums to train communities on the pilot islands to reduce vulnerability to climate change-induced food shortages for 3 pilot islands.
Outcome 2: *Implementation of community adaptation measures to increase food security.*	**Actual Outcome 2:** Several community adaptation measures have been implemented to increase food security in all communities. However, the extent of increased food security Is amongst the populations of the 3 islands is not known.

Summary of Conclusions, Recommendations and Lessons Learned

E-13. Government personnel were generally very positive on the Project that enabled them to work closely with the pilot islands and deliver beneficial activities in fisheries, agriculture and tourism that was appreciated by communities. The impact of this Project has enabled some communities on pilot islands to become more self-reliant on existing natural resources to support their livelihoods against the effect of climate change. However, there was also a segment of the population that did not appreciate the works done by MELAD, MFMRD and the Project; the extent of this dissatisfaction is not known. Though GoK officials are able to share the knowledge and lessons from pilot islands with other outer islands, they could only do so if funding is available for work on other outer islands; otherwise, this knowledge would generally not be shared with other islands of Kiribati. Notwithstanding, the overall Project outcomes are rated as ***satisfactory*** based on Project proponents "powering" through all sort of difficulties in achieving the objective and outcomes (Paras 137-138).

E-14. *Recommendation 1 (to UNDP and the Government of Kiribati): Incorporate lessons learned from the LDCF-FSCC Project into the current UNDP-GEF LDCF2-WoI project (Para 139).*

E-15. *Recommendation 2 (to UNDP): For subsequent projects to LDCF-FSCC, step up safeguard-related requirements as per UNDP's latest guidance to ensure that sufficient resources are allocated to conduct this work (Para 140).*

E-16. *Recommendation 3 (to UNDP). Engage with the GoK to enforce co-financing commitments (Para 141).*

E-17. *Recommendation 4 (to UNDP and GoK): Formulate and implement a gender action plan that works with Island Councils and Assistant Social Welfare Officers (ASWOs) on all islands (from both the LDCF-FSCC and LDCF2-WoI Projects) to implement culturally acceptable ways of directly engaging women and youth in all aspects of project planning and implementation (Para 142).*

E-18. *Lesson #1: Recruitment of an International Technical Advisor starting the first year of the Project and carrying through part-time at critical junctures of the project, would have greatly facilitated better coordination for implementation (Para 143).*

E-19. *Lesson #2: There is limited support to improve timely delivery of tools and equipment that are procured for communities (Para 144).*

E-20. *Lesson #3: Ensure site selection and planting of mangroves are undertaken with appropriate efforts that contribute to community participation and to soft coastal protection measures (Para 145).*

E-21. *Lesson #4: The design of the LDCF-FSCC Project is applicable to the current UNDP-GEF LDCF2-WoI project (Para 146).*

Evaluation Ratings[1]

1. Monitoring and Evaluation	*Rating*	2. IA & EA Execution	*Rating*
M&E design at entry	4	Quality of Implementation Agency - UNDP	5
M&E Plan Implementation	4	Quality of Execution – Implementing Partner (MELAD)	5
Overall quality of M&E	4	Overall quality of Implementation / Execution	5
3. Assessment of Outcomes	**Rating**	**4. Sustainability[2]**	**Rating**
Relevance[3]	2	Financial resources	3
Effectiveness	4	Socio-political	4
Efficiency	4	Institutional framework and governance	4
Overall Project Outcome Rating	5	Environmental	4
		Overall likelihood of sustainability	3

[1] Evaluation rating indices (except sustainability – see Footnote 3, and relevance – see Footnote 4): 6=*Highly Satisfactory (HS)*: The project has no shortcomings in the achievement of its objectives; 5=*Satisfactory (S)*: The project has minor shortcomings in the achievement of its objectives; 4=*Moderately Satisfactory (MS)*: The project has moderate shortcomings in the achievement of its objectives; 3=*Moderately Unsatisfactory (MU):* The project has significant shortcomings in the achievement of its objectives; 2=*Unsatisfactory (U)* The project has major shortcomings in the achievement of its objectives; 1=*Highly Unsatisfactory (HU):* The project has severe shortcomings in the achievement of its objectives.

[2] Sustainability Dimension Indices: *4 = Likely (L):* negligible risks to sustainability; *3 = Moderately Likely (ML):* moderate risks to sustainability; *2 = Moderately Unlikely (MU):* significant risks to sustainability; and *1 = Unlikely (U):* severe risks to sustainability. *Overall rating is equivalent to the lowest sustainability ranking score of the 4 dimensions.* [3] Relevance is evaluated as follows: 2 = Relevant (R); 1 = Not relevant (NR)

ABBREVIATIONS

Acronym	Meaning
AMAT	Adaptation Monitoring and Assessment Tool
APR	Annual Project Review
AusAid	Australian Agency for International Development
CBO	Community-Based organization
CC	Climate Change
CITES	Convention on International Trade of Endangered Species
CO	Country Office
CPAP	Common Country Programme Action Plan
DRM	Disaster Risk Management
ECD	Environment & Conservation Division
EEZ	Exclusive Economic Zone
ERC	UNDP Evaluation Office Evaluation Resource Center
EU	European Union
FAD	Fish Attraction Device
FAO	United Nations Food and Agriculture Organization
FCFS	Fisheries Conservation Field Schools
GEF	Global Environment Facility
IFAD	International Fund for Agricultural Development
ISS	Implementation Support Services
JICA	Japanese International Cooperation Agency
KAP	Kiribati Adaptation Project
KDP	Kiribati Development Plan
KFL	Kiribati Fish Limited
KIRICAN	Kiribati Climate Action Network
KJIP	Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management
KNEG	Kiribati National Expert Group on Climate Change and Disaster Risk Management
LDC	Least Developed Country
LDCF-FSCC	Least Developed Country Fund
M&E	Monitoring and Evaluation
MCIC	Ministry for Commerce, Industry, and Cooperatives
MCTTD	Ministry of Communication, Transport and Tourism Development
MELAD	Ministry of Environment, Lands and Agriculture Development
MET	Meteorological
MFED	Ministry of Finance and Economic Development
MFMRD	Ministry of Fisheries and Marine Resources Development

MIA	Ministry of Internal Affairs
MoE	Ministry for Education
NAPA	National Adaptation Program of Action
NDRMP	National Disaster Risk Management Plan
NGO	Non-Governmental Organization
NZ	Government of New Zealand
OB	Office of Te Beretitenti
PIF	Project Identification Form
PIR	Project Implementation Reports
PM	Project Manager
PMU	Project Management Unit
PPG	Project Preparation Grant

Acronym	Meaning
RTA	Regional Technical Advisor
SID	Small Island Developing State
SLM	Sustainable Land Management
SOPAC	SPC Applied Geoscience and Technology Division
SPC	Secretariat of the Pacific Community
STA	Senior Technical Advisor
TML	Te Mautari Co. Ltd
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VCO	Training on Virgin Coconut Oil
WoI	Whole of Island Approach

1. INTRODUCTION

1. This report summarizes the findings of the Terminal Evaluation Mission conducted during the 13 February – 3 March 2023 period for the UNDP-supported GEF-financed Project entitled: "Enhancing national food security in the context of global climate change" (hereby referred to as the LDCF-FSCC Kiribati Project, LDCF-FSCC Project or the Project) that received a US$4.446 million grant from the Global Environmental Facility (GEF). The objective of the LDCF-FSCC Kiribati Project was "to build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change."

1.1 Purpose of the Evaluation

2. The overarching purpose of this Terminal Evaluation (TE) is *to independently assess the LDCF-FSCC Project to help UNDP improve performance and results of ongoing and future programmes and projects.* This TE has:

- an *accountability* objective to assess Project performance and results towards the achievement of Project objectives and outcomes specified in the Project Document and the success towards achieving the intended results. The evaluation serves an important accountability function, providing national stakeholders and partners in the FSM with an impartial assessment of the results of Project's intervention;
- a *learning* objective to ascertain how beneficiaries have benefited from Project interventions and improve actions. This would include what lessons could be learned that can both improve the sustainability of benefits from this Project, and aid in the overall enhancement of UNDP programming moving forward. While understanding progress towards results is essential for accountability purposes, it is important that the assessment of progress is then used as a foundation for learning on what has worked well (and why) and what has not worked so well (and why). To address this objective, the TE will assess the broader FSM-R2R strategy and processes, exploring elements such as Project scope, planning and coordination. Such an assessment is essential if the TE is to develop an understanding of the Project's overall performance;
- assess and document project results, and the contribution of these results towards achieving GEF strategic objectives aimed at global environmental benefits;
- gauge the extent of project convergence with other priorities within the UNDP country and regional programmes, including poverty alleviation or SDGs such as sustainable communities, decent job and economic growth; strengthening resilience to the impacts of climate change, reducing disaster risk and vulnerability, as well as cross-cutting issues such gender equality, empowering women and supporting human rights.

1.2 Scope

3. The scope of the TE for the LDCF-FSCC Project was to include all activities funded by GEF and activities from parallel co-financing. The Terms of Reference (ToRs) for the TE are contained in Appendix A. Key issues addressed on this TE include:

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- to what extent has institutional capacity been built for disseminating actions to reduce vulnerability of Kiribati communities to climate change induced food shortages;
  capacities of extension officers to manage the coastal zone fishery to bolster fish stocks and significantly improve food security; and
- capacities built in villages for managing land resources, mangrove habitats and traditional food crops.

4. Outputs from this TE will provide an outlook and guidance in charting future directions on sustaining current efforts by UNDP and the Government of Kiribati on strengthening the programme for coastal zone fishery conservation and land management plans.

1.3 Approach and Methodology

5. The evaluation approach adopted was non-experimental evaluation[1] where the questions needed to be answered concerning national programs, guidelines, policy and regulations for the fishery conservation and land management, and the benefits and impacts to Project beneficiaries. Project implementers were questioned on the change contributions on systems to conserve and manage fisheries, mangroves and land. Beneficiary stakeholders were questioned in a participatory approach on their experiences managing fishery stocks and lands.

6. The methodologies adopted for this evidence-based evaluation includes a combination of contribution analysis, and the culturally responsive evaluation methods of outcome evidencing[2]. Techniques of the TE methodology included:

- review of all relevant sources of Project information including documents prepared during the preparation phase. This includes the PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure (SESP), PIRs, meeting minutes of Project Board or multipartite meetings, MTR, Project budget revisions, lesson learned reports, national strategic and legal documents, and pertinent background information. A focus was provided on the results of the performance of Project activities and co-financed activities where measurement of the level of achievement of the indicators can be for the Project objective and outcomes;
- review of baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the Request for CEO Endorsement (RCE) document and midterm stages and the terminal Core Indicators/Tracking Tools that were completed;
- a combination of in-depth interviews and focused groups discussions to provide qualitative and quantitative information that were semi-structured (see Para 11). This ensured a participatory and consultative approach for close stakeholder engagement with:

[1] From the UNEG Compendium of Evaluation Methods: http://www.unevaluation.org/document/detail/2939
[2] Ibid 4

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  - key PMU personnel including the current Project Managers, technical advisors, and Project developers;
  - government counterparts including the GEF Operational Focal Point, and Implementing Partners; o the UNDP Country Office and Regional Technical Advisor; and
  - direct beneficiaries whose food security from land and sea had improved;
- data and information review and analysis of data sources (i.e. interviews, focused group discussions and documents with relevant Project information). Triangulation of the various data sources ensured optimum validity and quality of the information and data received (see Paras **Error! Reference source not found.**-**Error! Reference source not found.**);

review of all information and data through a gender and human rights lens. This translated into the use of gender-responsive methodologies and tools to ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs were incorporated into the TE process (see Para 7). Detailed analysis on disaggregated data was undertaken as part of TE from which findings are consolidated to make recommendations and identify lessons learned for enhanced gender responsive and rights-based approach of the Project.

The Evaluation Mission for this TE was comprised of one lead International Evaluator and one National Evaluator. The approach, methodology and techniques of this TE were chosen given the limitations brought on by changes in the evaluation approach which resulted in the inability of the International Evaluator to travel to Kiribati and conduct field visits and face-to-face meetings (see Paras **Error! Reference source not found.**-**Error! Reference source not found.**). A detailed listing of the Zoom meetings is shown in Appendix B. A full list of people interviewed, and documents reviewed are given in Appendix C and Appendix D respectively.

7. The gender-responsiveness of the methodology was implemented by obtaining information from the field and questioning interviewees about the effectiveness of gender, youth and vulnerable group activities. Interview questions to the various stakeholders is provided in Appendix H.

8. The Project was evaluated for overall results in the context of:

- *Relevance* - the extent to which the outcome is suited to local and national development priorities and organizational policies, including changes over time;
- *Effectiveness* - the extent to which an objective was achieved or how likely it is to be achieved;
- *Efficiency* - extent to which results were delivered with the least costly resources possible; and
- *Sustainability* - the likely ability of an intervention to continue to deliver benefits for an extended period after completion;
- *Cross-cutting issues and gender equality and women's empowerment* - how the results contributed to gender equality and women's empowerment; and
- *Impact* – indications that the results have contributed to or enabled progress toward reduced environmental stress and improved ecological status.

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The conclusions are drawn from the information from relevance, effectiveness, efficiency, sustainability, cross-cutting and impact ratings.

9. All possible efforts have been made to minimize the limitations of this independent Terminal Evaluation. With the COVID-19 pandemic limiting international travel, mission and field visits to Kiribati could not be made by the International Evaluator. Instead, this TE was reliant on the work of the National Evaluator who was responsible for:

- analysis of relevant information, including project documents: project preparation document, PIF, UNDP start-up plan, social and environmental selection procedure of the SESP, project reports, legal and institutional framework of projects, logical framework, GEF core project evaluation indicators, UNDP guidelines and other relevant documents;
- maintains communication with the PMU to obtain relevant information related to the implementation of the Project and lessons learned and links with other UNDP-funded projects; interviews with the management of the Ministry of Environment, Lands and Agriculture Development (MELAD);
- field visits to sites where GEF investments for data collection (the collection of local information from stakeholders, submission of a questionnaire to beneficiaries, and interviews with the local administration, steering committee members and other stakeholders);
- photographs resulting from visits by the National Evaluator to various sites where GEF investments were made;
- report writing based on information and data collected;
- submission of the report document to the International Evaluator.

1.4 Structure of the Evaluation Report

10. This TE report has been prepared as follows:

- An overview of Project activities has been provided from the commencement of operations in January 2016 to the present activities of the LDCF-FSCC Project;
- A review of all relevant sources of information have been provided including documents prepared during the PPG phase (i.e. PIF, SESP), the Project Document (ProDoc), Project progress reports, and any other materials that the team considers useful for this evidence-based evaluation;
- Information from stakeholders who have Project responsibilities (as listed in Para 12) was collected from a participatory and consultative approach to ensure close engagement with stakeholders. With the restrictions of the International Evaluator to travel to site, the International Evaluator had to resort to on-line virtual interviews with the Project's stakeholders;
- An assessment of results was prepared based on Project objectives and outcomes through relevance, effectiveness and efficiency criteria;

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- An assessment of progress and sustainability of Project outcomes was conducted; • An assessment of monitoring and evaluation systems of the Project was conducted; and
- Conclusions, recommendations and lessons learned were provided.

11. This TE report has been designed to meet GEF's "Guidelines for Conducting Terminal Evaluations of UNDP-Supported, GEF Financed Projects" of 2020[3] as well as UNDP guidelines "Evaluation during COVID-19" (updated to June 2021)[7].

1.5 Data Collection and Analysis

12. A desk review was carried out of the key documents underpinning the Project's scope of work. This includes a review of the CEO document, PIRs, the MTR as well as any other reports that were provided by the PMU and the UNDP Fiji Country Office. Following the desk review, the International and National Evaluators augmented the documented evidence through an agreed set of interviews including:

[3] Available at: http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEFfinancedProjects.pdf [7] Available at: http://web.undp.org/evaluation/guideline/documents/covid19/update/June2021/UNDP%20DE%20Guidance%20Planning%20and%20Implementation%20during%20COVID19%203%20June%202021.pdf

- interview questions that account for gender; and
- interviews with key partners and stakeholders in a gender disaggregated manner.

13. Different key groups involved in the Project were consulted including:

- PMU. This involved interviews with UNDP and PMU. The purpose of contact with UNDP and the PMU were issues of implementation and execution. Persons for interviews were conducted via Zoom;
- National executing partners. This involved Zoom discussions with government entities who were recipients of capacity building activities;
- Local executing partners. This involved Zoom or phone discussions with state, traditional or municipal government entities who were provided with technical assistance;
- Beneficiaries. This involved Zoom discussions with the general public who were to benefit from the Project's efforts for sustainable land management (rehabilitation and tree planting, improvements of water sources, piggeries, integrated land management plans) and coastal fisheries management (bonefish conservation, coastal zone fisheries regulations, protected fish recovery zones, management of mangrove habitat, fishery conservation by-laws). Emphasis was placed on women's groups, youth groups, and people living with disabilities (of which the 2020 Kiribati census claims to be 11% of the population).

14. Data and information collected were then analyzed and fed into the TE, primarily coming from:

- project documentation that includes all reports related to the LDCF-FSCC Kiribati Project;
- an analysis of Zoom interviews with selected stakeholders including the PMU, to ensure the information from interviews and reviewed documents are triangulated, providing assurances that the conclusions of the evaluation are robust.

A full list of persons interviewed is provided in Appendix B.

1.6 Ethics

15. This Terminal Evaluation was undertaken as an independent, impartial and rigorous process, with personal and professional integrity and is conducted in accordance with principles outlined in the UNEG Ethical Guidelines for Evaluations, and UNDP-GEF M&E policies, specifically the August 2020 UNDP "Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects".

1.7 Limitations

16. There are limitations to this TE process, mainly due to the COVID-19 pandemic and the inability of the International Evaluator to travel to Kiribati to conduct face-to-face meetings. This task was instead undertaken by the National Evaluator. The information collected by the National Evaluator was then passed onto the International Evaluator. This resulted in the filling of information gaps which provided the TE with an improved knowledge base for assessing LDCF-FSCC performance on

the basis of relevance, effectiveness, efficiency and sustainability. Notwithstanding, limitations to this TE include:

- the National Evaluator only being able to interview a certain number of stakeholders;
- the National Evaluator only being able to visit a certain number of investment projects under Outcome 2 to draw conclusions on that aspect of the work;
- lack of data and difficulties in measuring food security making the assessment difficult, in part due to the unavailability of health officials and COVID-19 restrictions (Para 83, 1st bullet); and
- difficulties experienced in accessing some sites due to logistical issues and security concerns.

17. Actual visits to the offices of the stakeholders by the International Evaluator are usually an opportunity for the stakeholders and the Project Management Unit (PMU) to make a 2-3 hour presentation followed by question-and-answer period. This has many intangible benefits including the collection of information not documented. With the International Evaluator not being able to take the opportunity to get to know the stakeholders better, he has limited exposure to the stakeholder teams, and as such, the Terminal Evaluation to a large extent is dependent on the documentation from progress reports, PIRs and the National Evaluator. This dependence on documentation is also limiting the Terminal Evaluation in terms of findings.

18. To minimize these limitations, the Evaluation was organized as follows:

- After an office review of all LDCF-FSCC documents, the TE team decided on the best course of action for collecting data starting with interviews with personnel from the Project, Government of Kiribati, UNDP, and MELAD on project progress, followed by their recommendations on sites to be visited and personnel from communes to interviewed;
- Travel to the various communities by the National Evaluator to view physical progress of climate change adaptation investments;
- National Evaluator prepared field visit reports and then had detailed discussions with International Evaluator on physical progress in the field to entry into the TE; and
- Draft TE report is circulated with all stakeholders for feedback.

Information from these site visits and meetings were then used to reconcile the outcomes of various grant projects with the SRF in the ProDoc. The TE team has made every effort to understand the Project and present a fair and a well-considered assessment of the Project.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1 Project Start and Duration

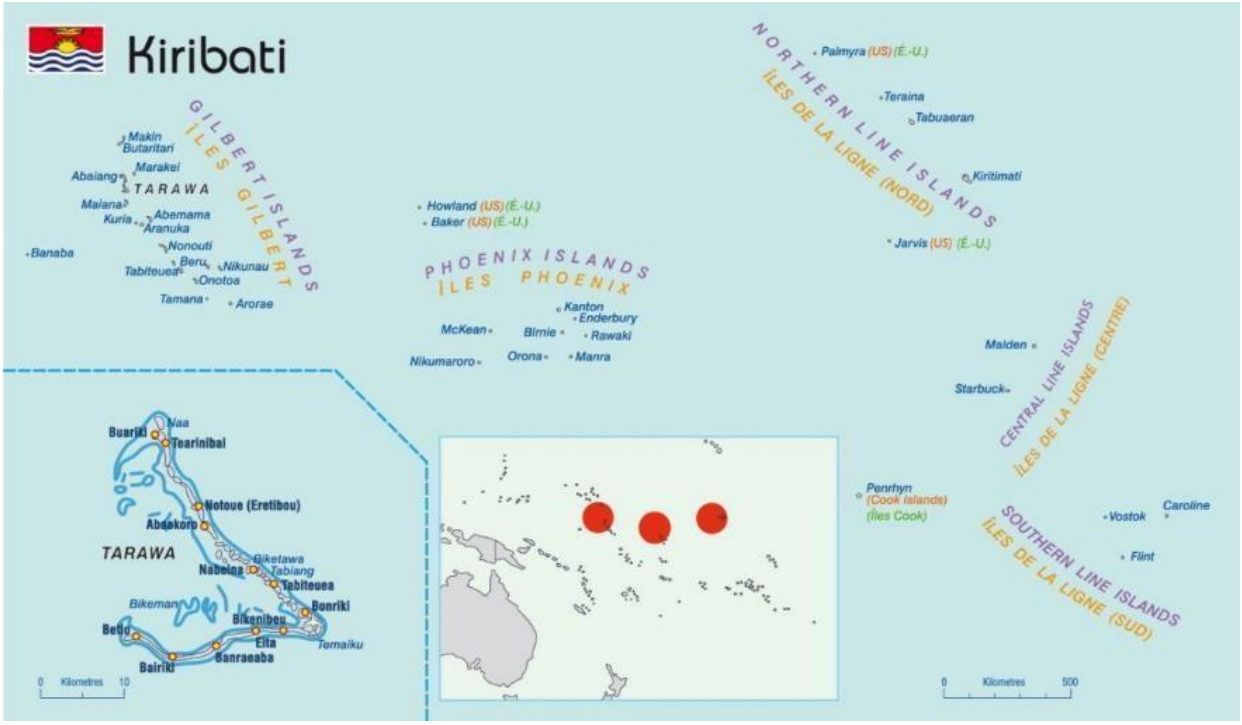
19. The PIF for LCDF-FSCC was approved by GEF Council on 12 April 2013, with GoK signing the ProDoc on 20 January 2016, marking the official start date of the LDCF-FSCC Kiribati Project. The Project duration for the LDCF-FSCC Project was originally planned for 5 years ending in 16 January 2021. The LDCF-FSCC Project was extended to terminate on 17 January 2023.

2.2 Development Context

20. Kiribati is situated in the Central Pacific Ocean, comprising 33 islands arranged in three groups: The Line, Phoenix, and Gilbert islands. With only 771 km2 of land, 21 islands are inhabited with a very large exclusive economic zone (EEZ). of 3.5 million km2, roughly the size of Australia with Kiritimati (Christmas) island having by far the most land at 384 km2. The remaining 32 islands average 17 km2 or less of land. All of Kiribati's atolls are long, narrow and less than 4 meters above mean sea level. Distance between islands is immense and transportation is extremely limited.

21. The population of Kiribati is 119,000 [8], with 50% living within Tarawa, the capital city with a population density of 3,500 persons per km^2. Christmas Island has approximately 8,000 persons with the remaining outer islands have populations of between 2,500 and 4,000 persons.

Figure 1: Map of Kiribati[9]



[8] https://nso.gov.ki/

[9] Kiribati Joint Implementation Plan for CCA&DRM (KJIP) 2014-2023

22. Kiribati is a Small Island Developing State (SIDS) and one of the Least Developed Countries in the world. The country's international economy is reliant on ODA (25% of GDP with nearly US$ 15 million annually received from an Australian trust fund), fees from EEZ tuna licenses, remittances and copra (coconut) export. According to the 2019 Human Development Index, Kiribati ranks 134 from 188

evaluated nations with one of the world's lowest GDP, ranked 194 out of 197 globally. The per capita GDP is slightly better, estimated at US$ 1,600 as of 2021 or 156th globally. Import of all commodities, including food, is exorbitant. The nation's primary work force depends upon a combination of remittances, fishing and limited agriculture for both food security and limited income. Two commodities, bonefish (Albula glossodonta) and coconut, dominate the diets of rural Kiribati with very little hunger in Kiribati and nutrition levels generally considered quite good. Although figures do not exist, unemployment and/or under-employment are considered to be very high with the government employing 35% of the work force. Tuna fisheries provide roughly 42% of the GDP[4].

23. Kiribati is a democratic nation with the President serving as the Head of State and Government, adopting a number of germane laws and policies, including the Environmental Act of 1999. Almost all land is privately owned with ownership being generally hereditary and highly complex. Exceptions to this are a few atolls such as Christmas Island and the Phoenix Islands that are owned primarily by the government and where the government leases property to individuals and businesses.

24. Agriculture in Kiribati consists of a few crops such as pandanus, bwabwai, breadfruit, banana, and coconut that are grown organically. Coconuts are highly important for both subsistence and commerce where copra (dried coconut) is a major export subsidized by the government. The understory is often densely vegetated, very positive both in terms of food security, land degradation and climate resilience. The dense understory promotes groundwater retention and contributes greatly to the stabilization of coastal zones. Livestock is generally limited to a few household pigs.

25. Agriculture, however, is challenged and limited by a scarcity of land and poor soils. Droughts are prolonged and fresh water is lacking and limited to rain or groundwater which is often brackish. Drought induced salinization of ground water in the mid-1950's and 1960's forced the permanent resettling of all inhabitants from the Phoenix Islands. The soil is high in alkaline coral and very porous with generally no surface water. Most of the islands lie within the equatorial dry belt with these islands enduring prolonged periods of drought. Limited groundwater is already threatened by increased salinity and pollution from human and domestic livestock waste. Substantial shifts in rainfall events and associated unreliability of water systems will further diminish the resilience of already weak agricultural systems. Although coconut is a relatively resilient crop, other produce upon which islanders depend on for added nutritional value, requires fresh water to produce and will be threatened. The GoK declared a national state of disaster due to drought in 2022[5].

26. Kiribati's marine biodiversity is significant. The atolls and reefs spread throughout the EEZ are critical to the region's marine fisheries resources. Coastal fisheries are the backbone of the nation's domestic livelihood and food security with subsistence fishing being the primary food source for nearly all of Kiribati. With bonefish being by far the most important food source for Kiribati, nearly every islander relies upon marine wealth for their survival, highly entwinning food security and ecological integrity. With each person consuming 115 kg fish annually amongst hundreds of marine

[4] https://nso.gov.ki/
[5] https://reliefweb.int/disaster/dr-2002-000244-kir

species, biodiversity located close to any inhabited islands is generally not afforded substantial protection and tends to be highly exploited based upon open resource access regimes.

27. Though there is very little tourism to Kiribati, a "major" tourism location is Christmas Island that is easily accessible from Hawaii and Fiji as a destination for international sport fishing, primarily catch and release fly-fishing targeting bonefish and trevally. With specific numbers not available, recreational fisheries represent a significant and growing revenue stream for this island with government estimates that tourism provides 20% of the GDP.

28. As a Least Developed Country (LDC), Kiribati has been eligible for the Least Developed Countries Fund (LDCF) managed by GEF. Kiribati is a small country with a constrained government budget and substantial per-capita donor investment. The efforts of many donors and government partners are focused upon addressing very similar challenges and approaches. Most are concerned with the intersection of food security, climate change adaptation, and ecosystem resilience. These concerns match government priorities. This includes project funding through GEF, LDCF-FSCC and similar mechanisms as well as a broader base of donor investments. The expense and logistical challenges associated with working in Kiribati justify the existence of many such activities. However, alignment is challenging. The project will rely upon a number of existing and innovated approaches and institutions to make certain that all project investment is highly effective. The country's small size is in some ways an advantage to making certain duplication is avoided and synergies generated. The LDCF concept was approved in 2013, with the LDCF-FSCC Project approved by GEF in 2015 and by the Government of Kiribati in January 2016 for US$4.446 million. The Ministry of Environment, Lands and Agriculture Development (MELAD) was the implementing agency for the LDCF-FSSC Kiribati Project with the United Nations Development Programme (UNDP) undertaking quality assurance.

2.3 Problems that the LDCF-FSCC Kiribati Project Sought to Address

29. Kiribati has three options available to secure food: buy, grow, or gather. Buying food is challenging as the islands of Kiribati are extremely isolated and resource poor, and imported food is extremely expensive. Growing food is very difficult on most islands due to poor soils and scarce water. As a result, gathering food from the coastal zones has traditionally been relatively easy and free in providing for their food security.

30. The same coastal zone fisheries are also being exploited increasingly for commercial markets driven by an urbanized Tarawa. Nearly all islands collect and dry fish for transport to Tarawa. Another driver of commercial exploitation is the requirement to generate cash for school fees. Many islanders must pay hundreds of dollars every year to send their children to school. Although remittances, small businesses, and government jobs supply some cash to some families, many rural families rely upon coastal zone fisheries to generate cash required to educate their children. This situation is not feasible over the long-term. This "open access" management approach generates and exposes Kiribati to the triple threats of overexploitation, habitat degradation and climate change.

Threat #1: Overexploitation

31. Very little data exists regarding the exploitation of Kiribati's coastal fish stocks. Strong anecdotal evidence from local community members, leaders and government representatives, and fisheries experts all state that once ample coastal fish stocks are diminishing. The baseline for the Project in 2016 included an IUCN red list roughly estimated overharvesting has resulted in Kiribati bonefish stocks reduced by at least 30% over the past 15 years with the numbers and size of these fish dropping. There is a very high risk that continued over-exploitation of fisheries resources will lead to localized extinction of many species leaving local communities to search for other food sources for subsistence and economic well-being.

32. The 2013-2025 Kiribati National Fisheries Policy notes that lagoon and coastal fisheries currently provide sufficient protein for most I-Kiribati. The policy, however, recognizes the challenges to longterm food security that are based upon fisheries health and from population pressures compounded with climate change. The policy notes that the response to increasing lagoon fisheries pressure should be the management of overfishing that will maintain sustainable levels of harvesting.

33. All outer islands supply fish to Tarawa either through regular markets. This is primarily for bonefish, snapper, shellfish, eel, and other species. Most of the fish is dried using traditional methods and transported either by plane or by boat. Stakeholders note that it is not uncommon for families to fish 2-3 times per week and to harvest on average 300 fish each time. The market pressures to supply Tarawa and provide revenue for local families is pushing fishery resources to the brink.

Threat #2: Habitat Degradation

34. While nearly all coasts and islands benefit from substantial ground cover, removal of mangroves and development coastal zone infrastructure cause localized habitat degradation. There are also issues related to on-shore and near-shore waste disposal; with growing population numbers and an increased harvest of fish, the lagoons are showing signs of pollution from sewage (open defecation), garbage, domestic animal (primarily pig) waste, and cleaned fish. The absorptive capacity and dilution rates of the lagoon systems seem to be exceeded as evidenced by both eutrophication and algae blooms. This causes a further imbalance to the system and compounds an already difficult situation. Diminished fish stocks may both result from and intensify the impacts of pollution.

Threat #3: Climate Change

35. Climate change is associated with droughts, sea level and temperature rises, increased frequency and magnitude of storm surges and king tides, exacerbating the issues of overexploitation and habitat degradation. This will lead to increasingly adverse impacts upon human health, ecosystem integrity, and ultimately food security. Climate change is already impacting the ecological integrity upon which Kiribati's food security depends. This includes rising sea levels and temperatures that are

and will likely continue to adversely impact coral reefs, fisheries and coastal plant species[6]. This will compound the existing issues related to fresh water and coastal lagoon pollution. With the quality of most habitats already degraded or facing imminent threats, there is little resilience within the system to withstand additional negative impacts of climate change.

36. Kiribati's agricultural sector is generally weak due to factors such as poor soil fertility and limited fresh water. The soil is high in alkaline coral and very porous with no surface water sources; the only water supply is rain or ground water. Most of the islands lie within the equatorial dry belt with prolonged periods of drought. With monitoring being limited, the limited groundwater is already threatened by rising seas levels, increasing salinity and pollution from human and domestic livestock waste. As the impacts of climate change continue to advance, rainfall patterns will likely become increasingly erratic. This greatly increases risk exposure to island inhabitants, creating challenges in terms of planting regimes, increasing risk of crop failure, and further diminishing the resilience of already weak agricultural systems. Although coconut is a relatively resilient crop, other produce for islander added nutritional value requires fresh water to produce and will be threatened.

37. Climate change compounded with current unsustainable management practices may collapse coastal zone fisheries. Climate change alterations to water temperature, water levels, currents and marine food chains will almost certainly negatively impact the integrity of coastal zone ecosystems. Increased sea temperatures will cause stresses on coral reefs and fish species and will hinder coral reef recovery in cases of seasonal or annual variations in temperatures causing coral bleaching. The impacts of climate change will be particularly evident for coastal zones that already suffer from overexploitation of fish stocks and pollution from nearby communities. The ecological integrity of key habitats (coral reefs, mangroves, sea-grasses and intertidal flats) will be diminished.

2.4 Objective of the LDCF-FSCC Kiribati Project

38. The Project objective as taken from the ProDoc and its SRF from 2015 was to "*build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change*". The revised LDCF-FSCC Kiribati SRF from June 2017 is contained in Appendix E.

2.5 Theory of Change

39. No theory of change was done for this Project.

[6] This will include plant species on coastal habitats such as coconut tree for instance that are highly affected by coastal erosion caused by rising sea levels.

2.6 Expected Results

40. To achieve the specific objective of "*building the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change*", the LDCF-FSCC Kiribati Project was designed for the removal of barriers (listed in Para 29) with the following expected **Project outcomes**:

- *Outcome 1*: Institutional capacity development to reduce vulnerability to climate change induced food shortages;
- *Outcome 2*: Implementation of community adaptation measures to increase food security.

2.7 Total resources required by the Project

41. Total resources required by the LDCF-FSCC Project are shown on Table 1.

Table 1: Toal Resources Required by LDCF-FSCC Project

Project Fund Sources		
Total Budget: $4,446,210 Project Period: January 2016-December 2020		
Source	**Amount ($)**	**Main Applications**
GEF	4,446,210	Technical assistance, investments
UNDP grant	140,000	Technical assistance
a. Local Government in-kind	7,000,000	Technical assistance, awareness raising
b. Other multilateral agency	n/a	

2.8 Main Stakeholders

42. A partial list of intended primary stakeholders of the LDCF-FSCC Project as of 2016 are listed on Table 2. The complete listing is provided on pgs 21-26 of the ProDoc. An analysis of the roles of some of the involved stakeholders on the LDCF-FSCC Kiribati Project is provided in Section 3.2.2 (Paras 54 to 56).

Table 2: Involvement of stakeholders during the preparatory phase

Stakeholders	Specific contribution
Ministry of Environment, Lands and Agriculture Development (MELAD)	MELAD would be responsible for National Environment, Lands and Agriculture and through the Environment and Conservation Division (ECD), the Agriculture and Livestock Division (ALD) and the Land Management Division (LMD). ECD is the political Focal Point of the GEF through the Secretary and the Director of ECD is the Operational Focal Point. Through the Lands, Agriculture and the Environment Conservation Divisions, the Ministry has direct interests in food security, environment conservation for both marine and land management and agriculture resources and to ensure that development activities are pursued sustainably for the environment and for traditional food production systems.

Ministry of Fisheries and Marine Resources Development (MFMRD)	MFMRD is responsible for National Marine and Fisheries policies development, implementation and monitoring and evaluation. Through the Fisheries Act 2010, it is tasked to promote sustainable management of fisheries and the development and use of fisheries resources for the benefit of Kiribati including the recovery of fees that reflect the value of resource and, to protect the fish stocks and marine environment of Kiribati. Based on this Act, the Kiribati National Fisheries Policy 2013-2025 has been developed with aims that portray short to medium and long-term strategic objectives that will enhance responsible fisheries with emphasis on the need to support, improve and sustain the peoples' livelihood, food security and sustainable economic growth.
Office of Te Beretitenti	The Office of Te Beretitenti (OB) plays a key role in the climate change (CC) and Disaster Risk Management (DRM) hosting the KJIP Secretariat, KAP Committee Chairmanship, Disaster Fund, and other CC and DRM projects including the CC and DRM Governance project for Information Management and Sharing and the Whole Of Island approach. It plays key role also in ensuring relative Government (Cabinet) decisions are adopted for implementation. The role it plays is more on coordination of CC and DRM policies and monitoring. The Kiribati Meteorological Services are also under OB and have a very important role in CC for early warnings of weather, data for long term DRM planning, food security information.
Ministry of Internal Affairs (MIA)	The MIA is responsible for Local Government and outer island development and manages the Local Government Act that governs the Island Councils functions and operations. MIA provides link between Government and other organizations with the Island Councils through its Local Government Division and its staff including the Island Council Clerk, Island Project Officer and the Treasurer serving the Island Councils.
Ministry of Finance and Economic Development	The Ministry of Finance and Economic Development is responsible for national planning and budgeting. Funds for the project will be
Stakeholders	**Specific contribution**
	disbursed to PMU through the Kiribati Fiduciary Steering Unit established within the Ministry to handle large project funds and following Government Financial Regulations and Procedures.

Ministry of Tourism, Commerce, Industry and Cooperatives (MTCIC)	The Ministry is responsible for tourism, private sector and industry development, international and domestic trade, copra and cooperatives. Through the Foreign Investment Act, it is responsible for foreign investment. It plays an important role in managing Government Copra Funds providing and replenishing copra funds that Island Council Treasurers manage in the Outer Islands. The Ministry through its Cooperative Division oversees Cooperatives that are registered offering auditing and training supports. Through the Price Control Policy, it regulates basic commodities and goods prices such as flour, sugar, rice, fuel especially diesel, kerosene, and benzene.
Island Councils	Island Councils are responsible for the development, administration and management of their island affairs assisted by Government through the MIA. Their involvement is important to ensure facilitation role for any undertaking or project. The Local Government Act governs functions and operations. Island Councils have individual by-laws that largely guide their business and operation. They oversee, lay out rules and procedures for how domestic affairs, business operators and licensing, development are managed. Island councils have discretionary power through issuing licenses for business development and setting prices and charges such as bus fares (KILGA 2013), fish sales prices in the local market.

3. FINDINGS

3.1 Project Design and Formulation

43. The Kiribati LDCF-FSCC Project was developed through an inclusive and participatory process, involving the participation of a wide range of stakeholders. During the PPG phase, consultations were undertaken with stakeholders responsible for germane initiatives. During implementation, the Project continued to work with these programs to strategically align activities, monitor and report results, and make certain that best-practices and lesson-learned are synergized, replicated, and upscaled. Examples of aligned efforts are covered in Para 52.

44. Following working sessions with UNDP and a team consultant, a common understanding and consensus was reached on how the LDCF-FSCC Kiribati Project design was to build the capacity of the local communities, and the national government to holistically address their risk issues to effectively respond to climate change risks, and to plan and budget for these risks and climate resilient activities. This translated into actions by LDCF-FSCC to:

- address the first identified barrier: “limited institutional and individual capacity to plan and implement actions to reduce the impacts of climate change-induced impacts on food and nutrition security.” The Project was to support national institutions to build capacities of national agencies to strategically plan, monitor and regulate natural resource use that will create the

safeguards necessary to ensure food security and ecosystem integrity to promote climate change resilience;

- assist the GoK to substantially enhance the capacities of extension officers to support their ability for island-level resource management improvements, and become a communication conduit between island and national level decision-makers;
- support the establishment of national-level monitoring to assess the nexus of food security, ecosystem-integrity and climate change adaptation. This translated into enhanced national institutions that have improved abilities to forecast climate change trends and impacts. A climate change adaptation early warning system was to be linked to a more complete understanding of meteorological events, natural resource use, and ecosystem conditions;
- address the barrier: "limited support to community-based adaptation measures to increase human, natural and productive livelihood capital in affected communities". The Project was to create an enabling environment at a national level to support a shift from open access to more community-based coastal ecosystem management framework. This was designed to increase the resilience of coral reefs, sea grass beds and mangroves for increased food production and to strengthen additional ecosystem services;
- assist 3 outer island pilot sites, Abemama, Nonouti, and Maiana, as shown on Figure 2, to develop models for improved management. Communities were to have the tools required to track and monitor resource use with support of government extension officers, island councils and other decision-makers. These tools should result in substantially improved capacities for island stakeholders to improve climate change resilience and reduce any emerging challenges to food security and ecological integrity.

45. Hence, a combination of an improved regulatory environment, strengthened institutional planning and policy frameworks, and generation of data was expected to support informed decision-making ensuring food security within the context of global climate change with practical on-the-ground community implementation in the pilot islands. "Open-access" management approaches are serious hindrances to ecosystem integrity and food security with island councils not having the experience to shift from open-access to more sustainable community-based management. Being a small Pacific Island country that is extremely vulnerable to climate impacts, the Project design clearly addresses a key national priority as well as conforming to global needs.

Figure 2: Pilot Islands of the LDCF-FSCC Kiribati Project


Bonriki
Tarawa Island, Kiribati
Bairiki
Abemama
Nonouti
76 km
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Google earth
0°16'43.72" N 174°06'12.27" E elev -3823 m eye alt 318.11 km

Maiana

46. However, there was a lack of integration between marine and terrestrial management efforts that would have helped link the achievement of food security and ecosystem integrity rather than an actual fragmented Project design approach. According to the ProDoc, Island Councils have not had an opportunity to build their capacity and knowledge to adopt and implement by-laws (regulations) to govern integrated resource management using best international practices. In addition, there are no working examples of comprehensive by-laws designed to address food security threats. Islandbased strategic planning represented an opportunity to perform this integration with a comanagement approach to integrate community efforts towards food security and ecosystem integrity.

3.1.1 Analysis of Project Planning Matrix

47. Well-prepared Strategic Results Frameworks (SRFs) are important tools for all GEF projects including the LDCF-FSCC Kiribati Project, for preparing work plans to achieve the intended objective and outcomes, as well as for the effective monitoring and managing of LDCF-FSCC Project activities. The LDCF-FSCC SRF in the ProDoc was revised in June 2017, generally meeting SMART criteria [7] for preparing SRFs to measure food security.

48. However, there is an issue with the quality of Indicator 1: "Percentage of households and communities that have stable or increased food security in the face of climate change". An indicator such as "number of households with diversified climate resilient crop production systems that increase all season availability of food" would have been more useful in terms of measuring food security. This would have required baseline work on the 3 Project islands on sub-indicators (such as sources of incomes for households from fish, crops and other sources; frequency of fish consumption at the household level; and annual per capita consumption of fin fish and invertebrates). The issue is that a qualitative survey is called for by the actual Indicator 1 that only provides *an indication* of the percentage of households and communities that have stable or increased food security; this is merely a perception rather than facts based on a scientific survey. A more detailed, substantive and quantitative baseline study and survey was conducted by the Ministry of Health and Medical Services and a local consultant as detailed in Paras **Error! Reference source not found.** and 85.

49. As such, the quality of the LDCF-FSCC SRF can be rated as **moderately satisfactory** mainly for reasons pertaining to the quality of the SRF for monitoring purposes.

3.1.2 Risks and Assumptions

50. No risks were provided in the LDCF-FSCC SRF of the ProDoc or the revised version of the SRF in June 2017. However, risks were presented on pgs 50-51 of the ProDoc including:

[7] Specific, Measurable, Attainable, Relevant and Time-bound

- Kiribati will not allocate adequate funds to continue support of project emplaced successes;
- Historically unsustainable implementation practices will stymie long-term project impacts;
- Low implementation capacities will slow project progress;
- Uptake of adaptation measures may require extra efforts or inputs by local communities;
- Climatic variations may affect project progress, including community ability to participate, rapid loss of ecosystem integrity, etc.

51. Assumptions for the LDCF-FSCC Project listed under the LDCF-FSCC SRF. Comments on the assumptions for smooth implementation of LDCF-FSCC include:

For Objective-level indicators:

- High-level ownership by primary government stakeholders to apply reforms continues;
- Substantial buy-in from island stakeholders is sustained and expanded; • Rate of capacity building can match pace of required changes; *For Outcome 1*:
- High-level ownership by primary government stakeholders to apply reforms continues; and
- Rate of capacity building can match pace of required changes;

For Outcome 2:

- Substantial buy-in from island stakeholders is sustained and expanded;
- Rate of capacity building can match pace of required changes;
- Project resources are not overextended in an attempt to pilot interventions at more locations than feasible.

3.1.3 Lessons from Other Relevant Projects Incorporated into LDCF-FSCC Project Design

52. According to the ProDoc, LDCF-FSCC Kiribati was supposed to draw from a number of ongoing and yearly completed initiatives in partnership with various donor organizations that cover disaster risk reduction, food security and economic recovery:

- "*Coping with Climate Change in the Pacific Island Region*" under GIZ/SPC operated between 2009-2015 for €19.2 million, shared between Kiribati and 12 other Pacific Island Countries, implementing climate change adaptation and mitigation measures with an integrated multisector 'whole of island' approach. This project worked on Abaiang atoll near Tarawa. The program was to generate a vulnerability assessment and action planning approach;
- "*Vegetation & Land Cover Mapping*" under USAID/SPC for US$492,000 operated between 20122015. This project set out to improve understanding of present and future climate related constraints on sustainable food production on various Pacific Island agriculture ecosystems. The project was to support baseline information on vegetation and land cover mapping; community awareness of the impacts of climate variability and measures to increase agricultural resilience; and, strengthen food security-climate change information systems;
- "*Increasing salinity tolerance knowledge in Kiribati and supporting utilization and enhancement of pandanus diversity*" under AusAid/SPC for A$58,500. This project was to increase salinity

tolerance knowledge on food crops in Kiribati and support utilization and enhancement of pandanus varieties;

- "*Sustainable Development of Senile Coconut Palm in Kiribati*" under FAO for US$300,000 operated between 2014 - 2015. The main objective was to remove senile coconut palms and utilize them for coconut timber to provide more land space for replanting and more opportunities for coconut timber production for household income generation;
- "*Increasing Resilience to Climate Variability and Hazards* (KAP III)" under the World Bank/GEF for US$9.5 million operated between 2011-2016. This project was to strengthen the capacity of communities to manage water resources and infrastructure; increase availability and quality of water at the community level; and protect targeted coastal areas from storm waves and flooding;
- "*PAS: Phoenix Islands Protected Area (PIPA)*" under UNEP-GEF for US$890,000 operating between 2011 and 2015. The project was to advance implementation of the PIPA Management Plan; and
- "*Support to Alignment of Kiribati's National Action Programme to the UNCCD Ten-Year Strategy and Reporting Process*" under UNEP-GEF for US$136,000 operating between 2014 and 2016. This land degradation project was to build Kiribati capacity to align the NAP with the 10-year UNCCD Strategy and prepare a national report for UNCCD.

3.1.4 Planned Stakeholder Participation

53. The range of stakeholders for Kiribati with a population of 119,000 residents is very broad as evidenced by the long list of stakeholders identified in the ProDoc in Section 1.5. The planned stakeholder participation was reliant on:
    - the Project Steering Committee (PSC) to ensure that a broad range of national stakeholders are aware of and engaged with Project implementation efforts;
    - regular reporting by Project management and technical staff regarding the status of Project implementation activities and updates regarding challenges, opportunities, and lessons learned;
    - national engagement through Project activities such as training programs and other capacity building efforts designed to incorporate representation from variety of stakeholders and stakeholder organizations;
    - at the island level, the Island Councils were to be the primary mechanism for stakeholder engagement, augmented by project activities (training programs, planning operations, and field work) designed to include broad-based participation by island inhabitants in project activities;
    - the PSC and the PMU making certain opportunities in related investments are maximized by inviting government and donor partner stakeholders to participate in a round-table discussions;
    - stakeholder being invited to work cooperatively to seek out the means to ensure implementation is mutually beneficial and synergistic with the existing and emerging investment environment;
    - convening government and donor partners annually during Project implementation to share updates regarding progress and lessons learned.

3.1.5 Linkages between the LDCF-FSCC Kiribati Project and other interventions within the sector

54. During implementation, the Project was to work with the following programs to strategically align activities, monitor and report results, and make certain that best-practices and lesson-learned are synergized, replicated, and up-scaled:

- "Outer Island Food & Water Project" under IFAD for US$ 3.9 million operated between 2014 - 2018. This project was designed improve food security through island-based agriculture. The project was to enhance community-wide participatory planning, increase the use of nutritious local foods in household diets, improve household water safety and security; and, increase production of agricultural staples such as vegetables and poultry;
- "Improving soil health, agricultural productivity and food security on atolls" under ACIAR for US$0.688 million operated between 2015 and 2020. This project was designed to address capacity building of key stakeholders to ensure soil constraints are addressed for households of Kiribati to produce starchy staples and nutritious food;
- "Community Based Fisheries Management (CBFM)" under AusAid for US$1.2 million operated between 2013-2017. The objective of this multi-nation project was to develop and nurture the structures, processes and the capacity to implement and sustain national programs of CBFM;
- "Fisheries Sector Policy Development Project is a Fisheries partnership agreement" under the EU for US$450,000 operated between 2013 and 2019. This project was to assist MFMRD to promote responsible fishing in Kiribati deep-waters (tuna). Work was to support achievement of FAO's code of conduct for responsible fisheries;
- "R2R Resilient Islands, Resilient Communities" under FAO-GEF for US$4.7 million operated between 2015-2020. This multi-focal area project was to strengthen protected areas and mangrove conservation, and review and improve management planning;
- "Enhancing 'whole of islands' approach to strengthen community resilience to climate and disaster risks in Kiribati" (otherwise known as the LDCF2-WoI project) under UNDP-LDCF-GEF for US$8.925 million starting in January 2021.

3.1.6 Gender responsiveness of Project design

55. The Project design responds to gender in the following ways:

- Project was to be implemented with the support of several NGOs, CBOs, and church groups that are focused upon gender. The Project was to pursue a gender-sensitive approach whereby women's participation in training workshops, demonstration activities and management committees will be strongly promoted. Gender and other social inclusion issues will be considered in all stages of project development and implementation;
- community-based management model by-laws and other implementation guidelines was to contain specific sections and references to issues of gender. The extension programs implemented through this Project were to have components designed especially for women and women cohorts. The Project's monitoring efforts were to be disaggregated by gender to certain women, women headed households, and women led economic and subsistence issues are well understood and part of the Project's overall monitoring framework. Gender balance will be sought and achieved for all Project governance. During Project inception, the final management

and decision-making framework were to make certain that issues of gender were well incorporated.

3.1.7 Society and Environmental Safeguards

56. The Environmental and Social Screening Procedure (ESSP) was followed during the PPG, as required by the ESSP Guidance Note of the UNDP:

- The environmental and social screening led to a category 3a for the Project. This meant impacts and risks are limited in scale and can be identified with a reasonable degree of certainty and can often be handled through the application of standard best practices that require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for a full environmental and social assessment;
- There were no significant negative social or environmental impacts foreseen with this Project that has been designed to have no measurable negative environmental and social impacts. The Project will improve environmental integrity and social welfare, including advancements in gender equality, participatory decision-making, and reduction of environmental degradation.
- This Project was to be subject to ongoing Project review and evaluation. At these junctures, Project overseers would want to be certain that the Project remains within the parameters as described within the ProDoc. A supplementary environmental and social review may be required.

57. The ESSP also sought clarification on whether the Project involves the production and harvesting of fish populations or other aquatic species without an accepted system of independent certification to ensure sustainability. The fish production from the Project was assured to be primarily for subsistence and not for large-scale commercial development, and not requiring certification. In addition, the Project was designed to assist vulnerable communities to increase their resilience to climate change. This included assistance to islanders to design community-based approaches which are inclusive and set-aside specific areas for the benefit of community members who cannot afford access to motorized craft. If the current situation continues, these vulnerable community members will likely be at greater risk of social and environmental impacts. The Project was designed specifically to mitigate these risks.
58. The ESSP also sought clarifications on Project impacts that could affect the ability of communities to use, develop and protect natural resources and other natural assets. The Project envisions that these impacts will largely be positive. Current use patterns by all levels of island society are causing a rapid decline of resources, particularly fisheries. Interventions that were to be applied by the Project would reverse this trend and ideally increase the number of fish available to island residents, and poorer women-headed households who often do not have access to motorboats and remote fisheries.

3.2 Project Implementation

59. The following is a compilation of key events and issues of the LDCF-FSCC Kiribati Project implementation in chronological order:

- CEO endorsement of LDCF-FSCC Kiribati was on 10 March 2015;
- ProDoc was signed by GoK on 20 January 2016;
- Inception workshop was held on 8 July 2016;
- First PSC meeting was held 20 September 2016;
- The Fisheries Regulation was promulgated in 2019;
- The MTR for the LDCF-FSCC Project was completed on 29 September 2020;
- Kiribati re-opened its borders for international visitors from August 2022;
- Final PSC meetings for LDCF-FSCC were held in August and November 2022;
- Fishery by-laws were finalized, signed off by Island Councils for all 3 pilot islands, and by MIA in early 2023.

60. The Project was executed under National Implementation Modality (NIM) with CO support and execution by the Ministry of Environment, Lands & Agriculture Development (MELAD), following UNDP's Programme and Operations Policies and Procedures, as per its role as implementing agency. Execution of the Project was subject to oversight by the PSC, detailed in Para 61. Day to day coordination was carried out under the supervision of a PMU and the key partner agencies including the MFMRD. The executing agency took responsibility for different outcomes and activities according to existing capacities and field realities, ensuring effective and efficient use of GEF resources. Management arrangements for the LDCF-FSCC Project are illustrated on Figure 3.

61. The *Project Steering Committee (PSC)* provided guidance and oversight for Project implementation including a critical role in Project monitoring and evaluation for performance improvement, accountability and learning. The PSC ensured that required resources were committed to activities and approved the appointment of the Project Coordinator and associated staff. PSC decisions were made in accordance to standards to ensure management for development results. Some other responsibilities of the PSC included:

- identifying solutions to problems facing the Project´s partners;
- review proposals for major budget re-allocation such as major savings or cost increases, or for use of funds for significantly different activities;
- review evaluation findings related to impact, effectiveness, and the sustainability of the Project;
- ensure participation and ownership of stakeholders in achieving the objectives of the Project;
- ensure Project communication of its objectives to stakeholders and the public;
- approve Project communication strategy and public information plans; and

- facilitate linkages with high-level decision making.

Member of the PSC are listed in Table 3.

Figure 3: Management Arrangements for the Project "*Enhancing national food security in the context of global climate change*" (LDCF-FSCC Kiribati Project)

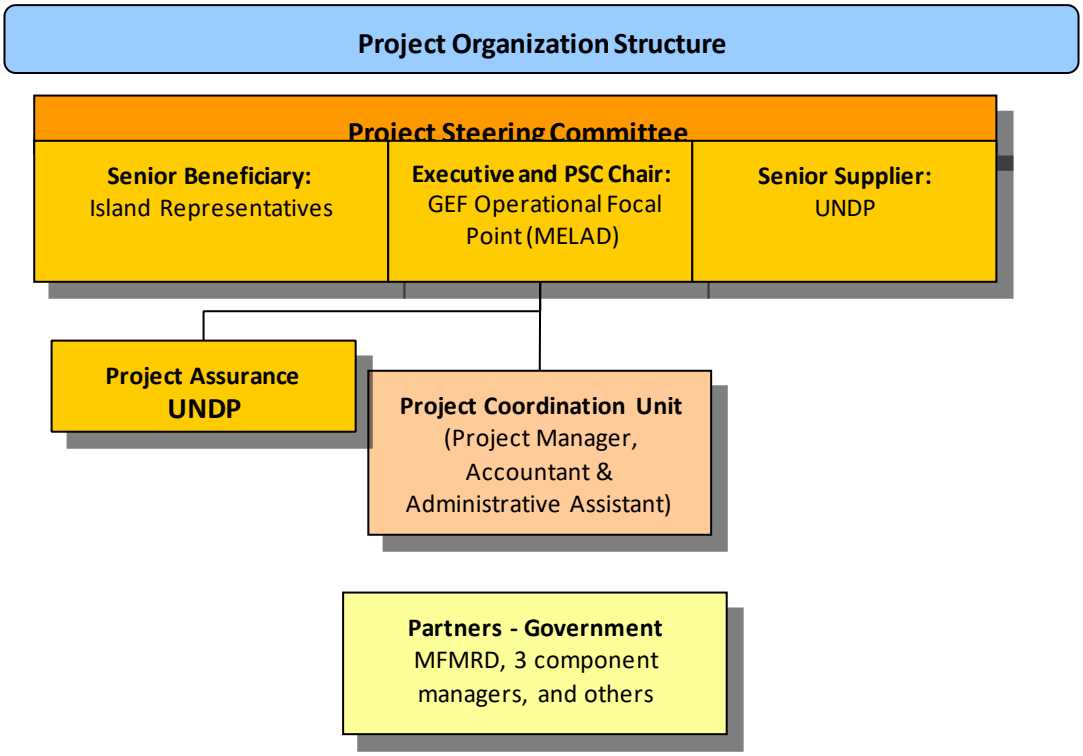


Table 3: Project Steering Committee

Member Organization	*Organization Job title or position*
Ministry of Environment, Lands & Agriculture Development	Director of Environment & Conservation Division (ECD) Director of Agricultural Development Deputy Secretary (Project Director and PSC Chair)
Ministry of Fisheries & Marine Resources Development	Director of Fisheries Division Director of Policy and Development Division
Office of Te Beretitenti	Director of MET Services
Office of Te Beretitenti	KJIP Secretariat or CC & DRM Coordinator
Ministry of Internal Affairs	Director of Local Government Division/KNEG Rep

62. The PMU had an oversight role to ensure execution and delivery of Project outputs, and to ensure Project fund delivery is timely. The PMU reviewed quarterly financial plans as well as advanced and narrative plans and identified emerging risks during Project implementation. The PMU also conducted at least one visit each year in-country to support the national officers. The PMU was

staffed with a Project Coordinator, Communication Officer and Administrative Assistant accompanied by 2 field assistants for each of the three islands with an Assistant Agricultural Assistant (A-AA) and a Fisheries Extension Assistant (FEA) who were directly involved with community engagement, providing extension services in agriculture and fisheries and in planning and implementation of Project activities on the pilot islands. From mid-2020, a Chief Technical Advisor was also in the PMU staff. Component Managers (or Focal Officers) were based partly in the PMU and partly in fisheries, agriculture and environment departments, and assigned from the implementing partners to provide oversight and technical inputs for the Project.

63. The Project Coordinator:

- managed day-to-day activities of the Project, working with stakeholders to plan for the year and invite stakeholders to submit proposals;
- submitted advance requests for funds on a first-come-first-serve basis, following the national procurement and UNDP procurement protocols as it suits delivery of Project activities;
- visited pilot islands for monitoring once in 2019;
- mentors government stakeholders to align proposed activities with Project objectives to achieve targets and offer solutions to various issues and challenges encountered during implementation. This included negotiations with local stakeholders on proposed activities on pilot sites, mainly mangrove replanting, agriculture (involving 2 teams to provide plants provide seedlings, pandanus, swamp taro, fig tree) and fisheries (to re-introduce fish farming and communitiesbased fisheries management, and mini-hatcheries;
- worked with MIA in the development of ISPs and by-laws;
- worked with MET to install AWSs; and
- review and assist MTCIC to align with objectives of the Project and participate in monitoring and evaluation of tourism products.

3.2.1 Adaptive Management

64. Adaptive management is discussed in GEF terminal evaluations to gauge Project performance and the ability of a project to adapt to changing regulatory and environmental conditions, common occurrences that afflict the majority of GEF projects. Without adaptive management, GEF investments would not be effective in achieving their intended outcomes, outputs and targets. Some examples of adaptive management on LDCF-FSCC are included in the following text.

65. In reality, projects such as the LDCF-FSCC Kiribati Project are bound to have varying degrees of adaptive management. The examples showed on Table 4 reflects some of the major adaptive management measures undertaken, especially where there was no definition of activities or insufficient details to implement an activity. While the LDCF-FSCC Project SRF has been laid out in Appendix E, there were inevitably a number of adaptive management changes that were made on the LDCF-FSCC Project. In conclusion, efforts to adaptively manage this Project were satisfactory in light of the adaptive management measures summarized in Table 4.

3.2.2 Partnership Arrangements

66. The LDCF-FSCC Project has made every effort to effectively involve all stakeholders involved in the Project implementation. This includes personnel at the national level agencies, island communities, island councils, extension officers, community and village groups, NGOs and CSOs.

67. Partnerships were enhanced through press releases and social media platforms. One PMU requirement was to issue one press release after the end of every mission. There were also national events such as the World Food Day, and other national events. Increasingly, the Project started to use Facebook in Kiribati to enhance the visibility of the activities conducted. The report on the Etrade readiness assessment 2019 in Kiribati was an example of its use that fostered enhanced partnership arrangements.

68. Overall efforts by the LDCF-FSCC Project to facilitate strengthened partnerships were **satisfactory**. This was due to partnership arrangements from LDCF-FSCC activities that had resulted in several good developmental outcomes, generating considerable interest in these activities to setup potential partnerships with island councils, and community and village groups. Table 5 covers the main stakeholder arrangements made during the PPG.

Table 4: Adaptive management undertaken within LDCF-FSCC

Original Outcomes and Actions	Actual adaptive management measures completed
During the initial stages of the Project, there was a lot of confusion amongst Implementing Partners on the SRF and indicators, a lack of full appreciation of the integrated nature of the Project, and the inability to sequence the foundational activities (AMAT, regulations, by-laws and planning) in a manner that was necessary to effective plan and implement critical on-the-ground activities on pilot islands that support improved food security for vulnerable communities. This resulted in fragmented Project activities that were not effective.	In 2017, the SRF and budgets were revised to overcome this issue; however, the inherent weaknesses of Project design continued to have some negative affect on implementation beyond the control of the PMU.
There was rotation of PMU positions including Administrative Assistant and Communication Officer. As of November 2019, the Focal Officers and AAs and FAs were not fully engaged with the Project, stifling progress to communities with limited technical support, training and mentoring of A-AAs and FEAs.	A Chief Technical Advisor was finally recruited in June 2020, on a part-time basis and working remotely from overseas due to COVID-19, 3 years after the commencement of the Project. However, this provided an opportunity to put the Project on track in attempts to achieve significant progress in key Project outcomes. The recruitment of additional A-AAs and FEAs for each of the pilot Islands and enhanced fund flows (reducing delays from 3 months to 2 weeks) augured well for the Project.

	Component managers for Fisheries, Agriculture and Environment were hired in 2020 and placed partly in the PMU for 2-3 days a week, and partly with line ministries.
The COVID-19 pandemic caused a slow-down of implementation, not allowing for completion of Project activities and reaching targets by the EOP	Project extensions were requested in mid 2020 and again in 2022, to allow for completion of Project implementation that included reaching targets for each indicator.
There was poor oversight, coordination and decision making of Project activities up to mid-2020, made worse by the COVID-19 pandemic.	Weekly meetings between UNDP programme manager and the PMU were introduced in mid-2020 to improve coordination, implementation, and monitoring.
	Monthly management meetings between UNDP and MELAD Secretary were introduced in mid-2020 to improve oversight and facilitation of decisions

Table 5: Involvement of stakeholders during implementation

Stakeholders	Specific contribution
Ministry of Environment, Lands and Agriculture Development (MELAD)	MELAD took the lead role in this project to coordinate all stakeholders who were identified to deliver activities at pilot sites -This included the implementation of Agricultural Program.
Ministry of Tourism, Commerce, Industry and Cooperatives	-identifying potential areas for sustainable commercial activities and investment; entrepreneurial training for micro and cottage business industries; marketing and online promotion and selling of handicrafts; compliance to regulatory frameworks and measures for business related activities; conduct handicraft competitions in urban areas; video production of handicraft making sustainable for cottage and micro business -linking the role of tourism in food security, and to identify means of involving tourism community-based activities including mitigating food security challenges through tourism-based initiatives; -develop business plans on community-based tourism on 3 pilot islands.
Ministry of Internal Affairs (MIA)	-supporting stakeholders under LDCF-FSCC to assist island councils in developing Island Strategic Plans (ISPs) to support some of the LDCF-FSCC objectives; -consult and draft by-laws for Island communities on activities implementation with assistance from lawyers.
Department of Culture and Museum Division (under MIA)	-establish cultural trade fairs on pilot islands to promote the activities involving all villages planting of native crops; -support planting of 5 native crops (coconut, bread fruit, fig trees, giant swamp taro, pandanus) in all pilot islands villages; -collect and record on video traditional methods, skills and knowledge on food preservation
Island/community Level:	On 3 pilot islands, both Island staff and communities are engaged in project activities, in particular during awareness, training, and monitoring activities.
The Island Councils	Involved during all island visits, specifically in the formulation and monitoring of by-laws.
Extension Officers:	Agricultural and Fisheries extension officers are closely involved in the implementation of Project activities on the 3 pilot islands and supported by Youth Inventory Stocktakers and consultants hired under the Project in agriculture.

Community/village groups:	-community/village groups are engaged and consulted during pilot islands visits, trainings and awareness activities, and contributing to traditional knowledge to improve food security and climate resilience; -teachers are involved in implementation of Project activities targeting schools.
NGO/CSO engagement:	Several NGOs/CSOs continue to contribute to and benefit from Project activities, in particular, related to awareness raising at community-level and women-participation and empowerment.

3.2.3 Project Finance

69. The LDCF-FSCC Project had a GEF budget of US$4,446,210 that was to be disbursed over a 5-year period. Table 6 depicts the disbursement levels up to the end of the Project, 17 January 2023, revealing the following:

- Funds expenditures from 2016 to 2017 were 8% and 29% respectively of planned expenditures, resulting in very low delivery. Fund expenditures in 2018 and 2019 were 46% and 65% respectively, closer to planned expenditures. Fund expenditures for the remainder of the Project was expended from 2020 to 2022;
- Outcome 1 and Project Management were over-expended by US$144,361 and US$38,174 respectively while Project management costs were 6%, over the 5% of the total budget allowed by GEF. This incorporated additional management costs for Project extension in 2021 and 2022;
- Most of the GEF budget was expended on travel, followed by national contractual services and audio-visual and printing costs as shown on Table 7;
- The LDCF-FSCC Project has a mechanism under UNDP-POPP to determine and adjust budgets;
- With UNDP having to comply with their own financial regulations, financial delays from the Project were due to: ○ implementation halt during UNDP's Micro-HACT assessment of a contractor that put a stop to funds transfers in 2021 and 2022; ○ lengthy approval and transfer time of funds to Kiribati.

Table 6: GEF Project Budget and Expenditures for LDCF-FSCC Project (in USD as of 17 January 2023)

70. Co-financing was US$7.664 million against a target of US$7.14 million as summarized on Table 8. While US$7.0 million co-financing was expected from the GoK as in-kind, only US$0.581 million was received. This appears to be too low or not properly monitored. The bulk of co-financing was realized from IFAD and SPC for US$6.25 million in in-kind support. Sources of co-financing are provided on Table 9.

71. Overall, the cost effectiveness of the LDCF-FSCC Project has been **moderately satisfactory** in consideration of that most of the GEF funds were expended on Project activities with the majority of co-financing from partner agencies such as IFAD and SPC, and not the Government of Kiribati.

[14] Commencing 20 January 2016

[15] Up to 31 December 2022 and including 17 January 2023

LDCF-FSCC Outcomes	Budget (from ProDoc)	2016[14]	2017	2018	2019	2020	2021	202
Outcome 1: Institutional capacity development to reduce vulnerability to climate change-induced food shortages	1,000,000	30,000	200,000	194,347	273,018	734,663	78,123	63
Outcome 2: Implementation of community adaptation measures to increase food security	3,226,210	2,136	22,218	285,000	300,000	164,582	700,000	1,123
Project Management	220,000	15,000	30,000	45,000	45,000	45,000	45,000	45
Total (Actual)	4,446,210	47,136	252,218	524,347	618,018	944,245	823,123	1,232
Total (Cumulative Actual)	4,446,210	47,136	299,354	823,701	1,441,719	2,385,964	3,209,087	4,41
Annual Planned Disbursement (from ProDoc)	4,446,210	602,605	864,007	1,131,500	952,410	896,688		
% Expended of Planned Disbursement		**8%**	**29%**	**46%**	**65%**	**105%**		

3.2.4 M&E Design at Entry and Implementation

72. The M&E design of the LDCF-FSCC Project is contained on pages 73 to 75 in the ProDoc for the LDCFFSCC Project. The M&E design of the LDCF-FSCC Project is comprehensive as well as standard to other similar GEF projects within UNDP. The design included the Inception Workshop and report, measurements of means of verification for Project results and progress, PIRs, midterm valuations, final evaluations, audits, and site visits. However, as mentioned in Para 48, the quality of Indicator 1 of the SRF did not link the indicators and targets with the objective, hampering the effective monitoring and evaluation of the objective. As such, M&E design is rated as **moderately satisfactory**.

73. Implementation of the M&E system was designed to avoid repetition of activities to ensure implementation of activities on pilot islands was conducted effectively and not deviating from Project

outputs. Emerging issues were addressed immediately and promptly during the implementation. The M&E system was developed based on Island Strategic Plans (ISP) and feedback from communities with communications with island councils to identify activity shortfalls.

74. At the time of the MTR, progress towards achieving results was constrained by the design of SRF Indicator 1 (as mentioned in Para 72), and the lack of established baselines that prevented an understanding of the impacts of that indicator. Further delays in getting commitment from the key sector entities (in particular fisheries and agriculture), lack of timely and adequate technical support and training progress and delays in establishing key planning and monitoring systems affected progress in understanding the target of this indicator. There were reports that M&E implementation was not quite as organized. One pilot island that was monitored had MELAD staff involved in monitoring, but their report was not well presented. This had much to do with the delays and changes in Project design as outlined in Para 65 and Table 4.

75. At the time of the MTR, progress towards achieving results was constrained by the design of SRF Indicator 1 (as mentioned in Para 72), and the lack of established baselines that prevented an understanding of the impacts of that indicator. Further delays in getting commitment from the key sector entities (in particular fisheries and agriculture), lack of timely and adequate technical support and training progress and delays in establishing key planning and monitoring systems affected progress in understanding the target of this indicator. There were reports that M&E implementation was not quite as organized. One pilot island that was monitored had MELAD staff involved in monitoring, but their report was not well presented. This had much to do with the delays and changes in Project design as outlined in Para 65 and Table 4.

76. There has been some progress, however, in establishing baselines for some of the key indicators by mid-2019. A more detailed, substantive and quantitative baseline study and survey was conducted by the Ministry of Health and Medical Services and a local consultant to assess the status of Indicator 1 (as mentioned in Paras 48 and 85). This required an improved and concerted effort with increased technical support, improved collaboration between key sectors, and improved communication and technical support in island communities to ensure some level of sustainability of Project investments. However, due to the COVID-19 pandemic and unavailability of health officials during 2020 to 2022, the survey was only conducted in November-December 2022 with the results not yet analyzed. Additional technical staff, improved training for communities and island staff, and information sharing is required to try to achieve some understanding of Project activity impacts.

77. Notwithstanding the availability of travel budgets, it was evident from the PMU that there was insufficient travel for M&E visits. In hindsight, a serious discussion should have been raised at the Inception Workshop or shortly thereafter to review and ensure sufficient personnel for required M&E activities with the onus placed on the NC and the PMU on ensuring sufficient resources for M&E-related travel. For the resources provided, some monitoring and evaluation services were realized but were hampered by an SRF with working issues for Indicator 1. For these reasons, the

M&E plan implementation is rated as ***moderately satisfactory***. Ratings according to the GEF Monitoring and Evaluation system[16] are as follows:

- *M&E design at entry - 4;*
- *M&E plan implementation - 4;*
- *Overall quality of M&E – 4.*

[16] 6 = HS or Highly Satisfactory: There were no shortcomings;
5 = S or Satisfactory: There were minor shortcomings,
4 = MS or Moderately Satisfactory: There were moderate shortcomings;
3 = MU or Moderately Unsatisfactory: There were significant shortcomings;
2 = U or Unsatisfactory: There were major shortcomings;
1 = HU or Highly
Unsatisfactory U/A = Unable
to assess N/A = Not applicable.

Table 6: GEF Project Budget and Expenditures for LDCF-FSCC Project (in USD as of 17 January 2023)

LDCF-FSCC Outcomes	Budget (from ProDoc)	2016[8]	2017	2018	2019	2020	2021	2022[9]	Total disbursed	Total remaining
Outcome 1: Institutional capacity development to reduce vulnerability to climate change-induced food shortages	1,000,000	30,000	200,000	194,347	273,018	734,663	78,123	63,223	1,573,374	-573,374
Outcome 2: Implementation of community adaptation measures to increase food security	3,226,210	2,136	22,218	285,000	300,000	164,582	700,000	1,123,900	2,597,836	628,374
Project Management	220,000	15,000	30,000	45,000	45,000	45,000	45,000	45,000	275,000	-55,000
Total (Actual)	4,446,210	47,136	252,218	524,347	618,018	944,245	823,123	1,232,123	4,441,210	0
Total (Cumulative Actual)	4,446,210	47,136	299,354	823,701	1,441,719	1,767,946	2,264,842	3,496,965		
Annual Planned Disbursement (from ProDoc)	4,446,210	602,605	864,007	1,130,500	952,410	896,688				
% Expended of Planned Disbursement		**8%**	**29%**	**46%**	**65%**	**105%**				

[8] Commencing 20 January 2016

[9] Up to 31 December 2022 and including 17 January 2023

Table 7: LDCF-FSCC Kiribati Project Expenditures by ATLAS Codes (to 17 January 2023)

ATLAS Code	Expenditure Description	Spent to date (US$)
71200	International Consultants	384,394
71300	Local Consultants	408,398
71400	Contractual Services - Individuals	334,054
71600	Travel	1,327,765
72200	Equipment and Furniture	260,190
72300	Materials & Goods	471,186
74200	Audio Visual & Print Prod Costs	40,001
74500	Miscellaneous Expenses	10,120
76100	Realized loss	35,661
75700	Training, Workshops and Conference	452,355
72100a	Contractual Services - Companies / Nat	401,960
72100b	Contractual Services - Companies / Int	

72800	Information Technology Equipment	243,987
64397	Services to projects -CO staff	2,765
74596	Services to projects	813
72500	Supplies	50,941
73100	Rental & Maintenance-Premises	123
74100	Professional Services	21,499
74100b	Professional Services - International	
Totals:		**4,446,210**

Table 8: Co-Financing for LDCF-FSCC Kiribati Project (as of 17 January 2023)

Co-financing (type/source)	UNDP own financing (million USD)		Government (million USD)		Partner Agency (million USD)		Private Sector (million USD)		Total (million USD)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	0.140	0.000		0.000	0.000	0.000	0.000	0.000	7.140	0
Loans/Concessions		0.000		0.000		0.000		0.000	0.000	0
• In-kind support		0.140	7.000	0.581		6.943		0.000	0.000	7.664
• Other		0.000		0.000				0.000	0.000	0
Totals	0.140	0.140	7.000	0.581	0.000	6.943	0.000	0.000	7.140	7.664

Table 9: Details of LDCF-FSCC Kiribati Project Co-Financing (as of 17 January 2023)

Classification	Name of Co-financier (source)	Type	Financing Committed (US$)	Financing Actual Amount (US$)
National Government	MELAD	In-kind	7,000,000	547,080
National Government	MFMRD	In-kind	0	34,000
Partner Agency	KOIFWP (IFAD)	In-kind	0	5,200,000
CSO	ACIAR	In-kind	0	692,801
Partner Agency	SPC	In-kind	0	1,050,000
Partner Agency	UNDP	In-kind	140,000	140,000
Total Co-financing			**7,140,000**	**7,663,881**

3.2.5 Performance of Implementing and Executing Entities

78. The performance of the implementing agency of the MELAD can be characterized as follows:

- Provided strong leadership of the Project as Chair of the PSC;
- Provided timely comments on monitoring and evaluation reports and approval of PIRs and AWPs for work to proceed;
- Addressed staffing concerns of the Project;
- Ensured use of GEF funds was efficient and effective.

Overall performance of MELAD on the LDCF-FSCC Kiribati Project is assessed as being **satisfactory** considering MELAD support for meeting most of the targets.

79. The performance the executing partner, UNDP, can be characterized as follows:

- Provision of technical and administrative support to MELAD was timely;
- Transfer of payments to MELAD done in a mostly timely manner with delays in 2021 and 2022;
- Monitored co-financing;
- Supported posting and dissemination of knowledge products of the Project onto its website;
- Reporting to donor through PIRs and MTR.

Overall performance of UNDP on the LDCF-FSCC Kiribati Project can be assessed as being **satisfactory.**

80. A summary of ratings of the executing agency and executing partner of the LDCF-FSCC Kiribati Project are as follows:

- *Implementing Entity (MELAD)* – 5;
- *Implementing Partner (UNDP)* – 5;
- *Overall quality of execution (MELAD/UNDP)* – 5.

3.3 Project Results

81. This section provides evaluation ratings for overall Project results against the June 2017 SRF (as provided in Appendix E)[10] as well as an assessment of relevance, effectiveness and efficiency, country ownership, mainstreaming, sustainability, and impact of the LDCF-FSCC Kiribati Project. For Table 8, "status of target achieved" is color-coded according to the following scheme:

[10] Evaluation ratings are on a scale of 1 to 6 as defined in Footnote 23.

Green: Completed, indicator shows successful achievements	Yellow: Indicator shows expected completion by the EOP	Red: Indicator shows poor achievement – unlikely to be completed by project closure

Table 8: Project objective-level achievements against LDCF-FSCC Project targets

Intended Outcome	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating [20]
Project Objective: *To build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change*	1. Percentage of households and communities that have stable or increased food security in the face of climate change	Current trajectory of resource use signify increased future food insecurity (actual household food security will be defined during Year 1 of project and presented as gender- disaggregated data)	By the end of the project 100% of men, women and children of targeted islands *(Nonouti 2,744 Abemama 3,299, Maiana 1,981)* have stable and/or increased levels of food security increasing their resilience against climate change	*Reaching of the target of, is not really known*	See Paras 83-84	3
	2. Number of bonefish (*Albula glossodonta*) increasing and/or stable. * Bonefish are the main protein source for I-Kiribati and an indicator of over-all coastal zone fishery health.	Nonouti Estimated number of bonefish: TBD Abemama Estimated number of bonefish: TBD Maiana Estimated number of bonefish: TBD South Tarawa Estimated number of bonefish: TBD *Qualitative estimates are that populations at all islands are overharvested*.	Nonouti Estimated number of bonefish: Stable or increasing compared to baseline Abemama Estimated number of bonefish: Stable or increasing compared to baseline Maiana Estimated number of bonefish: Stable or increasing compared to baseline South Tarawa Estimated number of bonefish: Stable or increasing compared to baseline	*Q4 2022 survey data is currently being processed for results on the populations of bone fish. Report is expected to be out by Q1 2023*	See Paras 86-87	3

	3. Percentage of Kiribati population covered by the enhanced early warning system	The existing communication systems are inadequate to send early warning message in timely manner	*At least* 95% of Kiribati population (*109,693, of which 55.591 are women*) receives early warning in a timely manner using one of the multiple communication lines	*By June 2021, AWS were operational on 3 pilot with near-real time data being received at KMS covering 100% of the population of the 3 project islands (109,693 of which 55,591 are women)*	See Paras 88-89	5
Overall Rating – Project-Level Targets						4

[20] Ibid 23

3.3.1 Objective-level Results

82. With regards to the key objective-level targets of LDCF-FSCC Kiribati, the Project was aiming to "*build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change"* by the EOP.

83. With regards to Indicator 1: percentage of households and communities that have stable or increased food security in the face of climate change, the following issues were revealed:

- A draft report was prepared in 2022 by a multi-sector working group led by a local health expert that included 2015-2017 baseline information and the current status of various health and nutrition-related indicators based on available data. However, lack of data and difficulties in measuring food security other than through the various sub-indicators made the assessment difficult, in part due to the unavailability of health officials and COVID-19 restrictions[11]. This has led to the report not having established a clear baseline and assessment of the Project's contribution toward food security in the pilot islands. The report does offer insights into developments and trends including the strong relationship between copra production and the level of malnutrition on the pilot islands[12];
- A Fisheries Management Plan (CBFM) has been implemented since 2017. In 2019, Island Council had banned fishing of under-sized milkfish and fining offenders. The Elders Circle (Te Bau ni Maiana) had passed a number of rulings banning the taking of all inshore fish species during spawning runs and undertook enforcement of by-laws and its own traditional law restrictions to manage fishery resources. The Maiana Island Council (MIC) provided enforcement to catch islanders who "creep" in after dark to the mouth of the lagoon to catch the spawn runs of undersized bonefish and other finfish species;
- A program was conducted in 2019 on 3 pilot islands that contributed towards the establishment of mini-hatcheries, fish and clam farming, the introduction of livestock, the planting of perennial vegetables and crops, and efforts to increase home-gardening. The Cultural Affairs team of MIA and the ALD managed to plant several native food crops such as breadfruit, coconut, pandanus, fig trees and giant swamp taro (babai)[13]. Training of inventory stock takers (that included youth) took place to assist agricultural extension officers and assistants to optimize food production;
- Post-harvest and value-added training on marine resources by Coastal Fisheries and aided at times by MoCIC to promote revenue generation activities since 2017 with three trainings per pilot island conducted in April 2019;
- Training sessions for communities were delivered in 2020 for food preparation and preservation, related to planting food crops (perennial and home gardening), livestock management (mainly piggery development and combined with IFAD project), distribution of seedlings and cuttings, composting, and sowing seeds for women's associations in villages (Tekaranga, Tebanga, Aobike,

[11] In 2020, baseline surveys were conducted for existing food crop and livestock production for 2-pilot villages, Abamakoro islet and Rotimwa.

[12] As copra production is highly dependent on weather patterns, climate change is an important consideration to factor in when framing nutritional strategies.

[13] This happened despite one season where there was brackish water flooding from the adjacent swampy areas from heavy rains and high tides.

Tebangetua). There was also training to members of a Farming Association on papaya marcotting and preparing compost beds for home gardening for 4 pilot villages (Tebikerai, Temantantongo, Buota, and Bubutei Maiaki). The training built capacities of those without skills in food processing

using traditional methods adding to the resilience of the population to food shortages and climate change;

- Catch monitoring activity was commenced in 2021 to assess the effectiveness of the communitybased fisheries;
- A qualitative survey on beneficiary perception of food security was carried out by the PMU's Communications Team from December 2021-February 2022 to evaluate beneficiary capacities and awareness levels. The survey indicated 71% of respondents believed they had sufficient food supply, 68% indicated that they have better food supply (45%) or same food supply (23%) compared to 2017 (pre-Project);
- An end-of-project-survey design was considered but was not implemented due to COVID-19related travel restrictions and the lack of availability of the government health and nutrition working group (details in Para 85).

84. In conclusion, the reaching of the target of 100% of households and communities that have stable or increased food security in the face of climate change, is not really known. As mentioned in the MTR, there is a lack of specific sub-indicators under Indicator 1 that actually measure the level of food security. As mentioned in Para 48, an indicator mentioning the "number of households with diversified climate resilient crop production systems that increase all season availability of food" would have been more useful in terms of measuring food security. This would have required baseline work on 3 Project islands on sub-indicators such as sources of incomes for households from fish, crops and other sources; frequency of fish consumption at the household level; and annual per capita consumption of fin fish and invertebrates. While the qualitative survey provides an indication of the percentage of households and communities that have stable or increased food security*, it is merely a perception rather than facts based on a scientific survey*.

85. As detailed in Para **Error! Reference source not found.**, however, there was some progress in establishing baselines for some of the key indicators by mid-2019, notably Indicator 1 where an endof-project-survey consisting of a more detailed, substantive and quantitative base line study and survey was conducted by the Ministry of Health and Medical Services and a local consultant. This required an improved and concerted effort with increased technical support, improved collaboration between key sectors, and improved communication and technical support in island communities to ensure some level of sustainability of Project investments. However, due to the COVID-19 pandemic and unavailability of health officials during 2020 to 2022, the survey was only conducted in November-December 2022 with the results not yet analyzed. Additional technical staff, improved training for communities and island staff, and information sharing is required to try to achieve some understanding of Project activity impacts.

86. With regards to Indicator 2: number of bonefish (*Albula glossodonta*) increasing and/or stable, the following issues were revealed:

- Observations from 2017 to 2020 from monitoring of bonefish on all pilot islands through creel surveys by MFMRD and SPC of the pilot islands, show decline in the number of bonefish from the beginning of the Project. The bonefish monitoring report was finalized for Maiana, Abemama and Nonouti in late 2022. The monitoring program, however, was initially plagued with insufficient data to report reliable results; however, it did reveal that:
  - unsustainable fisheries practices (splash fishing) have been significantly reduced by the project;
  - overfishing of bonefish has been reduced as indicated by a decrease in catch and a more mature bonefish population;
- Operational cost (travel, fuel and communication) of 2017-2019 creel surveys for fisheries data collection undertaken by extension staff, was provided by the Fisheries recurrent budget for all pilot islands;
- The National Fisheries regulation was endorsed by Cabinet in 2019, with island-specific by-laws, fishing permits and protection zones all supporting sustainable management of coastal fisheries;
- Fishermen perceptions of the fishery in 2019 indicated that they had seen little change in the fishery over the last 2014-2019 period in which 60% of respondents mentioned that the number of fish caught were the same. However, 67% claimed that the size of fish caught was decreasing compared to 2014. Gillnetting was found in 2019 to be the main fishing method used accompanied by the splash fishing, one of the more destructive fishing methods used on the islands, and where 48% of the catch is bonefish. Splash fishing was totally banned as of 2019 with Elders imposing high fines to fishermen using these destructive methods;
- In 2019, MPAs were established at Baretoa and Abatiku, and in 2020, community-based fisheries management established 4 MPAs in Autukia, all to conserve fishing[14]. Under a co-financing arrangement, the SPC had undertaken creel survey and biological sampling on bonefish with ongoing monitoring of bonefish by Fisheries Extension Assistants on all pilot islands;
- Fish aggregation device (FAD) construction and training on FAD fishing and deep bottom fishing was conducted to diversify pressure from lagoon fishing. The FADs, however, had not been deployed due to delays in the arrival of additional construction material from abroad;
- There were follow-up surveys in 2021 for monitoring of finfish and invertebrate resources (using Soft Infauna Quadrat (SIQ), Reef Benthos Transect (RBT) and underwater Visual Census (UVC)), and creel surveys using the new "Tails app" method by fisheries extension staff;
- In 2021, geographical data has been collected to compile a GIS resource map for marine spatial planning for the islands;
- In Q1 2022, seagrass monitoring took place specifically at Tebwanga and Tekatirirake villages to assess the growth status of seagrass planted in these two villages in 2021 to boost, enhance and contribute to the abundance of existing seagrass. Unfortunately, all the seagrass planted Project teams did not survive due to low coverage of coral and sand. This may mean that climate change or a shift in current has removed the seagrass;
- Creel surveys and monitoring have been carried out at Abemama, Nonouti and Nikunau in Q4 2022. Creel survey data is currently being processed in the new SPC app with the finalization of

[14] Maiana Island has a CBMMP to establish 3-4 MPAs on the island for fishery recovery, including bonefish.

creel survey reports, peer reviewed technical reports, and monitoring reports of seagrass and coral deployment on all pilot islands by Q1 2023.

87. In conclusion, baseline and progress values were difficult to establish for the bonefish population due to a significant shift in fishing methods towards more sustainable fisheries. Findings were based on the monitoring reports for Maiana, Nonouti, and Abemama. All monitoring results were entered and analyzed in the SPC database, showing a decrease in Catch per Unit Effort (CPUE), indicating a decrease in fish stock. However, the average CPUE of each surveyed year is hardly comparable due to an important shift from predominantly unsustainable fishing methods in 2017/2018 (resulting in over-fishing and high CPUE) to sustainable fishing methods in 2020. Therefore, CPUE is not reliable as indicator measurement. In addition, comprehensive Fisheries monitoring reports with Status of Invertebrates and Finfish have been finalized for the 4 islands (3 pilot islands Abemama, Maiana and Nonouti, as well as Kuria). This is the result of the Project's effort to establish the National Coastal Zone Monitoring program using marine surveys using distance underwater visual census (D-UVC), reef benthos transect (RBTt), point intercept transect (PIT), seagrass assessment and creel survey.

88. With regards to Indicator 3: Percentage of Kiribati population covered by the enhanced early warning system, the following issues were revealed:

- By June 2021, Automated Weather Stations (AWS) were operational at the 3 pilot islands to operational Climate Early Warning Systems (CLEWS) with near-real time data being received on a neon display at the Kiribati Meteorological Service (KMS). This covers 100% of the population of the 3 project islands (109,693 of which 55,591 are women)
- training of the KMS staff in 2019 to resolve technical difficulties with CLEWS;
- in 2020, the New Zealand-based National Institute of Water and Atmospheric Research Limited (NIWA) was engaged as co-finance to install the AWS and to provide support and technical backstopping to KMS staff. This included virtual training of KMS staff in May 2022 to enable technical staff to be able to follow a technical explanation of the Real-Time Display Module's characteristics and operation as a reference for installation activities;
- KMS meteorological data collection, processing and services significantly improved in 2021 with an increased the number of islands with AWS and EWS from 6 to 9 out of 22 inhabited islands for monitoring and detection, data analysis (services), and dissemination of information;
- The CLEWS generates near-real time (10-minutes interval readings) data to the Kiribati Meteorological Services every hour covering, wind speed and direction, air temperature, relative humidity, rainfall, barometric pressure and solar radiation.
- CLEWS uses this data to provide advisories, warnings, and weather forecasts, sent out via radio messages, sms, email, website, and social media-channels. No drought warnings were issued;
- Improvements to real time data displays on pilot islands, and data sharing with key government departments were delayed due to COVID-19 border closures. Related equipment to improve real-time data availability and transmission was delayed for 1.5 years, arriving in November 2021. Virtual training for KMS staff by NIWA for equipment installation on pilot islands was delayed to Q4 2022;

- Maintenance of both AWSs at Abemama and Nonouti was being done including involving KMS technicians who cut the grass and conduct general clean-up of the sites. With the Project being completed, interested community members were keen to maintain the cleanliness and security of these assets for later payments by KMS office from the GoK's recurrent budget.

89. In summary, the percentage of Kiribati population covered by the enhanced EWS under this Project has been on less than 100%. However, the enhanced EWSs installed on pilot islands does cover 100% of the pilot islands and is rated as ***satisfactory***. The Project met the expectations of training KMS personnel on hydrometeorological forecasting.

90. Overall, achievement of objective-level indicators has been moderately satisfactory considering 100% of the Kiribati population were covered by the enhanced early warning system, and draft reports indicating populations of bone fish are recovering, and not really knowing if 100% of households and communities on the 3 pilot islands have stable or increased food security in the face of climate change.

3.3.2 Outcome 1: Institutional capacity development to reduce vulnerability to climate change-induced food shortages

91. Under this Component, the expected outcome was "institutional capacity development to reduce vulnerability to climate change-induced food shortages". A summary of actual achievements of Outcome 1 with evaluation ratings are provided on Table 9.

92. With regards to Indicator 4: GoK provides annual financial support (in-kind and/or grant) to maintain of national adaptation and monitoring tool, the following issues were revealed:

- As of December 2022, the Adaptation Monitoring and Assessment Tool (AMAT) platform (https://www.kiribatiamat.net) is almost complete with an expected launched in 2023. The AMAT has been developed to be integrated with the EMIS already hosted by MELAD. With AMAT becoming a subset of EMIS and GoK not funding the AMAT until 2023, its sustainability was to be ensured by extending AMAT activities beyond the pilot islands to other non-pilot islands after the EOP;
- Data collection has been ongoing since November 2018 starting with a coastal assessment of 7 villages on Maiana (Tematantongo, Toora, Tebiauea, Buota, Bubutei Meang, Bubutei Nuuka and Bubutei Maiaki) with the assistance of Lands Management Division and including data on salinity of groundwater, co-financed through the Ministry of Infrastructure and Sustainable Energy (MISE);
- An international consultant commenced training in 2019 of Environment staff on statistical analysis, designing questionnaires to data entry to analysis using DevPro software (currently used for the EMIS). A local consultant was used for training on CSPro software, Integrated Vulnerability Assessment (IVA) data collection needs and statistical analysis, and;
- In 2020, hardware equipment had been procured for the national AMAT server and pilot islands servers. The AMAT structure has been developed with an initial focus on data generated under the Project;

- A multi-sector technical working group (health, agriculture, tourism, fisheries, environment, meteorology) worked on data entry and display on the AMAT platform with domains and subdomains created for most sectors. There was no progress with this working group in 2022 due to COVID-19 lock-down;
- Government financial support for AMAT is to be requested from Cabinet once AMAT is finalized;
- Installation of AMAT on the pilot islands and virtual training was delayed due to COVID-19 and delays in the provision of GEF funds.

In summary, GoK is struggling to provide annual financial support (in-kind and grant) to maintain the AMAT.

93. With regards to Indicator 5: Coastal Zone Fisheries Regulation adopted based upon increased level of national awareness about links between improved coastal ecosystem management and sustainability and resilience of subsistence coastal fisheries livelihoods, the following issues were revealed:

- The Fisheries Conservation and Management of Coastal Marine Resources Regulation 2019 was endorsed by Cabinet in August 2019 and launched on 21 February 2020. Work on the final version of Fisheries regulation was done with Project assistance at the Coastal Fisheries Summit

Table 9: Component 1 achievements against targets

Intended Outcome/Output	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating [37]
Outcome 1: Institutional capacity development to reduce vulnerability to climate changeinduced food shortages	4. GoK provides annual financial support *(in-kind and grant)* to maintain national adaptation and monitoring tool.	GoK annual support for AMAT: 0 *Investment in current monitoring system TBD*.	GoK annual support for AMAT: *AU$* 25,000 (~US$ 18,600)	*Installation of AMAT on all client computers for all 3 pilot islands has been completed as well as all baseline data entry. The sustainable plan for AMAT operation is not yet executed, with aims to finalize in Q2 2023.*	*See Paras 92-0*	3
	5. Coastal Zone Fisheries Regulation adopted based upon increased level of national awareness about links between improved coastal ecosystem management and sustainability and resilience of subsistence coastal fisheries livelihoods.	0: National Coastal Zone Fishing Regulation adopted	1: National Coastal Zone Fishing Regulation adopted	*Fisheries conservation and management of Coastal Marine Resources Regulation 2019 is being enforced. However, enforcement support and awareness is ongoing, which is to be expected due o the complexity of the nature of the regulations and restrictions with very specific time frames where fishing of certain species are prohibited during spawning season.*	*See Paras 93-94*	4
	6. Cohort of eight extension officers increase capacity score as a result of project training program based upon GEF Capacity Result 2 (Capacities to generate, access and use information knowledge).	Cohort of eight agriculture extension officers CR2 capacity score: 3 Cohort of eight fisheries extension officers CR2 capacity score: 3 * Score range: 0-15	Cohort of eight agriculture extension officers CR2 capacity score: 15 Cohort of eight fisheries extension officers CR2 capacity score: 15 * Score range: 0-15	*Two assessments for CR2 capacity scores of MELAD and MFMRD extension officers were measured in July 2022 of 12-13, significant improvement in scores. It is unlikely that the capacity score will increase further before the end of the project. Number of officers tested is 18 (3 pilot islands with each 3 fisheries and 3 agricultural assistants).*	*See Para 95*	

	7. Number of project beneficiaries (includes people engaged in training, awareness-raising and education, pilot villages, delivery of project initiatives, stakeholder meetings and project governance)	*0*	*10,000 (of which at least 60% are women)*	*Project beneficiaries was 30,682 (16,060 men and 14,622 women),*	*See Para 96*	5
Overall Rating – Component 1						**3**

[37] Ibid 23

in May 2019 that was attended by all 23 Island Council Mayors and their Clerks, 2 representatives of the Elders (old men and women) and 1 representative from youth;

- This regulation aims to conserve fisheries resources through bans on splash fishing, defining closure periods during spawning runs (of bonefish, flying fish and goldfish), restricting the length and mesh size of fishing nets, and limiting the size of finfish catches. These measures were expected to help replenish fish species;
- Capacity building training for enforcement through regional training in 2019 including MCS staff, extension staff and FEAs plus personnel from Environment, Internal Affairs and Police;
- Awareness and capacity building on the regulation was conducted for enforcement officers at island level. This covered posters, communication strategy, pull up banners, handbook on the new regulation, radio announcements, and church notices;
- Capacity building of MFMRD (Fisheries) staff, extension staff, police officers and CBFM has been continuous since 2021 to cover powers of authorized officers, questioning techniques, monitoring compliance surveillance and enforcement (MCS&E) interventions, and other important aspects of enforcement of the Fisheries regulations. This led to the establishment of an MCS&E Unit within the Coastal Fisheries Division (CFD) of MFMRD with continuous on-thejob training of extension staff and community members related to boat safety, engine training and ice making operations;
- Positive impacts on marine resources are being observed by island fisheries extension staff and communities;
- Enforcing the regulation on all islands, including the pilot islands, is challenging. According to a December 2021-February 2022 household survey by the communications team from covering 2 pilot islands (Maiana and Abemama), 86% of households were aware of the National Coastal Fisheries regulation, whereas 67% were aware of the locally established fisheries recovery zones, and 77% of respondents were in favor of these initiatives for sustainable fisheries management.

94. In summary, the Fisheries Conservation and Management of Coastal Marine Resources Regulation 2019 is being enforced. However, despite continuous awareness and enforcement support, there are still misunderstandings of the importance of closed fishing seasons and control of prohibited fishing gears by communities and fishermen. Nevertheless, training of enforcement staff (Island Council village wardens) on fisheries regulation continued into Q4 2022 in Nonouti. Plans to do the same for Maiana did not happen due to funds not being available.

95. With regards to Indicator 6: Cohort of eight extension officers increase capacity score as a result of project training program based upon GEF Capacity Result 2 (Capacities to generate, access and use information knowledge) was partially achieved with the following issues:

- Project-related theory and practical training was conducted in 2018 by Fisheries (1 month), Agriculture (1 month) and Environment (1-2 weeks) to supplement the 1-year government training of Agricultural Assistants (AA) and Fisheries Extension Assistants (FEA). For some topics, manuals were issued but mostly pamphlets and handouts were issued, besides hands-on training. The Project supported on-the-job training at pilot islands and refresher courses were conducted on pilot islands during visits from the sector ministries.

- With the Phase I of the agricultural training manual completed in 2017, agricultural extension staff were trained for over a year in February 2018;
- With the fisheries manual e-copies completed in 2019, 12 fisheries assistants (4 males and 8 females) were trained, all below 40 years of age. As co-finance, recurrent government budget supports the 2 years training of Fisheries Trainees. The Coastal Fisheries Summit is part of capacity building training to extension staff. Capacity building training for new Fisheries Extension Officers from the pilot sites (1 week) took place in 2019. Topics covered included CBFM; postharvest and value adding; research monitoring activities; FAD fabrication and fishing technology training; pond survey; creel survey; seaweed farming; clam farming; and data collection (landing and marine product);
- There was limited refresher training to extension officers in Q1 and Q2 2020 due to COVID19 limiting island visits. This was made up more frequent island missions and focus on improving reporting and monitoring skills by MFMRD (Fisheries) and MELAD (Agriculture) plan to improve extension staff capacity. However, remote communication was difficult due to limited internet and phone connectivity, and the turnover rate of staff and unfilled government positions posed a risk to the achievement of the target. The Project then supported assistant extension staff positions to fill gaps. Efforts were made by both Fisheries and Agriculture departments to post new staff and conduct on-the-job training as each team visit the pilot islands;
- By 2021, staffing situation as the pilot island improved with both government and Project-based extension assistant positions filled on all 3 pilot islands including agricultural assistant (AA), Assistant to Agricultural Assistant, Agriculture Nurseryman, Fisheries Assistant (FA) and Fisheries Extension Assistant (FEA). However, on-the-job training has been limited during Q4 2021 and Q1 2022 due to implementation halt and COVID-19 travel restrictions. No follow-up training has been conducted;
- In 2021 and 2022, CR2 capacity scores of MELAD and MFMRD extension officers were measured after the training. A capacity assessment was done in June 2021 and July 2022, evaluating the GEF CR2 capacity score to 12-13 (with a target of 15). With the capacity scores unlikely to increase further before the EOP, the Agriculture and Fisheries sectors are conducting their own regular assessments of their staff capacities, which to the extent possible are considered in the GEF scorecard; however, the methodologies are not comparable. The Evaluators did not have any opportunities to interview extension officers.

96. Indicator 7: Number of project beneficiaries (includes people engaged in training, awareness-raising and education, pilot villages, delivery of project initiatives, stakeholder meetings and project governance), was achieved:

- Number of Project beneficiaries was 30,682 (16,060 men and 14,622 women), counting people directly involved in project training, awareness, consultations, and other project field activities Targets were to reach >50% of population on each outer island, plus stakeholders in South Tarawa and does not include early warning system coverage (>95% Kiribati population) for simplicity and more meaningful reporting of beneficiaries;
- The Project has had a direct impact on 48% of the population who were women who became more aware of issues of stable or increased levels of food security and resilience against climate

change. The target of reaching 60% women can be considered surpassed even though not relative to male beneficiaries;

- A household survey carried out by the communications team from December 2021-February 2022 covering over 90% of households on 2 pilot islands (Maiana and Abemama) revealed that actual beneficiary numbers may be lower;
- 46% of households indicated that they received training or attended other project activities related to climate change, environment, or food security;
- 45% of respondents received training in other areas by the Project (tourism, finance).
- 28% of households have participated in the development of community-based plans in either the area of environment or fisheries;
- 52% of respondents use weather information from the AWSs, radio or other channels;
- Only 40% of households were involved in planting crops at their village or school, whereas 67% planted food crops at their household with support of the Project;
- Overall, 76% or households found the Project to be beneficial to them. However, there is a segment of the population that do not appreciate the works done by MELAD and the Project. The extent of this dissatisfaction is not known.

All of these figures aligns with the UNDP Results Framework and GEF CCA Tracking Tool.

97. In conclusion, the results of Outcome 1 can be rated as **moderately satisfactory** based on the AMAT installation being complete, a sustainability plan for AMAT operation not yet completed, fisheries conservation and management of Coastal Marine Resources Regulation 2019 being enforced despite stakeholder misunderstandings of the importance of closed fishing seasons, scores for MELAD and MFMRD extension officers being 12-13 below the target of 15, and more than 30,000 Project beneficiaries (over the target of 10,000).

3.3.3 Outcome 2: Implementation of community adaptation measures to increase food security

98. Under this Component, the expected outcome was "implementation of community adaptation measures to increase food security". A summary of actual achievements of Outcome 2 with evaluation ratings are provided on Table 10.

99. With regards to Indicator 8: Management of land in accordance with land use/resource management plans developed using national guidelines for ecosystem-based adaptation i) Hectares of island territory under land use plan/revised land use plan ii) Number of villages managing land in accordance with land use plans, the following achievements and issues were revealed:

- There are an unspecified number of villages managing land in accordance with land use plans based on Ecological Land-Use maps, Community-Based Mangroves and Natural Resources Management Plans and Integrated Environment and Natural Resources Management Plan (IENRMP). This includes:

- 3 IENRMPs were completed for Benuaroa village, Taboiaki village and Te Buroo/Unimwane; - 2 villages in Nonouti with draft community-based plans and ecological land-use maps were developed for the whole island;
- 4 villages in Abemama with completed Community-Based Mangroves and Natural Resources Management Plans in 2017 and ecological land-use maps; - 12 villages in Maiana with completed Community-Based Mangroves and Natural Resources Management Plan in 2019 plus ecological land-use maps and one combined plan covering the whole island;

- Villages receiving support to establish Management Committees that implemented their plans such as coastal protection measures (soft measures), awareness and training programmes. There was also support for ISPs from MIA related to topics such as invasive species control (for Abemama), livestock provision to the islands, translocation of marine invertebrates (bivalves, sandfish) to the islands and access to clean water;

Table 10: Achievements of Outcome 2 against targets

Intended Outcome	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating [38]
Outcome 2: Implementation of community adaptation measures to increase food security	*8. Management of land in accordance with land use/resource management plans developed using national guidelines for ecosystem-based adaptation:* *i) Hectares of island territory under land use plan/revised land use plan ii) Number of villages managing land in accordance with land use plans*	*i) and ii)* Nonouti 0 ha Abemama 0 ha Maiana 0 ha	i) Nonouti Area with EBA land use plan: 2,000 ha Abemama Area with EBA land use plan: 2,700 ha Maiana Area with EBA land use plan: *1,350* ha ii) *At least two villages on each of the three target islands managing land in accordance with EBA land use plan.*	*Community-based ecological land use maps developed for the 3 pilot islands. This includes 2 villages in Nonouti, 4 villages in Abemama, and 12 villages in Maiana.* *National EBA-guidelines were finalized in December 2022*	*See Para 99*	5
	9. Number of vulnerability assessments completed.	*0*	*3 (one for each target island)*	*3 Integrated Vulnerability Assessments reports are being prepared for release in Q1 2023*	*See Para* ***Error! Reference source not found.***	**4**
	10. <u>*Hectares of coastal zone*</u>: i) Regulated through fishing management zoning system as a result of national regulatory tool adopted by GoK. ii) Protected in fish recovery zones developed using national guidelines for ecosystem-based adaptation management.	<u>*i) and ii)*</u> <u>Nonouti</u> 0 ha <u>Abemama</u> 0 ha <u>Maiana</u> 0 ha	i) <u>Nonouti</u> Regulated fishing area: 40,000 ha <u>Abemama</u> Regulated fishing area: 15,000 ha <u>Maiana</u> Regulated fishing area: 10,000 ha <u>*ii) At least 10% of area under zoning on each island:*</u> <u>Nonouti</u> <u>Fish recovery zones: 4,000 ha</u> <u>Abemama</u> <u>Fish recovery zones: 1,500 ha</u> <u>Maiana</u>	*Coastal zones are regulated through fishing management zoning system as a result of national regulatory tool adopted by GoK* *Marine Protected Areas or fish recovery zones have been established, mapped, and demarcated on each pilot island, exceeding targets*	*See Paras 102* [3]	

			Fish recovery zones:1,000			

[38] Ibid 22

Intended Outcome	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating [38]
	11. Increase in hectares of mangrove habitat as reported annually by Island Councils using the national adaptation and monitoring tool.	Nonouti Mangrove (ha): TBD Abemama Mangrove (ha): TBD Maiana Mangrove (ha): 273	Nonouti Mangrove (ha): *At least 5%* increase compared to baseline Abemama Mangrove (ha): *At least 5%* increase compared to baseline Maiana Mangrove (ha): *>285*	*Mangroves were planted in 2021. However, many of the transplanted mangroves did not survive.*	*See Paras 103*	
	12. Number of by-laws on fisheries conservation adopted on each target island.	*Nonouti* *3* *Abemama* *3* *Maiana* *1*	*Nonouti* *6* *Abemama* *5* *Maiana* *4*	*By-laws for Nonouti, Maiana and Abemama have been finalized and signed by the Island Councils*	*See Para 104*	

	13. Number of existing commercial fishing operators with permits allocated and monitored based upon implementation of coastal zone fisheries conservation by-laws.	Nonouti Commercial Permits: 0 Abemama Commercial Permits: 0 Maiana Commercial Permits: 0	Nonouti Commercial Permits: *3* Abemama Commercial Permits: *3* Maiana Commercial Permits: *3*	*The number of commercial fishing operators is 0. However, island councils and national authorities will be able to issue permits to interested commercial operators and game fishing commercial permits for external bodies wishing to bring in anglers from abroad. Templates for such permits are already ready with Coastal Fisheries as also mandated by their Fisheries Regulation.*	*See Para 105*	
	14. Capacity score of Fisheries Conservation Field School participants increases based upon GEF Capacity Result 2 (Capacities to generate, access	Nonouti FCFS Scorecard CR2: 1 Abemama FCFS Scorecard CR2: 1	Nonouti FCFS Scorecard CR2: *At least 10* Abemama FCFS Scorecard CR2: *At least 10*	*CR2 capacity scores of all pilot island communities was 14*	*See Para 106*	

Intended Outcome	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating [38]
	and use information knowledge).	Maiana Scorecard CR2: 1 * Score range: 0-15	Maiana Scorecard CR2: *At least 10* * Score range: 0 - 15			

	15. Amount of revenue generated annually *(including Island Councils and target communities)* from the *nonconsumptive* use of coastal zone resources.	Nonouti AU$ 0 Abemama AU$ 0 Maiana AU$ 0	Nonouti AU$ 15,000 (~US$ 11,200) Abemama AU$ 5,000 (~US$ 3,750) Maiana AU$ 5,000 (US$ 3,750)	*Much effort had gone into preparing the 3 pilot islands for eco-tourism since November 2021 when international travel restrictions were lifted. Achievement was just below targets for the 3 pilot islands from zero in 2020.*	*See Para 107*	
	16. Number of food crops, including traditional food crops, planted at each target village.	Surveys indicate that villages on target islands typically have 2 crops planted.	Nonouti At least 5 varieties per village Abemama At least 5 varieties per village Maiana At least 5 varieties per village	*5 varieties of traditional crops per village for all villages of the 3 pilot islands has been achieved*	*See Para 108*	5
Overall Rating – Component 2						**4**

- National coastal EBA-guidelines were developed remotely by an international expert (professor from an Australian university with prior knowledge of Kiribati) and finalized in December 2022 based on inputs from island participants (from a GEF 7 National Dialogue held in February 2020 with elders, mayors, youth, traditional healers fishermen and farmers), reviews from 2 advisors, and inputs from MELAD and MFMRD. Multi-sector review and finalization was delayed due to COVID-19 restrictions. Endorsement is expected in Q1 2023 with translation of these Guidelines into local language for appropriate reference at national level.

100. With regards to Indicator 9: Number of vulnerability assessments completed, the following issues were revealed:

- 3 Integrated Vulnerability Assessments reports (IVAs) were initiated in 2017 and 2018 finalized as per the methodology established by the Kiribati National Expert Group on Climate Change (KNEG). However, these reports were supplementary with environmental emphasis that do not have comprehensive coverage as ECD would endorse. All questionnaire results for Nonouti have been entered into the CSPro database MELAD also tried to carry out supplementary surveys but these were not fully completed;
- Analysis of Nonouti IVA supplementary data collection resulted in a draft report in 2021. IVArelated field work at Abemama was undertaken in November 2022 while IVA-related field work for Maiana was undertaken in early January 2023;
- Data and analysis of the IVA are being used for Indicator 1 to inform implementation of ISPs;
- These reports are to be submitted to KNEG following a national endorsement procedure.

101. Indicator 10: Hectares of coastal zone: i) Regulated through fishing management zoning system as a result of national regulatory tool adopted by GoK, has been fully achieved with the following issues revealed:

- the 3 pilot islands are 100% regulated in 2020 through a fishing management zoning system as a result of the adoption of the ISPs for each of the 3 pilot islands, covering the entire land and sea territories (lagoon plus 3 nautical miles from island oceanward). ISPs contain plans to destructive fishing methods that bans fishing during spawn runs, designate protected areas, closing areas where restocking of bivalves and sea cucumber had been implemented, reflected in a by-law;
- coastal zones regulated through fishing management zoning system that includes Nonouti (128,138 ha), Abemama (65,112 ha) and Maiana (51,920 ha);
- monitoring and regulation enforcement by Island Council Fisheries is supported with a marine patrol boat and training of boatmen on safe handling and maintenance of boats;
- the Project supported development of marine spatial plans with GIS officers.

102. Indicator 10: Hectares of coastal zone: ii) Protected in fish recovery zones developed using national guidelines for ecosystem-based adaptation management, has been fully achieved:

- Marine Protected Areas or fish recovery zones have been established, mapped, and demarcated on each pilot island, exceeding targets. The MPAs were established in 2021 and governed by

Community-Based Fisheries Management Plans. MPAs were developed using national guidelines for ecosystem-based adaptation management:

- MPAs include Nonouti at 14,136 ha (11% of regulated coastal zone), Abemama at 1,912 ha (13% of regulated coastal zone) and Maiana at 2,069 ha (28% of regulated coastal zone). However, the physical setup of 30-40 % of these MPAs was affected by uncertainty of fund availability, missing community availabilities, and timely purchase of the MPA boundary borders;
- Involved communities have expressed great interest in managing their coastal marine resources. and are receiving support to implement their plans through enforcement of fish recovery times, translocation of species waste management, awareness of fisheries management and fisheries measures, monitoring surveys 3 times a year to monitor the impacts of seasonal closures during spawn run.

103. Indicator 11: Increase in hectares of mangrove habitat as reported annually by Island Councils using the national adaptation and monitoring tool, has been partly achieved with the following issues revealed:

- Mangroves were planted in 2021 including Maiana (137,056 mangrove seedlings were planted, covering 123.35 ha of coastal area), Nonouti (10,491 mangrove planted, covering 9.44 ha of coastal area) and Abemama (1,900 mangrove seedlings planted, covering 1.71 ha of coastal area);
- There were issues, however, with the survival of many of the transplanted mangroves planted since 2018. Survival rates of transplanted mangroves was 80% for Nonouti, 73% for Abemama and 94% for Maiana;
- In Abemama, transplants did not survive including Reina and Tanimainuku villages where there was a playground for kids and soccer during low tide. Low survival rate is also due to lack of monitoring from both the Environment sector and communities. *Mangroves that survived were planted in January 2022 by a volunteer older man who cared for the plants*. Algae is the main cause of mangrove mortality, with only one surviving mangrove on the lagoon side, where one of the participants used to clean the mangrove on a daily basis;
- In Maiana, transplanted mangroves at Tebangetua village (Government centre) had very low survival rates likely due to storms and algae, and unsuitable site selection for planting. There was the possibility that fishermen may unknowingly killed the mangroves while fishing;
- Lessons from the mangrove plantation efforts have been used in the development of EbA guidelines. To overcome poor knowledge and capacities for site selection, the guidelines recommended a mangrove sea level rise vulnerability assessment for selected sites;
- In 2020, new mangrove nursery established at South-Tarawa (ECD yard) with more than 1,500 seedlings for translocation. Trials were conducted at South Tarawa to increase mangrove hypocotyls' survival rate, using improved transplanting techniques at various planting sites;
- In 2021, mangrove and beach re-vegetation training was conducted that has proven to be an effective incentive to engage communities and youth in schools;
- Target of 5% increase was not met as pointed out at in the MTR. However, the Project aimed to achieve 0.7-1% increase and to collect lessons that contribute to improved guidelines for soft coastal protection.

104. Indicator 12: Number of by-laws on fisheries conservation adopted on each target island has been partly achieved with the following issues revealed:

- A number of by-laws on fisheries conservation were adopted on each target island (0 endorsed but 20 drafted for 3 pilot islands)
- A draft by-law has been agreed to in Maiana which has 4 fisheries provisions, 6 land provisions, 4 cultural provisions focusing on local food management, 2 formal education provisions and 1 quality standard of local products provision;
- A draft by-law has been agreed to in Nonouti and Abemama each of which has 8 fisheries provisions as well as land provisions, cultural provisions focusing on local food management, formal education provisions and quality standard of local products provision;
- By-laws for Nonouti, Maiana and Abemama have been finalized and signed by the Island Councils in Q1 2023, pending final signature by MIA;
- Enforcement training was held for village wardens at Maiana in Q3 2022 aided by legal advisors from OAG, and attended by village wardens, special constables and all police officers on the island. The same training was undertaken in December 2022 at both Nonouti and Abemama;
- By-laws are developed based on ISPs and not limited to fisheries, but inclusive of all island strategic development priorities.

105. Indicator 13: Number of existing commercial fishing operators with permits allocated and monitored based upon implementation of coastal zone fisheries conservation by-laws, has been 75% achieved with the following issues revealed:

- The number of existing commercial fishing operators with permits allocated and monitored based upon implementation of coastal zone fisheries conservation by-laws is in progress;
- One multi-sector consultation was held with the Office of the Attorney General (OAG) to align this permit with existing by-laws (indicator 12). Island Councils can issue any business permit whether for commercial fisheries licenses or otherwise, as advised by the OAG;
- The tourism business levy was approved by Cabinet in Q3 2021. The International Sustainable Tourism Levy charges international visitors with a 50 AUD levy upon arrival at Kiribati international airports (TRW and CXI). This payment will be managed by the Tourism Authority of Kiribati. AUD15 will be allocated to the Fisheries Department to cater for the cost of fishing licences and the fishing conservation and marine resource management programs. Implementation awaits options of either a revenue subsidy (in 2022) or full implementation of tourism licences (in 2023). The by-law formulation supports tourism operations and business plan development of eco-tourism operators;
- a sustainable fisheries management plan was developed for recreational game fishing on pilot islands;
- Ministry of Fisheries developed a fishery management plan for certain species (as stipulated under section 6 of the Fisheries Act 2010) to address the management of fisheries for commercial (section 14b under the Fisheries Act) or recreational activities. This was endorsed by Cabinet as a Designated Fishery Notice. This management plan included spawning area closures, seasonal closures, quota systems, and other management measures;

- When finalized, national authorities can issue permits to interested commercial operators allowing recreational fisheries, whereas island by-laws (indicator 12) will enable Island Councils to issue licenses for recreational fisheries activities within the respective island territory including closed area permit, commercial permit, and game fishing permit.

106. Indicator 14: Capacity score of Fisheries Conservation Field School participants increases based upon GEF Capacity Result 2 (Capacities to generate, access and use information knowledge), was achieved with the following issues:

- In July 2022, CR2 capacity scores of pilot island communities was assessed at 14 (target 10). A final assessment of GEF CR2 capacity scores of pilot island communities was carried out at the EOP[15]. This includes a household awareness survey conducted at Maiana and Abemama between December 2021 and February 2022 by the Project communication team that indicates 70% of respondents were aware of climate change as a global challenge and around 50% were aware of possible global solutions;
- Training activities delivered by extension officers took place between 2020 and 2022 that increased community awareness and capacities. Some of the fisheries and aquaculture related activities included:
  - community-based fisheries management mapping on various habitats of the marine finfish resources, especially during spawning to plan closed MPAs and closed seasons;
  - catch monitoring in Nonouti to build community capacity to know of the impacts of overharvesting on their future resources;
  - restocking Nonouti MPAs with sandfish, clams arkshell; ○ hands-on training on basic sandfish farming management practices at Abemama; ○ training in seaweed farming at selected communities on 3 pilot islands with monitoring;
  - awareness in fisheries management in Abemama with 480 students; ○ coral planting and sea grass restoration at Abemama and Maiana;
  - set up of co-operatives for fisheries post-harvest and cooking involving the promotion of seagrape preparation in Abemama for 200 people;
  - collection and aggregation of giant clams (H.hippopus) for stimulating natural spawning to increase food sources in Maiana;
  - monitoring of translocated ark shells from Abemama to Nonouti and within Abemama with a 95% survival rate using cages;
  - monitoring of farmed sea cucumbers at Tabiang village in Abemama; ○ predator eradication related to milkfish farming;
  - ToT of teachers co-financed from the TW programme and SPC project where resource kits for teachers and materials were developed.
- Some of the environment-related training activities also delivered by extension officers that increased community awareness and capacities between 2020 and 2022 included: ○ rodent control in Abemama;
  - environment training on construction of soft coastal protection measures in Buibui and cleaning and protection of mangrove plants from both algae and debris in Abemama;
  - mangrove plantation and beach re-vegetation and monitoring;

107. Indicator 15: Amount of revenue generated annually (including Island Councils and target communities) from the non-consumptive use of coastal zone resources, was only partially achieved:

[15] Strict following of this indicator was difficult at the island level if certain participants were chosen to attend trainings for later assessments. This is politically incorrect in any island setting in Kiribati because the communities chose their own participants for each training and cannot choose the same participants that would exclude others to join later. This was the reason for openended trainings used to address this indicator, hence, the lower scores.

- Due to Covid-19 international travel restrictions since March 2020, amount of revenue generated annually was zero in 2020 from the non-consumptive use of coastal zone resources for all 3 pilot islands. This included cancellation of planned game-fishing tourism-trips. The international borders only reopened from 1 August 2022 with quarantine requirements suspended. Currently,

there are domestic/expat tourism packages being promoted with eco-tourism capacity development of communities on the 3 pilot islands;

- In 2019, Nonouti achieved the Project target through revenue from international fly-fishing tourism. However, from 2020 to 2022, the target was not achieved;
- In 2019, Abemama attained 60% of the target. In March 2021, US$1,750 (46% of the target) was generated at Abemama at a Cultural Trade Fair held, attended by 1,952 people. Due to lack of international visitors, the Cultural Fair had visits mostly from locals and expats;
- In 2020, the 2nd Bonefish Flyfishing assessment was conducted in Abemama by qualified local fishing guide. The assessment confirmed scarcity of bonefish within the lagoon due to overfishing, and insufficient bonefish stock for gamefishing. The assessment recommended species recovery by banning splashfishing allowing recovery within 2 years. This led to a joint effort between Tourism and Community based Fisheries to establish the Abatiku islet as an MPA for bonefish conservation;
- Abemama conducted a trial of cultural night and local culinary experience on a community-based cultural package at Reina Village where revenue was generated to the village from 12 customers;
- In 2019, Maiana attained 40% of the target;
- Preparations for fly-fishing tourism and ecotourism has continued on the pilot islands between 2020 and 2022 through support from the Tourism and Commerce sectors including registration of new businesses, setting up community cooperatives for new income generating initiatives, awareness raising for compliance with business law, and development of eco-tourism plans;
- Some of the tourism-related training activities between 2020 and 2022 included: ○ training in boat safety and first aid for fishermen and tour guide operators; ○ assistance to local communities for launching of eco-tourism products;
    - ○ training on ecotourism (community sustainable tourism), tour guiding, customer service, front office, housekeeping and baking in Abemama in Reina and Baretoa villages and to the existing accommodation providers in June 2020;
    - ○ training on ecotourism, first aid, boat safety, pastry and tour guiding for gamefishing tour guides at Maiana;
    - ○ cultural rehabilitation consultation by Culture and Tourism at Abemama and Nonouti; ○ development of ecotourism plans;
- Some of the training activities related to commerce and business issues for income-generation between 2020 and 2022 included:
    - ○ financial literacy training for establishing income generating initiatives;
    - ○ handicraft trainees producing many items which were presented at national trade fairs in Tarawa; ○ business awareness raising at Maiana

    and Nonouti; ○ e-commerce.

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108. Indicator 16: Number of food crops, including traditional food crops, planted at each target village, was achieved:

- In 2022, the target of >5 varieties of traditional crops per village of all villages of the 3 pilot islands has been achieved. This includes 15,089 native food crops (33-60 different varieties) such as coconut, breadfruit, pandanus and swamp taro, planted across all 36 villages on 3 pilot islands:
  - Nonouti: 4,480 crops planted with 59 different varieties of 5 native crops; ○ Abemama: 4,273 crops planted with 33 different varieties of 5 native crops; ○ Maiana: 6,336 crops planted with 60 different varieties of 5 native crops; The Project is supporting home and school gardening with plantation of 15 varieties of vegetables and fruits at household and schools to further increase the production of food;
- 400 poultry and 40 pigs were raised in 2 villages in Abemama and 4 villages in Nonouti complete with piggery and poultry management capacity building;
- The only team visit conducted was the Culture and Museum Division (CMD) team who went to Abemama. The team managed to continue with planting and cultivation activities of local plants and crops (such as fig trees (te bero), breadfruit trees, pandanus trees, coconut trees and te giant swamp taro) to promote and support food security and preservation of culture, and considering that such plants and crops that can provide nutritious foods for many generations;
- There was increased participation of local communities in cultural practices targeting fishing skills that are ways to safeguard marine resources. This activity aimed at enhancing community engagement and participation in local agricultural activities targeting all households specifically for varieties of long term native plants that may help to enhance food security at the island level;
- Booklets and videos have been published gathering traditional knowledge for each of the 3 pilot islands related to crop cultivation, food preparation and processing (seasonal fruits, finfish and invertebrates), food preservation and storage, processing of fish for preservation (drying and salting), production of traditional medicine from vegetation (stem, leaves and roots), traditional arts/skills for toddy cutting, production and weaving of mats from raw materials, fishing methods (netting) and fishing seasons, traditional navigation and weather forecasting for fishing, traditional construction, and traditional culture (dancing and music instruments);
- Monitoring surveys are regularly undertaken to assess survival of seedlings to sustain plantation efforts. The Project has engaged Inventory Stocktakers in villages (Maiana) to support Agriculture Extension staff, as well as Youth stocktakers in each village to collect data in the 3 pilot islands;
- Two rounds of visits to all pilot islands by ALD staff in 2023 on both restocking of plants and livestock husbandry management was conducted to introduce new exotic varieties;
- A cultural trade fair was undertaken in January 2023 at Nonouti to display local food varieties, preservatives and launching of publications;
- Some of the agriculture-related training activities between 2020 and 2022 included:
  - post-harvest and value-added training for communities to diversify their products and address sustainable livelihood and food security options through hands on demonstrations; ○ training of farmers on livestock management on all pilot islands. This included piggery and poultry training including dry litter piggery system for making compost. Training was held at Nonouri for 100 people;

- on-the-job training of youth inventory stocktakers on farming of perennial crops and shortterm food crops. This included 12 from Maiana, 14 from Abemama and 10 from Nonouti;
- crop plantation and monitoring;
- traditional food preservation methods and other knowledge and skills vital in building resilience against climate change. This involved filming of traditional skills related to making local preserved foods, local medicines, and local handicrafts. The documented knowledge was used for teaching resources and promotional at international events;
- establishment of an agricultural association; ○ a lessons learned report on crop plantation was produced in January 2021.

109. In conclusion, the results of Outcome 2 can be rated as **satisfactory** based on the achievement of most targets.

3.3.4 Relevance

110. The Kiribati LDCF-FSCC Project is rated as **relevant** due to:

- the Government of Kiribati's comprehensive Kiribati Development Plan (KDP 2016-2019);
- Kiribati's 20-year Vision (KV20);
- Kiribati Climate Change Policy (KCCP, draft 2017);
- Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management 2014-2023 (KJIP, reviewed 2018), which is the National Adaptation Plan (NAP) document that sets out the national framework for integrating CCA and DRM considerations into existing national and sector strategies [16] including a 9-year plan for advancing climate change adaptation and reducing disaster risk that is closely aligned with the national vision for sustainable development, identifying increasing water and food security, all to promote healthy and resilient ecosystems as one of the plan's 12 key strategies;
- GEF programmes, specifically:
  - Objective CCA-1 - Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level;
  - Objective CCA-2 - Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level.
- UNDAF Outcome 1.1 (Sub-Regional Programme Outcome 4): Improved resilience of Kiribati by 2017with particular focus on communities through integrated implementation of sustainable environment management, climate change adaptation and disaster risk management;
- SDGs including: 1 (No poverty), 2 (Zero hunger), 3 (Good health and well-being), 5 (Gender equality), 6 (Clean water and sanitation), 8 (Decent work and economic growth), 10 (Reduced inequalities), 12 (Responsible consumption and production), 13 (Climate action), 14 (Life Below Water), 15 (Life on Land), 17 (Partnerships for the Goals).

[16] These documents supersede and complement previous policy documents, such as the National Adaptation Programme of Action (NAPA 2007) and the National Disaster Risk Management Action Plan (2012).

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3.3.5 Effectiveness

111. The effectiveness of the LDCF-FSCC has been rated as **moderately satisfactory.** Legislative and institutional aspects were strengthened:

- A Fisheries regulation was developed with Project assistance in late 2019, aimed at assisting the communities from over harvesting the fisheries;
- Government staff capacities have increased significantly in their understanding on:
  - by-laws which involved increased cross-sectoral capacities involving various MIA, MFMRD, MELAD, MTCIC and others plus Office of the Attorney General; ○
  EbA guidelines for MELAD;
  - the importance of eco-tourism to the extent that it played huge role in the development of the Kiribati Sustainable and Tourism Framework. This led to the ADB engagement in assisting with the development of the National Sustainable Tourism Policy and strategy for Kiribati;
- There has been nationwide interest and increases in MPAs as a result of successful pilot island MPAs initiatives;
- MIA has built official capacity on how to formulate ISPs;

KNEG formulated IVAs;

- Culture and Museum Division worked with communities on existing traditional knowledge on food processing skills increasing the capacities of government personnel.

112. Community capacities were strengthened to react to climate change and disaster risk manage ment:

- There was an outstanding campaign and awareness programs on Project activities at the community level, reportedly better than other similar projects;
- Early Warning System and weather and climate information systems were strengthened for the 3 pilot islands with AWSs installed to strengthen both forecasting capacities and Early Warning Mechanisms of communities;
- There is some in-depth knowledge of likely impacts of climate change and disaster risk in pilot Island community over the short, medium or long-term. Information on climate change, adaptation strategies and disaster preparedness were communicated in ways that were meaningful or relevant to the local context. With island level stakeholders, including council members, extension officers and community members themselves, actively involved in identifying their major concerns and preferred solutions, there should be sufficient ownership or engagement to sustain CCA interventions;
- From a commercial perspective, the Project has enabled people in the outer islands to rely on existing natural resources to support their daily living against the effect of climate change. People now have the knowledge and skills to utilize and maximize benefits from their natural resources for their livelihood and are able to be more self-reliant in the face of climate change;

- Delivery of a study on traditional crops to improve livelihoods of pilot communities on food security and management of resources helped to strengthen pilot communities. The study informed decisionmakers on their policies who used the study as a guide in dealing with development partners regarding other environment and climate change programs;
- Most importantly, the pilot communities had knowledge towards improved management in maintaining the ecological integrity of each pilot island.

113. There were also some effectiveness issues:

- Notwithstanding the capacities built by the Project for CCA and DRM, there is still limited knowledge and lack of understanding amongst many government officials across all sectors on how to mainstream CCA and DRM into island mandates. This includes a limited understanding of some government officials in the context of gender equity and social inclusion factors in CCA and DRM and knowing what is needed. As a result, there are only pockets of expertise built for KJIP implementation with better coordination and communication mechanisms needed for "wholeof-island" approaches and IVA-processes;
- Island Councils members do not have the capacity and experience required to utilize their authority to ensure comprehensive and strategic resource management and planning. As a result, most projects are implemented with involvement sector extension officers and NGOs, with only some control or ownership by the Island Council;
- Notwithstanding pilot Island communities where there is some in-depth knowledge of the likely impacts of climate change and disaster risk, very little of this information is shared with other local communities on other islands. This was reflected in the lack of participants in sustainability planning that does not bode well for sustaining skills and knowledge gained through trainings;
- Notwithstanding efforts made by the Project to include women, youth and vulnerable groups (such as people with disabilities) on pilot island communities in LDCF-FSCC Project activities, women and youth were not as actively or equally engaged in planning and decision-making processes as targeted. Kiribati customs are still very strong on males (husbands, fathers and brothers) voicing women's concerns and viewpoints;
- Data management and monitoring is still insufficient across all government levels, due to poor internet connections that limits information sharing and connectivity of Kiribati's outer islands. The GoK pledges to improve internet connectivity for the outer islands, notwithstanding the immense distances. The AMAT system is supposed to be commissioned in early 2023. Without the AMAT system, monitoring is very challenging with no formalized mechanisms or support tools in place to effectively monitor KJIP in the evaluation of CCA and DRM interventions. This limits adaptive feedback management and learning to KJIP objectives, and ISPs. There have been several CCA and DRM projects in Kiribati, but often have been implemented in isolation with little knowledge transfer, including this LDCF-FSCC Project. There is hope that the AMAT system will overcome this issue;
- There is an issue with delays in procurement of tools and equipment for communities to fully maximize stakeholder skills and knowledge to become more resilient to climate change, notwithstanding substantial training being done in agricultural and marine production;
- The increase in copra subsidies is not conducive to encouraging production of coconut valueadded products;

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- The lack of capacity to overcome bad weather and storm surges that wash away mangroves in efforts to provide coastal protection for Maiana Island that is very interested in coastal afforestation;
- There is a segment of the population that do not appreciate the works done by MELAD and the Project. The extent of this dissatisfaction is not known.

114. Overall, there is ample evidence of the Project contributing towards improved management in maintaining the ecological integrity of each pilot island. The Project been effective in formulating national policies on improved management of fisheries which is now being enforced. There has been progress made towards achievement of the intended outcomes. It has also been effective in contributing to increased gender equality in pilot island communities by improving capacities of both men and women, and in particular empowering women to increasingly contribute to household earnings and family health and well-being. Despite the contribution of Project partners and other organizations to intended outcomes, there has been the limited sharing of Project knowledge within the government, pilot Island communities and to outside Island communities. There is dissatisfaction amongst a certain segment of the population on the pilot islands that do not appreciate the works done by MELAD and the Project.

3.3.6 Efficiency

115. While capacities and knowledge bases were built for all community and government stakeholders, the efficiency of the LDCF-FSCC Project has been **moderately satisfactory** for a range of reasons including:

- each island community have their own priorities that clashes with Project needs that delays government support;
- Island councils have limitations including:

○ limited national support for Island Councils; ○ technical knowledge of an Island Project Officer is largely determined by their skill set; ○ there are no procedures in place to transfer or retain knowledge when Island Project

Officers are transferred every 4 years; ○ no financial capacities to manage their activities, placing a dependency on resource people from Tarawa;

- stringent procurement requirements which undermined the commitments made for the training and resources;
- outer island missions being delayed due to delayed receipt of funds and internal clearances from administration departments of respective ministries. This led to flight bookings not being guaranteed;
- COVID-19 related delays that severely restricted implementation of activities due to logistical issues, beyond the control of the Project;
- community being divided on which Project consultation to attend stakeholders when several Project teams are visiting at one time on the same trip;
- shortage of fuel in the pilot islands;
- financial delays from UNDP due to implementation halt during UNDP's Micro-HACT assessment of a contractor in 2021 and lengthy approval and transfer time of funds to Kiribati;
- miscommunication by Island council staff in distributing information to target participants.

116. Overall, the approaches, resources, and conceptual framework to the Project were relevant to achieving the intended outcomes. However, Project expenditures took more than 3 years to reach intended levels of expenditure (for the aforementioned reasons in Para 115) that resulted in late delivery of many of the outputs. Despite these delays, there has been economical use of financial and human resources and strategic allocation of resources (funds, human resources, time, expertise). Monitoring and evaluation systems of the Project has assisted in helping that activities and outputs were managed efficiently and effectively as possible given the delay circumstances. No alternative approaches were considered in delivery of the Project outputs and outcomes.

3.3.7 Overall Project Outcome

117. The overall Project outcome of the LDCF-FSCC Project has been rated as **satisfactory**:

- A regulation was promulgated in 2019 aiming to conserve fisheries resources through bans on splash fishing, and fishing during spawning runs as well as fisheries by-laws for the 3 pilot Island communities, signed off by Island Councils;
- Management Committees were established by Island villages to implement their ISPs which included awareness and training programmes for coastal protection measures, livestock provision to the islands, and access to clean water;
- There was extensive capacity building training for enforcement of the Fisheries Regulation in 2019 and agriculture that included fisheries and agricultural extension staff. However, their capacities were not built to targeted levels (Para 95, 6th bullet);
- There were over 16,000 men and over 14,000 women who were Project beneficiaries who were engaged in training, awareness-raising and education, pilot villages, delivery of Project initiatives. The result was that their capacities were built for food security and resilience to climate change;

- Monitoring and regulation enforcement of the Fisheries Regulation resulted in positive impacts on marine resources being observed by island fisheries extension staff and communities and strong interest by communities in managing their coastal marine resources;
- Preparations for fly-fishing tourism and ecotourism continued on the pilot islands between 2020 and 2022 through support from the Tourism and Commerce sectors including registration of new businesses, setting up community cooperatives for new income generating initiatives, awareness raising for compliance with business law;
- A program to transplant mangroves had many issues with survival since 2018 (Para 103);
- 15,089 native food crops with 60 different varieties were planted across all 36 villages on the 3 pilot islands. This included coconut, breadfruit, pandanus and swamp taro.

3.3.8 Sustainability of Project Outcomes

118. In assessing sustainability of the LDCF-FSCC Project, the evaluators asked "how likely will the LDCFFSCC outcomes be sustained beyond Project termination?" Sustainability of these outcomes was evaluated in the dimensions of financial resources, socio-political risks, institutional framework and governance, and environmental factors, using a simple ranking scheme:

- *4 = Likely (L):* negligible risks to sustainability;
- *3 = Moderately Likely (ML):* moderate risks to sustainability;
- *2 = Moderately Unlikely (MU):* significant risks to sustainability; • *1 = Unlikely (U):* severe risks to sustainability; and
- *U/A = unable to assess*.

Overall rating is equivalent to the lowest sustainability ranking score of the 4 dimensions as summarized in Table 11.

119. *The overall LDCF-FSCC sustainability rating is moderately likely (ML).* The primary determinant for LDCF-FSCC sustainability is the continued dependence on donors and MELAD recurrent budgets for external funding to carry out activities for the GoK and Island Councils. Otherwise, Project assistance was setup to support the drafting of the final version of the 2019 Fisheries Regulation, capacity building training for enforcement, and appropriate institutional capacities (extension officers and island council personnel) to ensure self-sufficiency after Project closure which will help the GoK sustain fisheries conservation and marine ecosystem integrity. Extension officers from fisheries and agriculture and island council personnel are committed to providing continuing support as funding is available.

3.3.9 Country Ownership

120. Country ownership is demonstrated through Kiribati's ratification of the UNFCCC in 1995 and the Kyoto Protocol in 2000, preparation of a National Adaptation Plan of Action submitted to UN FCCC in January 2007, and the KJIP 2019-2028 that supports implementation of holistic approaches on climate actions across multiple sectors and with stronger linkages among climate adaptation planning processes at national, sectoral and island levels (Para 110). KJIP is aligned and supportive of the Kiribati Vision for 20 years (KV20) and the Kiribati Development Plan (KDP). For effective and

efficiency in implementation, KJIP also aligns well with ministerial strategic plans and sectoral policies that are related to climate change and disaster risk management, further demonstrating country ownership.

Table 11: Assessment of Sustainability of Outcomes

Actual Outcomes against the SRF of June 2017	Assessment of Sustainability	Dimensions of Sustainability
Actual Outcome 1: Institutional capacities were developed to reduce vulnerability to climate change-induced food shortages for 3 pilot islands. This includes capacities built for MELAD, MFMRD, MIA and the Department of Culture and Museums.	• *Financial Resources:* Financing of training and re-training programmes for Government personnel is dependent on the ongoing project funded by the Australian Center for Agricultural Research (ACIAR) for fisheries, and MELAD recurrent budgets for agricultural nurseries. While funds do help with training, there is a risk that funding shortfalls may result in thorough training not be delivered to Government personnel; • *Socio-Political Risks:* All Government personnel do not have issues with having their capacities strengthened; • *Institutional Framework and Governance:* All Government personnel do not have issues with having their capacities strengthened; • *Environmental Factors:* Environmental factors were not issue in terms of sustainability. ***Overall Rating***	3 4 4 4 **3**
Actual Outcome 2: Several community adaptation measures have been implemented to increase food security.	• *Financial Resources:* Island community councils have no financial capacities to manage their activities meaning increased dependency on resource people from Tarawa (for example, MELAD recurrent budgets for agricultural nurseries and ACIAR for fisheries). While funds do help with activities for community adaptation measures, there is a risk that funding shortfalls may result in less community adaptation measures to increase food security; • *Socio-Political Risks:* Capacities have been built in pilot communities to advocate to other communities about the benefits of this Project and attracting other islands to seek assistance on similar projects and activities suit to their needs; • *Institutional Framework and Governance:* Several government ministries have had their capacities built to manage community adaptation measures; • *Environmental Factors:* Environmental factors were not issue in terms of sustainability. ***Overall Rating***	3 4 4 4 **3**
	Overall Rating of Project Sustainability:	**3**

3.3.10 Gender equality and women's empowerment

121. Traditionally, fishing is done by men with women using the knowledge and skills gained through Project awareness and training to contribute towards sustainable fishing practices and alternate sources of household income. Starting in 2019, efforts were made by the Project to monitor gender in extension programs where disaggregated data was generated to monitor women headed households, and women led economic and subsistence issues. Women were equally involved in the decision-making process for natural resource governance in Kiribati with the Project consulting women, men and youth for the development of ISPs, Community-Based Fisheries Management Plans, and Integrated Natural Resource Management Plans.

122. During 2020-2021, women were particularly involved in the consultation process prior to the establishment of fishing recovery zones, especially with regards to fishing closures, no harvesting zones for invertebrates. Efforts made to teach women planning and hospitality to alleviate the pressure on the fishing grounds and dwindling stock of in-shore fisheries, fin-fishes and invertebrates, resulted in more women becoming interested in fisheries management. Community training at Abemama on sandfish cultivation show that women are interested and were able to take a more active part in sustainable fisheries practices, where there are no longer traditional norms and gender roles restricting or discriminating women.

123. Fisheries monitoring results from 2020 indicate increased abundance of fish near-shore as compared to the Project baseline data due to the establishment of fish recovery zones and the prohibition of unsustainable fishing methods by the 2019 National Fisheries Regulation. Thus, with women involved in the establishment of fishing recovery zones, the Project has succeeded in protecting near-shore fisheries that are more accessible without motorized boats. This contributes to the enhancement of the Project outcomes of assisting in the resiliency of the marine resources, and improved access to fisheries for poorer and women-headed households who often do not have access to motorboats.

124. A series of Project-sponsored hospitality trainings on the 3 pilot islands has built the capacity and confidence of women (with females outnumbering males by a 4:1 ratio) with the Kiribati National Tourism Office providing work for women trainees in hotels and resorts in Kiribati. The newfound ability of women to contribute financially to their families has changed the perspectives of their husbands in their respective communities. This has also indirectly contributed to efforts to reduce gender-based violence through a mindset change of men in pilot island communities. In addition, women's opinions on their communities are given more attention and consideration.

125. Women groups were also targeted in capacity building related to handicraft production for incomegeneration (specifically organized in Nonouti with a total of 42 women) focusing on producing high quality products such as earrings and flower-decorations. Participants from the first handicraft training organized by the Project in 2018 that focused on products made from coconut, reported how the training had significantly improved their livelihoods with continued support from MTCIC for business registration, establishment of cooperatives, business plans, and participation in cultural trade fairs. More capacity building related to handicraft production was organized in 2022 for women's groups (in Abemama with a total of 38 women) that focused on producing high quality products with 90% local materials, showcasing the products at an event where products were

successfully sold, and registering their handicraft businesses as cooperatives. Participation in the National Trade Show provided opportunities for women from Maiana, Abemama and Nonouti to showcased their refined, diversified and improved quality handicraft products. In addition, the seamstresses in the textile small and micro businesses have improved their skills and complied to the mauri wear standards.

126. This has also allowed the Project to portray predominately female participants in a community-based fisheries management planning workshop that challenged the status quo that men are the decision makers, especially in a planning workshop for the significant marine resource given Kiribati's context. By increasing awareness of the need to rehabilitate marine resource and climate change, and participation of women in diversifying food security and income-generating activities, women are being empowered to contribute towards improved resilience.

127. Moreover, enhanced skills and knowledge of both men and women have led to better understanding and behavior towards coastal protection, sustainable fisheries, management of perennial crops and cultivation of food crops, and sustainable land management. Through gender-inclusive capacity development of islands communities related to sustainable fisheries management, sustainable agriculture and livestock, nutrition, environmental protection, small scale commercial production and marketing, and ecotourism, the Project has contributed to increased capacities of both men and women, livelihood diversification, and income-generating opportunities. This is evidenced by over 60% female employment within several ministries with women involved in decision-making. This is contributing to increased gender equality by improving capacities of both men and women, and in particular empowering women to increasingly contribute to household earnings and family health and well-being[17].

3.3.11 Cross-cutting issues

128. The main cross-cutting issues of the LDCF-FSCC Project is gender disaggregation as mentioned in Section 3.3.100. Under the SESP, the Project was rated under Category 3a where impacts and risks were limited in scale and identified with a reasonable degree of certainty and often handled through the application of best practices. No significant negative social or environmental issues were seen with this Project with the Project designed to have no measurable negative environmental or social impacts. Moreover, the Project improved environmental integrity and social welfare including advancements in gender equality (youths and women were always involved in all activities most notably in trainings for gardening provided by the Department of Agriculture, and in fisheries which was included in the school curriculum), participatory decision-making, and reduction of environmental degradation.

[17] There was training conducted on Maiana Island facilitated by the New Zealand funded Kiribati Solid Waste Management Programme Phase III (WMPPS) on the waste repurposing involving women from each village to improve their capacity to make use of waste by creating handicrafts from waste such as bottle and rice bags, instead of discharging it everywhere causing land and sea pollution.

3.3.12 GEF additionality

129. The issue of GEF additionality is quite clear on the LDCF-FSCC Project. Without the Project, there would be no activity towards sustainable fishing practices and alternate sources of household income.

3.3.13 Catalytic/Replication Effect

130. The catalytic and replication effect has been mixed. There has been enthusiasm for the works being done on this Project from all stakeholders from all pilot islands, and women's groups. However, the efforts of the Project still, to a large extent, are dependent on government and donor funding which has been lacking. To this end, the catalytic and replicating effect of the Project is somewhat restrained.

131. However, there are some developments on the replication front:

- pilot communities have the capacity to advocate to other communities about the benefits of the LDCF-FSCC Project that attracts other islands to seek assistance on similar projects and activities suit to their needs. However, there needs to be a mechanism to share information on the benefits of the LDCF-FSCC Project with these other islands;
- environment extension officers were hired in October 2022 for the 3 pilot islands with the expectation that this is to be replicated to other outer islands through MELAD government funding as part of the update of the Environment Act in 2022;
- there are plans to replicate the Fisheries monitoring programme and methodology of MFMRD in other outer islands;
- a Fisheries regulation was promulgated in late 2019, aiming to assist the communities from overharvesting MPAs. These results of pilot islands that were successful MPAs initiatives with the new regulation created nationwide interest to implement a similar initiative;
- a traditional crops study that informed decision makers on their policies to improve community livelihoods on food security and management of resources, was being used as a guide to deal with development partners regarding similar environment and climate change programs.

3.3.14 Progress to impact

132. The LDCF-FSCC Project is bringing positive impacts to the livelihood of 30,000 people in Maiana, Abemama and Nonouti as well as government personnel who assist in community transition to climate resilient activities. Progress to impact of the LDCF-FSCC Project has led to:

- the Coastal Zone Fisheries Regulation 2019 being enforced with fisheries by-laws for the 3 pilot islands having been finalized and signed off by Island Councils through co-financing from MFMRD;
- significant increases in Government staff capacities for:

- the Ministry of Fisheries where the delivery of on-the-job training was conducted for the MPA initiative. This was slow with interest catalyzed after the successful implementation of MPAs in some community villages that showed increase in marine resources. The re was also an emphasis on training of women to process and prepare recipe for marine products preservation (bottling and canning);
- Ministry of Internal Affairs to formulate ISPs and by-laws;
- Department of Agriculture and Livestock in delivering training for composting in agriculture; ○ Department of Culture in delivering teachings on using traditional methods for preserving food and planting; and
- Department of Tourism in their understanding and delivery of the importance of ecotourism;

133. The LDCF-FSCC Project have also had progress to impact of increased capacities of pilot communities to be more resilient to climate impacts by being able to:

- implement income generating activities using traditional methods to improve food security. This includes:
  - the Ministry of Fisheries training to women in bottling and canning marine products for preservation;
  - the Department of Agriculture and Livestock on training on composting for agriculture and producing local food produce; and
  - the Department of Culture on teaching traditional methods of preserving food and planting;
- start a business based on the common understanding of how the formal sector of business works, adhering to business compliant activities, and utilizing e-commerce platforms for selling their products. This has resulted in a number of small and microbusinesses emerging from the Project to provide economic benefits to local communities of the pilot islands;
- a significant proportion of small-micro businesses established and cooperative societies that have focused on improvements in the quality of handicraft products (such as mauri wear) and local food produce, and the launching of the products to link to national market operators;
- develop game fishing initiatives for pilot islands;
- develop by-laws and regulation of activities that foster food security;
- manage livestock and agriculture In island communities;
- gradually build their capacity to implement activities on their own rather than depending on resources from the government;
- encourage and promote the value of natural resources for their livelihood and not taking this for granted.

134. The only barriers that may prevent progress towards the long-term impact of the LDCF-FSCC Project of building adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change is:

- funding of capacity building of all stakeholders;
- the sharing of climate resilient knowledge of the 3 pilot islands with other islands in Kiribati; and

- convincing a certain dissatisfied segment of the population that the activities done by the MELAD and MFMRD are beneficial to them in terms of climate change resilience.

4. CONCLUSIONS, RECOMMENDATIONS AND LESSON

4.1 Main Findings

135. The achievement of the LDCF-FSCC Project-level targets is rated as **moderately satisfactory**. On the positive side, there is evidence of the LDCF-FSCC project making a positive impact on the livelihood of the people in Maiana, Abemama and Nonouti pilot community islands where the communities are more aware of the value and worth of their natural resources, are observing positive impacts on marine resources, and are expressing strong interest in managing their coastal marine resources (Para 117, 5th bullet). There are a number of people generating income in producing local food produce (agricultural and marine) and handicrafts. Towards the end of the Project, adoption of the e-commerce platforms for selling their products has contributed positively to enhancing the marketing of their products. There are small and microbusinesses emerging since the inception of the Project which have provided economic benefits to the local communities in the pilot islands. Several small-micro businesses have been established with cooperative societies focusing on handicraft and local food produce. The quality of handicrafts and local produce has improved since the beginning of the Project with improved handicrafts and produce exhibited, promoted and sold at the National Trade Show events. As well, government personnel expressed the opinions that their knowledge bases and capacities were built to assist these communities in implementing climate resilient activities.

136. However, there were issues related to these findings:

- there is some in-depth knowledge in pilot Island communities of likely impacts of climate change and disaster risk. However, very little of this information is shared with other local communities on other islands mainly due to the remoteness and large distances between many islands, limited and expensive transport options, and poor digital connectivity with the outer islands;
- there is still limited knowledge and lack of understanding amongst many government officials across all sectors on how to mainstream CCA and DRM into island mandates, an issue to be addressed by the current UNDP-GEF LDCF2-WoI project;
- despite substantial training done in agricultural and marine production, there is limited support for procurement of tools and equipment for the communities to fully maximize benefits from their skills and knowledge to become more resilient to climate change;
- data management and monitoring is still insufficient across all government levels, due to poor internet connections that limits information sharing and connectivity of Kiribati's outer islands. The GoK pledges to improve internet connectivity for the outer islands, notwithstanding the immense distances (Para 113, 5th bullet);
- increases in copra subsidies is not conducive to encouraging production of coconut value-added products;
- internal clearance for approval of outer island missions is delaying the implementation of activities.

4.2 Conclusions

137. Government personnel were generally very positive on the Project that enabled them to work closely with the pilot islands and deliver beneficial activities in fisheries, agriculture and tourism that was appreciated by communities. The collection of traditional food methodologies was one of the most successful activities delivered with the hope that sharing traditional food methodologies nationwide will enhance food security. From a commercial perspective, the impact of this Project has enabled some communities on pilot islands to become more self-reliant on existing natural resources to support their livelihoods against the effect of climate change.

138. Some communities were appreciative of the knowledge and skills to utilize and maximize benefits from their natural resources for their livelihood. However, there is also a segment of the population that did not appreciate the works done by MELAD, MFMRD and the Project, the extent of this dissatisfaction not known. Though GoK officials were able to share the knowledge and lessons from pilot islands with other outer islands, they could only do so if funding is available for work on other outer islands; otherwise, this knowledge would generally not be shared with other islands of Kiribati. Notwithstanding, the overall Project outcomes are rated as ***satisfactory*** based on Project proponents "powering" through all sort of difficulties in achieving the objective and outcomes. Most of the other less satisfactory ratings have much to do with circumstances beyond the control of the Project.

4.3 Recommendations

139. *Recommendation 1 (to UNDP and the Government of Kiribati): Incorporate lessons learned from the LDCF-FSCC Project into the current UNDP-GEF LDCF2-WoI project*. The LDCF-FSCC Project was a great model to help improve the livelihoods of the pilot island communities and lessons should be passed on:

- lessons learned from the LDCF-FSCC Project should be integrated into the LDCF2-WoI project on 5 new pilot island communities. For example, this would include lessons from mangrove plantation efforts used in the development of EbA guidelines (see Para 145);
- develop and maintain a sustainability plan of activities as immediate and urgent actions to ensure less barriers, risks and challenges that hinder coastal zone and agricultural land rehabilitation on the islands;
- technical and financial support should be provided to pilot island communities for sustainable agricultural and commercial farming methods that utilize idle lands and take advantage of the freight subsidy support from Government. This translates into support for: ○ the timely (to the extent possible) provision of tools and equipment for sustainable farming and commercial activities for SMEs;
    - replicating training or refresher training to ensure sustainable management to support food security (such as in Butaritari and Tabiteuea South);
    - continuing similar activities on the 5 pilot islands in replicating much of what was achieved in the LDCF-FSCC Project.

140. *Recommendation 2 (to UNDP): For subsequent projects to LDCF-FSCC, step up safeguard-related requirements as per UNDP's latest guidance to ensure that sufficient resources are allocated to conduct this work*. Unlike this LDCF-FSCC Project which did not have a "safeguards officer", the follow-up project should employ a "safeguards officer" to oversee the environmental and social aspects of the ongoing work that complies with the overall project objective. The safeguard position can also be combined with a gender position to ensure gender-related aspects of the Project are complied with.

141. *Recommendation 3 (to UNDP). Engage with the GoK to enforce co-financing commitments*. When the LDCF-FSCC Project was signed, in-kind co-financing was committed from the GoK. The notion of cofinancing, in particular investment mobilized, will evolve (as has been the case with the LDCF-FSCC Project). Co-financing from the GoK for this Terminal Evaluation should have been closely monitored. As a remedial action, co-financing for the UNDP-GEF LDCF2-WoI project should be closely monitored.

142. *Recommendation 4 (to UNDP and GoK): Formulate and implement a gender action plan that works with Island Councils and Assistant Social Welfare Officers (ASWOs) on all islands (from both the LDCFFSCC and LDCF2-WoI Projects) to implement culturally acceptable ways of directly engaging women and youth in all aspects of project planning and implementation*. This is a clear issue that needs efforts to resolve the gap in terms of participation and involvement of the MWYSA to address gender equity and social inclusion climate resilient activities, in particular, the different needs of men, women, youth and vulnerable groups at community-level. Focused group discussions with separate male and female focus groups should be conducted, with subsequent sharing of group results. This approach should work well to allow both men and women to discuss climate issues from their gender perspective.

4.4 Lessons Learned

143. *Lesson #1: Recruitment of an International Technical Advisor starting the first year of the Project and carrying through part-time at critical junctures of the project, would have greatly facilitated better coordination for implementation*. International technical assistance can support the project even during the pandemic. Experience from this Project as well as other projects currently under implementation in Kiribati have demonstrated that to a large degree, international technical assistance can be planned and executed through local in-country consultancy assistance combined with remote international technical assistance. This holds particularly for organizations and individuals with prior knowledge of Kiribati and established working relationships. International import limitations also pose a challenge to the project in terms of purchasing required equipment…

144. *Lesson #2: There is limited support to improve timely delivery of tools and equipment that are procured for communities*. While import of goods and materials is still possible, implementation delays are likely in case to be prolonged or further restricted, considering that the GoK is prioritizing imports of essential items such as food and health care supplies. This does not fully maximize benefits of stakeholder skills and knowledge to become more resilient to climate change despite substantial training having been done in improving production of agricultural and marine products. Despite the

risks of delays in the process of procurement, the only means of mitigating this issue is to request funds well in advance, and to undertake procurement tendering at the earliest dates possible.

145. *Lesson #3: Ensure site selection and planting of mangroves are undertaken with appropriate efforts that contribute to community participation and to soft coastal protection measures*. This would include lessons from mangrove plantation efforts used in the development of EbA guidelines where poor knowledge and capacities for site selection was one of the key issues. Recommendations were made for an IVA for a mangrove-sea level rise on all Kiribati islands. There are also lessons learned to crop plantations and livestock transfers for outer islands compiled in a January 2021 report.

146. *Lesson #4: The design of the LDCF-FSCC Project is applicable to the current UNDP-GEF LDCF2-WoI project*. Activities related to capacity building, knowledge sharing, community participation, livelihood diversification, and inclusion were all scheduled to be implemented. The only issues with the LDCF-FSCC design were external to the Project including delays caused by COVID-19 pandemic, dealing with the vast distances and logistics of travel, and personnel or extension officer shortages in remote islands.

APPENDIX A – MISSION TERMS OF REFERENCE FOR LDCF-FSCC PROJECT TERMINAL EVALUATION

Terms of Reference for ICs and RLAs through /GPN ExpRes

Services/Work Description: Team Leader, Kiribati

Project/Programme Title: Kiribati's Enhancing National Food Security in the Context of Global Change Project

Consultancy Title: Team Leader

Duty Station: Kiribati

Duration: 25-35 working days

Expected start date: 21 October 2022

1. BACKGROUND

Kiribati is a nation comprised of 33 atolls (21 inhabited) spread across a vast Pacific Ocean territory. The people of rural Kiribati are largely reliant upon a limited land base and coastal zone fisheries for both nutrition and livelihood.

As the population grows and climate change advances, the security of island resources will be challenged. Already, the ecosystem integrity upon which islanders depend for climate change resilience is being eroded. This is evinced by many factors including deteriorating quality of near-shore fisheries, degraded lagoon health, and reduced freshwater quality. The primary reason for this is that current management regimes for both atoll and lagoon resources are defined by open resource access. Active management, research and regulation of lagoon and on atoll resources is insufficient and climate change is exacerbating the situation, leaving the Kiribati communities highly vulnerable.

The project's objective is to build the adaptive capacity of vulnerable Kiribati communities to ensure food security under conditions of climate change. The project determines to do this through its two components. Under Component One, the project is assisting the Kiribati Government to address urgent institutional capacity building needs primarily on the national level.

Through Component Two, the project is assisting the Kiribati Government to address climate change vulnerabilities by implementing and demonstrating community-based adaptation measures. For this, the project selected the three atolls of Abemama, Nonouti and Maiana to set in place models for land and lagoon resources management that is predicated upon thoroughly consultative, informed planning and management processes. Through the process, the project intended to increase the communities general awareness on fisheries management and knowledge of climate change impacts. Using this knowledge and the establishment of community-based monitoring systems, which it is translating into island-wide vulnerability assessments, the project has assisted the communities to make well informed

decisions on natural resource use. The monitoring system is being linked to national level programming so that national level decision-making benefits from more broad-based information sources. The project supports the generation, adoption, and implementation of model council by-laws designed to be ecosystem inclusive and enhance ecosystem integrity. This model regulations are designed to be holistic, to include the management of fisheries, permitting, the provision of resource use reporting mechanisms, including that used for tourism.

All project activity will target the reduction of food security issues by setting in place capacities required for local communities to maintain and enhance ecosystem integrity. By project close, Kiribati should have operational models showing that food security, ecosystem integrity and climate change resilience can be enhanced through improved management approaches.

NOTE: Include details (a paragraph) on the impact of COVID-19 both on the country as a whole (number of cases, deaths, lockdown dates etc.) as well as the impact on the implementation of the project/ programme/ outcome being evaluated, if any.

Kiribati was COVID-19 free until 18 May 2021, when two cases were reported, both border quarantine cases. Since then 3,042 COVID-19 cases has been recorded. Out of the 3,042 cases, 13 individuals have died. The Kiribati Government in its preparedness effort against the COVID-19 situation, closed its international borders in March 2020. In addition to the international border closure, there were restrictions on travel within the islands of Kiribati as well. The international border specifically impeded progress towards indicator 15, the eco-tourism component of the project, and on indicator 3 for the delay on the automated weather stations real-time display monitors and accessories, its set up and its operationalization. At one point for a period of about two months, travels were restricted to the pilot islands. Within Tarawa and the pilot islands, gatherings were also discouraged and the number of people attending were limited to 20. This resulted in a halt on the implementation overall. Further to these, was the inability for the UNDP Country Office staff as well as the Regional Technical Advisor to conduct oversight missions in-country.

Repatriation flights were coordinated by the Kiribati Government, in September and November 2020, with adherence to the strict quarantine guidelines, there were no positive community cases. However, in early January this year (2022) at the re-opening of the Kiribati's international borders a flight carrying 54 passengers had 36 who tested positive upon arrival. On the 19th of January the Kiribati Government announced a nationwide curfew. This was followed by lockdown directive on the 22nd of January. In its effort to stifle COVID-19 transmission, the Kiribati Government has made the wearing of mask compulsory, with the curfew in place until the 18th of March. The government has received assistance from UNICEF to build the capacities of its frontline workers and strengthen their health system. It has also received assistance from the regional body, the Secretariat of the Pacific on the same. Foreign governments have assisted in providing vaccines such as Japan donating 56,000 doses of OxfordAstraZeneca COVID-19 vaccine.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK

TE PURPOSE

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments. Further to this, the objectives of the evaluation will be to:

- assess the achievement of project results supported by evidence (i.e. progress of project's outcome targets),

- assess the contribution and alignment of the project to relevant national development plan or environmental policies;
- assess the contribution of the project results towards the relevant outcome and output of the Sub Regional Programme Document (SRPD) & United Nation Pacific Strategy (UNPS/UNDAF)
- assess any cross cutting and gender issues
- examination on the use of funds and value for money
- Assess the impact of COVID-19 on project's implementation and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

1. TE APPROACH & METHODOLOGY

The TE report must provide evidence-based information that is credible, reliable and useful.

The TE team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE team is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to *(list)*; executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc. Additionally, the TE team is expected to conduct field missions to the 3 pilot islands of Abemama, Nonouti and Maiana. These will include canvassing the project sites' traditional villages/communities, fishing and/or farming communities. *(Adjust text if a mission will not take place. Describe the virtual tools that will be used. See additional text suggestions below.)* If international travel restrictions persist the project will engage a local counterpart to conduct the field missions facilitating the required interview by the international team lead.

The specific design and methodology for the TE should emerge from consultations between the TE team and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE team must, however, use gender-responsive methodologies and tools and ensure that

gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed between UNDP, stakeholders and the TE team.

The use of questionnaires, field visits and interviews, but the evaluation team should be able to revise the approach in consultation with the evaluation manager and key stakeholders. These changes in approach should be agreed and reflected clearly in the TE Inception Report.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

✞ *Additional Text to incorporate into this section, as relevant (please adjust as needed):*

As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Travel to the country has been restricted since 03/2020 and travel in the country is also restricted. If it is not possible to travel to or within the country for the TE mission then the TE team should develop a methodology that takes this into account the conduct of the TE virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation questionnaires. This should be detailed in the TE Inception Report and agreed with the Commissioning Unit.

If all or part of the TE is to be carried out virtually then consideration should be taken for stakeholder availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue as many government and national counterparts may be working from home. These limitations must be reflected in the final TE report.

If a data collection/field mission is not possible then remote interviews may be undertaken through telephone or online (skype, zoom etc.). International consultants can work remotely with national evaluator support in the field if it is safe for them to operate and travel. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.

A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the TE schedule. Equally, qualified and independent national consultants can be hired to undertake the TE and interviews in country as long as it is safe to do so.

2. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects

http://web.undp.org/evaluation/guidance.shtml#handbook.*)*. The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in ToR Annex C. The asterisk "(*)" indicates criteria for which a rating is required.

Findings

Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*) , socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect

- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for Kiribati's Food Security Project

Monitoring & Evaluation (M&E)	Rating[18]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	**Rating**
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	**Rating**
Relevance	

[18] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating

Financial resources	
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

TIMEFRAME

NOTE: Flexibility and delays should be included in the timeframe for the TE, with additional time for implementing the TE virtually recognizing possible delays in accessing stakeholder groups due to COVID-19. Consideration may be given to a time contingency should the evaluation be delayed in any way due to COVID-19.

The total duration of the TE will be approximately (average 25-35 working days) over a time period of (12 weeks) starting on (21 October, 2022) The tentative TE timeframe is as follows:

NOTE: Adjust the text in this column if a mission will not take place. The stakeholder interviews, if done virtually, may require a longer than usual time period. Please adjust the number of days and completion date to accommodate this.

3. Expected Outputs and deliverables

Timeframe	Activity
12 November 2022	Selection of TE team (GPN express roster for IC while procurement process for NC will be used)
15 November 2022	Preparation period for TE team (handover of documentation)
16 November 2022	Document review and preparation of TE Inception Report
18 November 2022	Finalization and Validation of TE Inception Report
20 November 2022	Latest start of TE mission, TE mission: stakeholder meetings, interviews, field visits, etc.
30 November 2022	Mission wrap-up meeting & presentation of initial findings; earliest end o TE mission
05 December 2022	Preparation of draft TE report
06 December 2022	Circulation of draft TE report for comments
20 December 2022	Incorporation of comments on draft TE report into Audit Trail & finalization of TE report
22 December 2022	Preparation and Issuance of Management Response
23 December 2022	Expected date of full TE completion

Options for site visits should be provided in the TE Inception Report.

3. TE DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	TE Inception Report	TE team clarifies objectives, methodology and timing of the TE	No later than 2 weeks before the TE mission: *(18 November 2022)*	TE team submits Inception Report to Commissioning Unit and project management
2	Presentation Initial Findings	End of TE mission: *(30 November 2022)*		TE team presents to Commissioning Unit and project management
3	Draft TE Report *guidelines on report* (*05 December*	Full draft report *(using* end of TE mission: reviewed by BPPS-GEF with annexes	Within 3 weeks of Commissioning Unit; *content in ToR Annex C)* *2022)*	TE team submits to RTA, Project Coordinating Unit, GEF OFP

5	Final TE Report* + submits both Audit Trail the TE details how all	Revised final report and TE Audit trail in which comments on draft received comments report: (*20* have (and have not) *December 2022)* been addressed in the final TE report *(See template in ToR Annex H)*	Within 1 week of receiving Commissioning Unit	TE team documents to the

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.[19]

4. Institutional arrangements/reporting lines

The principal responsibility for managing the TE resides with the Commissioning Unit, here the Integrated Results Management Unit, M&E Analyst. The Commissioning Unit for this project's TE is *(in the case of single-country projects, the Commissioning Unit is the UNDP Country Office).*
The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the TE team. The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

5. Experience and qualifications

Education

- Master's degree in *Environmental Studies* or other closely related field;

Experience

- Relevant experience with results-based management evaluation methodologies;
- At least 10 years of experience in evaluating international cooperation projects promoting climate change adaptation, food security, ecosystems based adaptation, coastal protection, fisheries and agricultural adaptation, natural resources governance or similar programs and projects.
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to Climate Change Adaptation;
- Experience in evaluating projects;

[19] Access at: http://web.undp.org/evaluation/guideline/section-6.shtml

- Experience working in the Pacific especially Kiribati
- Experience in relevant technical areas for at least *10 years;*
- Demonstrated understanding of issues related to gender and *Climate Change Adaptation;* experience in gender responsive evaluation and analysis;
- Excellent communication skills;
- Demonstrable analytical skills;
- Project evaluation/review experience within United Nations system will be considered an asset;

Language

- Fluency in written and spoken English.

EVALUATOR ETHICS

The TE team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

6. Payment Modality

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%:

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
- The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID19 and limitations to the TE, that deliverable or service will not be paid. However, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete

it due to circumstances beyond his/her control.

APPENDIX B – MISSION ITINERARY (FOR FEBRUARY-MARCH 2023)

#	Activity	Stakeholder involved	Place
2023 (Monday 20th February)			
1	Kick-off meeting with LDCF-FSCC team	UNDP	Zoom
2023 (Wednesday 22nd February)			
2	Interview with Senior Assistant Secretary at Ministry of Environment, Lands and Agriculture Development	UNDP consultants & MELAD	zoom
2023 (Thursday 23rd February)			
3	Interview with Project Coordinator of the Food Security & Climate Change Project	UNDP consultants & ECD, MELAD	zoom
2023 (Thursday, 23rd February)			
4	Interview with Director of the Environment and Conservation Division	UNDP consultants & ECD, MELAD	In-Person
2023 (Thursday, 23rd February)			
5	Interview with Component Manager of the Agriculture and Livestock Division	UNDP consultants & ALD, MELAD	Zoom
6	Interview with Director of the Meteorological Service at Office of the President	UNDP consultants & OB	zoom
2023 (Wednesday 1st March)			
7	Interview with the Senior Urban Management Officer at Ministry of Internal Affairs	UNDP consultants & MIA	zoom
8	Interview with Director, Culture and Museum Division	UNDP consultants & MIA	zoom

9	Interview with Tourism Authority of Kiribati CEO, DCEO and senior tourism officer (focused group)	UNDP consultants & TAK	zoom
2023 (Wednesday 1st March)			
10	Interview with Trade Promotion Officer	UNDP Consultants & Ministry of Commerce	zoom
2023 (Friday 3rd March)			
11	Interview with Ministry of Health officials (focus group)	UNDP consultants & Ministry of Health officials	zoom
12	Abemama Island Clerk	UNDP consultant and Island Council	Questionnaires filled
2023 (Monday 13th March)			
11	Nonouti Isand Clerk	UNDP Consultant & Nonouti Island Clerk	Questionnaires filled and submitted
2023 (Wednesday 15th March)			
12	Interview with UNDP PMU	UNDP consultants & UNDP PMU	zoom

Total number of meetings conducted: 12

APPENDIX C – LIST OF PERSONS INTERVIEWED

This is a listing of persons contacted in Tarawa, and LDCF-FSCC project locations visited by the National Evaluator (unless otherwise noted) during the Terminal Evaluation duration. The Evaluators regrets any omissions to this list[20].

1. Mrs. Tererei Abete – Project Coordinator, MELAD

[20] Note that some stakeholders such as Ministry of Health and Medical Services and Tourism Authority of Kiribati did a focus group discussion rather than individual interviews.

2. Mrs. Anne Erica Larsen – Senior Technical Adviser, UNDP
3. Mr. Kabuati Nakabuta, Senior Assistant Secretary, MELAD
4. Ms. Neneteiti Teariki Ruatu – Director CED, MELAD and GEF Focal Point
5. Mr. Kautu Ieretita – Component Manager ALD, MELAD
6. Ms. Regina Rostitaake – Senior Urban Management Officer, MIA
7. Ms. Marie Marae – Director Culture & Museum Division, MIA
8. Mr. Ueneta Torua – Director Meteorological Service, OB
9. Mr. Petero Manufolau, CEO Tourism Authority Kiribati
10. Ms. Reeti Onorio, Deputy CEO Tourism Authority Kiribati
11. Ms. Kiarake Karuaki, Tourism Officer, TAK
12. Ms. Agoango Fakaua, Trade Promotion Officer
13. Abemama Island Clerk
14. Nonouti Island Clerk
15. Ms. Emire Kabuta, Head of Nutrition

16. Mr. Eretii Timeon, Director Public Health

17. Mr. Rusiate Ratuniata, FSCC Project Management Analyst, UNDP

APPENDIX D – LIST OF DOCUMENTS REVIEWED

1. UNDP-GEF Project Document for "Enhancing national food security in the context of global climate change in Kiribati (LDCF-FSCC Project) PIMS 4570";
2. UNDP-GEF PIF for "Enhancing national food security in the context of global climate change", April 2013;
3. 2017-2022 PIRs;
4. QPRs from 2017 to Q4 2022;
5. AWPs from 2016 to 2022;
6. PSC meeting minutes from September 2016 to December 2021;
7. MTR for "Enhancing National food security in the context of global climate change", September 2020;
8. UNDP-GEF MTR Management Response to MTR, 22 September 2020;

9. Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management 2019-2028 (KJIP), Government of Kiribati, 2014 and 2019;

10. National Adaptation Program of Action (NAPA), Republic of Kiribati, January 2007;

11. Kaongora Newsletter – Official E-Newsletter for the Kiribati National Tourism Office, 2017 and 2018;

12. Climate Change Adaptation - LDCF/SCCF - Adaptation Monitoring and Assessment Tool;

13. Financial Audit Report 2018 for "Enhancing National Food Security in the context of Global Climate Change {Project Id: 00087627 (Output No.: 00094574)}, Lochan & Co.- Chartered Accounts, 6 April 2019, UNDP;

14. United Nations Pacific Strategy 2018-2022.

Annex C: Evaluation Framework Matrix

Evaluative Questions	Indicators	Sources	Methodology
Project Design and Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?			
How well has the project aligned with government and agency priorities?	Number of stakeholders participating in project sponsored training sessions and meetings	PPG stakeholder meeting minutes Project designers PIRs	Desk review of PIRs and interviews with project designers, PMU, stakeholders
To what extent has the Project's selected method of delivery been appropriate to the development context?	Quality of outcomes and indicators on log frame	Project document	Desk review
Has the Project been influential in influencing national policies on management and rehabilitation of coastal zones to reduce the effects of climate change-induced impacts on food and nutrition security?	Number of stakeholders participating in PPG Number of stakeholders participating in project sponsored training sessions and meetings	PPG stakeholder meeting minutes Project designers PIRs	Desk review of PIRs and interviews with project designers, PMU, stakeholders

Evaluative Questions	Indicators	Sources	Methodology
To what extent was the theory of change presented in the outcome model a relevant and appropriate vision on which to base the initiatives?	Quality of outcomes and indicators on log frame	Project document	Desk review
To what extent was the project in line with the UNDP Strategic Plan, CPD, UNDAF, United Nations Sustainable Development Cooperation Framework (UNSDCF), SDGs, and donor strategic programming?	Effectiveness and efficiency ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review, interviews with PMU and stakeholders
Effectiveness:			
What evidence is there that the Project has contributed towards improved management and reasonable alternatives to maintain the ecological integrity of each island?	Effectiveness ratings of the project by the evaluation	PIRs	Desk review, interviews with PMU personnel
Has the FSCC Project been effective in influencing national policies on improved management and reasonable alternatives towards improved management and reasonable alternatives to maintain the ecological integrity of each island?	Effectiveness ratings of the project by the evaluation	PIRs and information from PMU personnel	Desk review, interviews with PMU personnel
To what extent have outcomes been achieved or has progress been made towards their achievement.	Adoption of strategies and policies Evidence of knowledge base and tools used to inform policy and developmental planning and decision-making (or commitment to do so) Evidence of improved awareness levels in ministries & professionals Training feedback;	Progress reports, PIRs, and information from PMU personnel	Desk review, interviews with PMU personnel

Evaluative Questions	Indicators	Sources	Methodology
What has been the contribution of partners and other organizations to the outcomes, and how effective have the programme partnerships been in contributing to achieving the outcome?	Adoption of strategies and policies Evidence of knowledge base and tools used to inform policy and developmental planning and decision-making (or commitment to do so) Evidence of improved awareness levels in ministries & professionals Training feedback	Survey of feedback of training sessions, testimonial evidence from training participants, and information from PMU personnel	Desk review, interviews with training participants, PMU personnel
What were the positive or negative, intended or unintended, changes brought about during project implementation?	Indicator targets of government and stakeholder strengthening	Survey of feedback of training sessions, testimonial evidence from training participants, and information from PMU personnel	Desk review, interviews with training participants, PMU personnel
What were the contributing factors and impediments that enhance or impede the project performance?	Indicator targets of government and stakeholder strengthening	Survey of feedback of training sessions, testimonial evidence from training participants, and information from PMU personnel	Desk review, interviews with training participants, PMU personnel
To what extent did the project contribute to gender equality, the empowerment of women, and/or a human-rights based approach?	Indicator targets of government and stakeholder strengthening	Survey of feedback of training sessions, testimonial evidence from training participants, and information from PMU personnel	Desk review, interviews with training participants, PMU personnel
Efficiency:			
To what extent are the approaches, resources, models, conceptual framework relevant to achieve the planned outcomes?	Efficiency ratings of the project by the evaluation	PPG stakeholder meeting minutes Project designers PPIRs	Desk review of PIRs and interviews with project designers, PMU, stakeholders

Evaluative Questions	Indicators	Sources	Methodology
To what extent were quality outputs delivered on time?	Efficiency ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Has there been an economical use of financial and human resources and strategic allocation of resources (funds, human resources, time, expertise, etc.)?	Efficiency ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Did the monitoring and evaluation systems that the Project has in place help to ensure that activities and outputs were managed efficiently and effectively?	Efficiency ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Were alternative approaches considered in designing the programme?	Efficiency ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?			
What is the likelihood that the Project interventions are sustainable?	Sustainability ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
What mechanisms have been set in place by the project to support the Government of Kiribati to sustain the results made through these interventions?	Evidence of government adopting policies sand strategies plans Quality / evidence of commitment (i.e. level and resource allocation)	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders

Evaluative Questions	Indicators	Sources	Methodology
To what extent has a sustainability strategy, including capacity development of key beneficiaries or national stakeholders, been developed or implemented?	Evidence of government adopting policies sand strategies into plans Quality / evidence of commitment (i.e. level and resource allocation)	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
To what extent have partners committed to providing continuing support?	Sustainability ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
What indications are there that the outcomes will be sustained, e.g., through requisite capacities (systems, structures, staff, etc.)?	Sustainability ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
What opportunities for financial sustainability exist?	Evidence of any innovative financial measures or incentives introduced	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
How has the project developed appropriate institutional capacity (systems, structures, staff, expertise, etc.) that will be self-sufficient after the project closure date?	Sustainability ratings of the project by the evaluation	PIRs Stakeholders (mainly government personnel)	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Impact			
What has happened because of the project?	Effectiveness ratings of the project by the evaluation	PIRs	Desk review of PIRs and interviews with project

Evaluative Questions	Indicators	Sources	Methodology
			designers, PMU, stakeholders
What real difference has the activity made to the beneficiaries?	Content of risk management in PIRs	PIRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders
How many people have benefited?	Content of risk management in PIRs	PIRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Were there contributions to changes in policy/legal/regulatory frameworks, including observed changes in capacities (awareness, knowledge, skills, infrastructure, monitoring systems, etc.) and governance architecture, including access to and use of information (laws, administrative bodies, trust building and conflict resolution processes, information-sharing systems, etc.)?	Adaptive management reporting in PIRs	PIRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Discuss any unintended impacts of the project (both positive and negative) and assess their overall scope and implications.	Annual financial disbursements against each component	PIRs, CDRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders
Identify barriers and risks that may prevent further progress towards long term impact;	Institutional arrangements of the Project	PIRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders

Evaluative Questions	Indicators	Sources	Methodology
Assess any real change in gender equality, e.g. access to and control of resources, decision-making power, division of labor, etc.	Institutional arrangements of the Project	PIRs and information from PMU personnel	Desk review of PIRs and interviews with project designers, PMU, stakeholders

APPENDIX E – STRATEGIC RESULTS FRAMEWORK FOR LDCF-FSCC KIRIBATI (FROM 14 JUNE 2017 INCEPTION REPORT)

Project Objectives	Indicator	Baseline	End of Project Targets	Source of Information	Risks and Assumptions	Justification for Changes and Outcomes
Project Objective: To build the adaptive capacity of food security in the face of climate change and ensure food security will be stable	1. Percentage of households and communities that have children of targeted islands *(Nonouti 3,299, Maiana*	Current trajectory of resource use and future food insecurity (actual household food site to climate change. Year 1 of project	By the end of the project 100% of signify increased survey to be administered at each pilot and/or increased and presented as levels of food increasing security. island disaggregated against climate change	The project will design and ownership by men, women and government stakeholders to estimate *2,744 Abemama* by health clinics continues conditions of determine levels of food buy-in from their resilience sustained and	High-level ambitious. implement a Target clarified to include population for each island (2015 census). apply reforms defined during Substantial gender- stakeholders is expanded	Noted that EoP target is incredibly primary vulnerable Kiribati communities to stable or increased security under *1,981)* have data)
	2. Number of bonefish (*Albula glossodonta*) increasing and/or stable. Abemama number Abemama Maiana	Nonouti Estimated number of bonefish: TBD increasing compared to baseline zone fisheries monitoring of over-all bonefish: Stable or increasing compared to baseline South Tarawa Estimated number of bonefish: TBD compared include *estimates are that populations at all are*	Nonouti Estimated number of bonefish: Stable or match pace of required changes. Maiana Estimated number of bonefish: Stable or Component 2. *Qualitative* rigorous South Tarawa Estimated number of bonefish: Stable or rates and	The project will support the design and implementation of a coastal volume of fish being caught. coastal zone monitoring program will be designed under Component 1 and implemented through increasing This will	Rate of capacity building can information on likely overharvest of bonefish at outer islands based on protein source for I-Kiribati and an indicator program. The fishery health.	While new monitoring program will be established, baseline has been broadened to include qualitative * Bonefish are the main Estimated of bonefish: TBD

Project Objectives Outcomes	Indicator and	Baseline	End of Project Information	Source of	Risks and Assumptions	Justification for Changes Targets
			increasing compared to baseline	fisheries health.		
	3. Percentage of Kiribati population covered by the enhanced early warning system	The existing communication systems are inadequate to send early warning message in timely manner	*At least* 95% of Kiribati population (*109,693, of which 55.591 are women*) receives early warning in a timely manner using one of the multiple communication lines	Radio and Television Reports		Views that target should aim to reach 100% of the population, although this may be unachievable. Agreement to make target "at least 95%" in response. Target clarified to include population size and % women for more meaningful reporting.
Outcome 1 Institutional capacity development to reduce vulnerability to climate change-induced food shortages	**Outputs:** National program for informed decision-making. National Guidelines for Ecosystem-based Adaptation Management National Coastal Zone Fisheries Monitoring and Conservation Awareness Program National Coastal Zone Fisheries Conservation Regulation Extension Officer Training					
	4. GoK provides annual financial support *(in-kind and grant)* to maintain national adaptation and monitoring tool.	GoK annual support for AMAT: 0 *Investment in current monitoring system TBD*.	GoK annual support for AMAT: *AU$* 25,000 (~US$ 18,600)	Project reports and documents. National AMAT delivered. National guidelines delivered. Results of training programs. Reports from island based	High-level ownership by primary government stakeholders to apply reforms continues Rate of capacity building can match pace of required changes	Indicator clarified to show includes in-kind and grant support from government. Noted that baseline might not be $0 as may be investment in current monitoring that can be built on through this project. Target amended to AU$ as more meaningful for project. Approximate US$ conversation at baseline provided.
	(indicator moved to Outcome 2)					Moved for better alignment to project activities and budget.
	(indicator moved to Outcome 2)					Moved for better alignment to project activities and budget.

Project Objectives Outcomes	Indicator and	Baseline	End of Project Source of Information	Risks and Assumptions		Justification for Changes Targets
	5. Coastal Zone Fisheries Regulation adopted based upon increased level of national awareness about links between improved coastal ecosystem management and sustainability and resilience of subsistence coastal fisheries livelihoods.	0: National Coastal Zone Fishing Regulation adopted	1: National Coastal Zone Fishing Regulation adopted	extension officers.		No change.
	6. Cohort of eight extension officers increase capacity score as a result of project training program based upon GEF Capacity Result 2 (Capacities to generate, access and use information knowledge).	Cohort of eight agriculture extension officers CR2 capacity score: 3 Cohort of eight fisheries extension officers CR2 capacity score: 3 * Score range: 0-15	Cohort of eight agriculture extension officers CR2 capacity score: 15 Cohort of eight fisheries extension officers CR2 capacity score: 15 * Score range: 0-15			No change. Noted that EoP target is very ambitious.
	7. Number of project beneficiaries (includes people engaged in training, awareness-raising and education, pilot villages, delivery of project initiatives, stakeholder meetings and project governance)	*0*	*10,000 (of which at least 60% are women)*			New indicator to capture the number of people engaged in the project across a diverse range of project activities by all partners. Estimate based on reaching >50% of population on each outer island, plus stakeholders in South Tarawa. Does not include early warning system coverage (>95% Kiribati population) for simplicity and more meaningful reporting of beneficiaries. Early warning system coverage is already reported via indicator #3. Aligns to UNDP IRRF and GEF CCA Tracking Tool.

Project Objectives Outcomes	Indicator and	Baseline	End of Project Information	Source of	Risks and Assumptions	Justification for Changes Targets
Outcome 2 Implementation of community adaptation measures to increase food security	**Outputs:** Ecosystem-based Adaptation Management Operational Vulnerability Assessment and Monitoring Tool Operational Island and Coastal Zone Strategic Natural Resource Planning Implemented Island-based Coastal Zone Fisheries Monitoring and Conservation Awareness Program Coastal Zone Fisheries Conservation By-laws Adopted Climate Resilient Fisheries Management Practices Demonstrated Models for Sustainable Tourism Demonstrated					
	8. Management of land in accordance with land use/resource management plans developed using national guidelines for ecosystem-based adaptation: i) Hectares of island territory under land use plan/revised land use plan; ii) Number of villages managing land in accordance with land use plans	*i) and ii)* Nonouti 0 ha Abemama 0 ha Maiana 0 ha	i) Nonouti Area with EBA land use plan: 2,000 ha Abemama Area with EBA land use plan: 2,700 ha Maiana Area with EBA land use plan: *1,350* ha *ii) At least two villages on each of the three target islands managing land in accordance with EBA land use plan.*			Two individual indicators merged for clarity and to show the connection between the two. EoP targets revised to be more realistic and show importance of establishing EBA land use plans and then engaging villages in the implementation of them to adopt EBA practices.
	9. Number of vulnerability assessments completed.	*0*	*3 (one for each target island)*			New indicator added given importance of this exercise and alignment to GEF CCA Tracking Tool.
	10. *Hectares of coastal zone*: i) Regulated through fishing management zoning system as a result of national regulatory tool adopted by GoK.	*i) and ii)* Nonouti 0 ha Abemama 0 ha	i) Nonouti Regulated fishing area: 40,000 ha Abemama Regulated fishing area: 15,000 ha	Project monitoring reports Results of island monitoring activities	Substantial buy-in from island stakeholders is sustained and expanded	Two individual indicators merged to provide clarity and show the link between the two. EoP targets revised/clarified to match size of fishing management area/coastal zone on each island.

Project Objectives Outcomes	Indicator and	Baseline	End of Project Information	Source of	Risks and Assumptions	Justification for Changes Targets
	ii) Protected in fish recovery zones developed using national guidelines for ecosystem-based adaptation management.	Maiana 0 ha	Maiana Regulated fishing area: 10,000 ha *ii) At least 10% of area under zoning on each island:* Nonouti Fish recovery zones: 4,000 ha Abemama Fish recovery zones: 1,500 ha Maiana Fish recovery zones:1,000	Reports from Island Councils to AMAT Evaluation mission reports	Rate of capacity building can match pace of required changes Project resources are not overextended in an attempt to pilot interventions at more locations than feasible	
	11. Increase in hectares of mangrove habitat as reported annually by Island Councils using the national adaptation and monitoring tool.	Nonouti Mangrove (ha): TBD Abemama Mangrove (ha): TBD Maiana Mangrove (ha): 273	Nonouti Mangrove (ha): *At least 5%* increase compared to baseline Abemama Mangrove (ha): *At least 5%* increase compared to baseline Maiana Mangrove (ha): *>285*			EoP targets revised to reflect low survival rate of mangrove revegetation seedlings, and low conversion of seedlings to habitat.
	12. Number of by-laws on fisheries conservation adopted on each target island.	*Nonouti* *3* *Abemama* *3*	*Nonouti* *6* *Abemama* *5*			New indicator added given significance of by-laws and connections to work under Component 1.

Project Objectives Outcomes	Indicator and	Baseline	End of Project Source of Information	Risks and Assumptions		Justification for Changes Targets
		Maiana 1	*Maiana 4*			
	13. Number of existing commercial fishing operators with permits allocated and monitored based upon implementation of coastal zone fisheries conservation by-laws.	Nonouti Commercial Permits: 0 Abemama Commercial Permits: 0 Maiana Commercial Permits: 0	Nonouti Commercial Permits: *3* Abemama Commercial Permits: *3* Maiana Commercial Permits: *3*			EoP targets revised to be more realistic based on the high costs of setting up commercial fishing operation. Indicator clarified regarding existing operators.
	14. Capacity score of Fisheries Conservation Field School participants increases based upon GEF Capacity Result 2 (Capacities to generate, access and use information knowledge).	Nonouti FCFS Scorecard CR2: 1 Abemama FCFS Scorecard CR2: 1 Maiana Scorecard CR2: 1 * Score range: 0-15	Nonouti FCFS Scorecard CR2: *At least 10* Abemama FCFS Scorecard CR2: *At least 10* Maiana Scorecard CR2: *At least 10* * Score range: 0 - 15			EoP targets revised to be more realistic based on low capacity of communities on outer islands, and cannot have expectation that capacity will increase by EoP to same level as extension officers.
	15. Amount of revenue generated annually (including Island Councils and target communities) from the non-consumptive use of coastal zone resources. -	Nonouti AU$ 0 Abemama AU$ 0 Maiana AU$ 0	Nonouti AU$ 15,000 (~US$ 11,200) Abemama AU$ 5,000 (~US$ 3,750) Maiana AU$ 5,000 (US$ 3,750)			Indicator broadened to also include revenues that flow to communities from non-consumptive use of coastal resources (e.g. eco-tourism). Noted that Nonouti target may be set too low and need to be revised upward based on progress at MTR.

Project Objectives Outcomes	Indicator and	Baseline	End of Project Source of Information	Risks and Assumptions		Justification for Changes Targets
	16. Number of food crops, including traditional food crops, planted at each target village.	*Surveys indicate that villages on target islands typically have 2 crops planted.*	Nonouti *At least 5 varieties per village* Abemama *At least 5 varieties per village* Maiana *At least 5 varieties per village*			New indicator added based on importance of diversifying food crops at village level to build adaptation. Connects project activities underway by multiple partners including gene banks.

APPENDIX F – GEF CORE INDICATORS AT TE FOR LDCF-FSCC [PIMS ID 4922]

Climate Change Adaptation - LDCF/SCCF Adaptation Monitoring and Assessment Tool

I. Introduction

The Adaptation Monitoring and Assessment Tool (AMAT) is being introduced to measure progress toward achieving the outputs and outcomes established at the portfolio level under the LDCF/SCCF results framework for GEF-5.

The tracking tool for adaptation projects or programs financed by the LDCF/SCCF will be conducted three times during the life of the project.

GEF-5 will offer an opportunity to pilot the AMAT and to test how best the LDCF/SCCF can measure results at the portfolio level. As such, Agencies are encouraged to include project specific indicators that link directly to the LDCF/SCCF portfolio objectives and outcomes. As projects and programs progress, the LDCF/SCCF will have enough data points to re-examine and reassess specific indicators and integrate changes to improve how portfolio results are tracked for adaptation.

II. Guidelines for Completion

The Implementing Agency will fill out the AMAT Excel spreadsheet for each project, and submit the tracking tool three times during the life of the project:

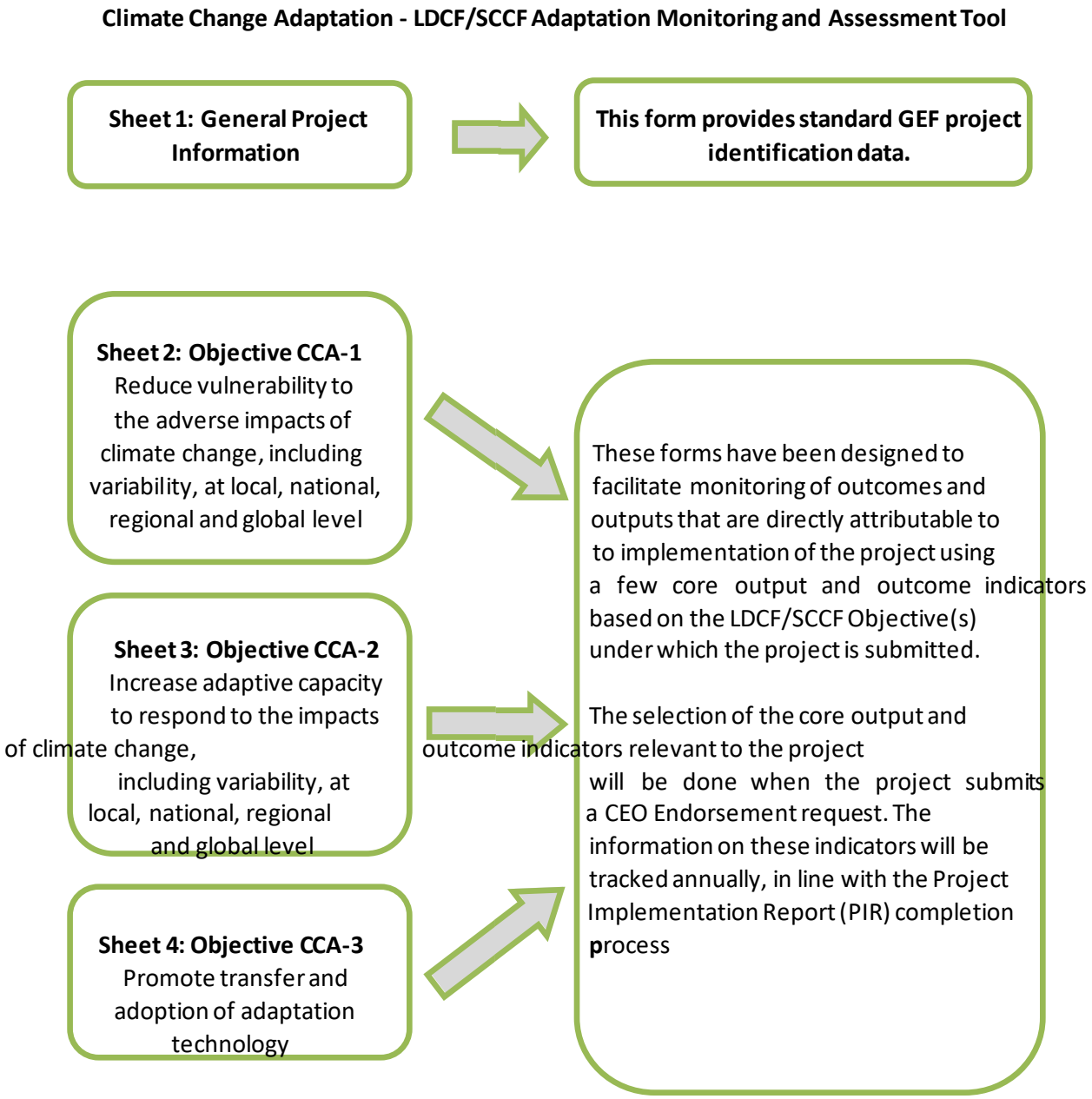
- at CEO Endorsement/Approval request;
- at project/program Mid-term; and
- at project completion.

Contextual information on existing climate change risks, vulnerability analysis, as well as socio-economic conditions addressed in full project document submitted for CEO Endorsement/Approval, will be complemented with quantitative data on core indicators identified from the AMAT. This information will largely serve as baseline for tracking progress toward achievement of project objectives and targets. It is, therefore, essential that all required information be taken into account during project preparation.

When appropriate, the GEF requests that multi-country projects complete one tracking tool per country involved in the project, based on the project circumstances and activities in each respective country. The completed forms for each country should then be submitted as one package to the GEF. Global projects which do not have a country focus, but for which the tracking tool is applicable, should complete the tracking tool as comprehensively as possible.

The AMAT tool will also apply to multi-sector projects using LDCF/SCCF financing.

The AMAT Excel spreadsheet includes four sheets:



Please note that only the sheet(s) related to the LDCF/SCCF Objective(s) selected in the submitted project will have to be completed. *For example, a project that plans to fulfill only Objective CCA-3 (Promote transfer and adoption of adaptation technology) should only fill in information on the relevant core set of indicators in sheet 4.*

The following steps will guide users in using the AMAT:

1. Each respective Objective sheet (*i.e. Objective CCA-1, Objective CCA-2, and Objective CCA-3*) contains a menu of outcome and output indicators.

2. At the time of requesting CEO Endorsement/Approval a project will be expected to select at least one outcome and one output indicator per project component from the relevant Objective sheet(s), based on the LDCF/SCCF Objective(s) under which the project is submitted. This means that only indicators specifically related to the main objectives and specific results that the projects plans to address should be selected (i.e., the rest of the suggested indicators that have no direct relation to the project should be left blank.)

For example, a project addressing Objective 1 (from the Results Framework) in the context of the agricultural sector should select only the outcome and output indicators on the Objective CCA-1 sheet that can best capture how the project will attempt to reduce the vulnerability of a country's agricultural sector to the adverse impacts of climate change. The Objective and Outcome at Project level should be aligned with the Results Framework.

Once the set of core indicators is selected at the project CEO Endorsement/Approval stage, projects will fill in the baseline and expected target levels (expected to be delivered at project completion) for each selected indicator in the AMAT. Specific explanation on what data is sought under each indicator is provided within the AMAT.

3. After the project is CEO Endorsed/Approved and begins its implementation, the project's AMAT will be updated and submitted again at mid-term and project completion. Baselines must be completed by CEO Endorsement/Approval.[21]

III. Data Requirements for AMAT Excel Sheets

This section presents purely supplemental information for reference to the menu of questions and indicators contained in the AMAT excel spreadsheet.

GENERAL PROJECT INFORMATION

1. GEF ID – This should be the GEF-issued PMIS number

2. LDCF/SCCF Objective– Select the most appropriate based on project objective, outcome, approach, and impact (please note that these three options are the ones agreed to by the LDCF/SCCF Council in June)

[21] Once projects begin implementation, baselines might be further refined and validated during the first year of implementation. If any changes to baseline figures are made, they must be reported by submission of an updated AMAT after the first year of implementation

a) Objective1: Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level.

b) Objective 2: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level.

c) Objective 3: Promote transfer and adoption of adaptation technology

3. Project's Primary Sector – This should be selected from the menu of provided options

4. AMAT Completion Date – Please specify the date when the AMAT is being submitted

SHEETS 2, 3 and 4 – Monitoring Outputs and Progress towards Outcomes under Objectives CCA-1, CCA-2, and CCA-3

These sheets will track outcomes and outputs and their respective indicators as related to the three LDCF/SCCF Objectives derived from the LDCF/SCCF RBM Framework.

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
OBJECTIVE 1: Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level			
Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas	Indicator 1.1.1: Adaptation actions implemented in national/sub-regional development frameworks (no. and type) Indicator 1.1.2. For each action listed under Indicator 1.1, indicate which ones include adaptation budget allocation and targets (yes/no) Indicator 1.1.3: For each action listed under Indicator 1.1, indicate to what extent targets set out in plans have been met (score) 1 = Not Significantly (<49%) 2 = Significantly (50-79%) 3 = Principally (>80%)	Output 1.1.1: **Adaptation measures and necessary budget allocations included in relevant frameworks**	Indicator 1.1.1.1: Development frameworks that include specific budgets for adaptation actions (list type of development framework and briefly describe the level[22] of the action) Indicator 1.1.1.2. Sectoral strategies that include specific budgets for adaptation actions (list type and level) Indicator 1.1.1.3. Regulatory reform and fiscal incentive structures introduced that incorporate adaptation as climate change risk management (list type and level)

[22] Level: refers to the geopolitical scope of the action, (i.e, community-level, local-level, state/province-level, national level, regional level, etc)

Outcome 1.2: Reduce vulnerability in development sectors	Based on development sector(s) that project/program targets, select appropriate indicator(s) from list below or provide relevant indicator to track reduced vulnerability in targeted development sector: Indicator 1.2.1: Infection rates of population to climate –sensitive diseases as compared with past population infected per year under similar climatic conditions (% change)	Output 1.2.1: **Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability**	As with Outcome indicators, include or select indicator(s) relevant to sector project/program is targeting. Indicator 1.2.1.1.: Health measures introduced to respond to climate sensitive disease (type and level) Indicator 1.2.1.2: Resilient infrastructure measures introduced to prevent economic losses (type and level)

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator

	Indicator 1.2.2.: % of targeted population covered by innovative insurance mechanisms (disaggregated by gender) Indicator 1.2.3: Number of additional people provided with access to safe water supply and basic sanitation services given existing and projected climate change (disaggregated by gender) Indicator 1.2.4: Increase in water supply targeted areas (tons/m^3) Indicator 1.2.5: Increase in agricultural productivity in targeted areas. (tons/ha) Indicator 1.2.6: Water availability for energy production (liters/gallons available for hydropower) Indicator 1.2.7: Energy production from hydropower (kW/hr generated from hydro) Indicator 1.2.8: % change in projected food production in targeted area given existing and projected climate change (food production is measured in tons/year) Indicator 1.2.9: % change in food availability[23] given existing and projected climate change (food availability is measured in tons/year)		Indicator 1.2.1.3 Climate resilient agricultural practices introduced to promote food security (type and level) Indicator 1.2.1.4. Sustainable drinking water management practices introduced to increase access to clean drinking water (type and level) Examples: ✦ Tube wells ✦ Rainwater harvesting ✦ Purification ✦ Water storage ✦ Other Indicator 1.2.1.5. Sustainable water management practices introduced to increase access to irrigation water under existing and projected climate change (type and level) *Examples:* ✦ Drip irrigation ✦ Reducing losses ✦ Reducing evapotranspiration rates ✦ Rainwater harvesting ✦ Water storage ✦ Other Indicator 1.2.1.6. Sustainable water management practices introduced to increase energy production from water resources under existing and projected climate change (type and level) ✦ Watershed management ✦ Other

[23] Food availability refers to the portion of total food production in tons/year that is actually consumed by the population.

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
	1.2.10: % change in income generation in targeted area given existing and projected climate change Indicator 1.2.11: % of population with access to improved flood and drought management (disaggregated by gender) Indicator 1.2.12. % of livestock farmers covered by a monitoring and early warning and response measures scheme for climate-sensitive diseases Indicator 1.2.13. % of cropland area covered by a monitoring and early warning and response action scheme for climate sensitive plants pests and diseases (Ha) Indicator 1.2.14. Vulnerability and risk perception index (Score) – Disaggregated by gender *The score for this indicator will have to be assigned based on the results of a conducted survey. The score ranges from 1 to 5 and below are the explanations of the rankings.* 1. Extreme vulnerability 2. High Vulnerability 3. Medium Vulnerability 4. Low Vulnerability 5. No Vulnerability		Indicator 1.2.1.7. Type and level of innovative insurance mechanisms introduced to reduce climate induced damages Indicator 1.2.1.8. Type and level of integrated disaster response measures to extreme climate events introduced to increase number of lives saved

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
Objective 2: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level			
Outcome 2.1 Increased knowledge and understanding of climate variability and change induced risks at country level and in targeted vulnerable areas	Indicator 2.1.1. Relevant risk information disseminated to stakeholders (Yes/No)	**Output 2.1.1** Risk and vulnerability assessments conducted and updated **Output 2.1.2** Systems in place to disseminate timely risk information	Indicator 2.1.1.1. Update risk and vulnerability assessment (Yes/No) Indicator 2.1.1.2. Risk and vulnerability assessment conducted (Yes/No). Indicator 2.1.2.1. Type and scope of monitoring systems in place *Examples:* ✦ Early warning systems ✦ Climate threat monitoring systems ✦ Event impact monitoring
Outcome 2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses	Indicator 2.2.1. No. and type of targeted institutions with increased adaptive capacity to minimize exposure to climate variability (describe number and type) Indicator 2.2.2. Capacity perception index (Score) (disaggregated by gender) The score ranges from 1 to 5 and below are the explanations of the rankings. 1. No capacity built 2. Initial awareness raised (e.g. workshops, seminars) 3. Substantial training in practical application (e.g. vocational training) 4. Knowledge effectively transferred (e.g.	**Output 2.1.1** Risk and vulnerability assessments conducted and updated **Output 2.1.2** Systems in place to disseminate timely risk information	Indicator 2.1.1.1. Update risk and vulnerability assessment (Yes/No) Indicator 2.1.1.2. Risk and vulnerability assessment conducted (Yes/No). Indicator 2.1.2.1. Type and scope of monitoring systems in place *Examples:* ✦ Early warning systems ✦ Climate threat monitoring systems ✦ Event impact monitoring

	passing examination, certification)		

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
	5. Ability to apply or disseminate knowledge demonstrated		

		Output 2.2.1 Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	Indicator 2.2.1.1. No. of staff trained on technical adaptation themes (per theme) – (disaggregated by gender) *Specify the type of adaptation themes first, then indicate the actual number per theme disaggregated by gender.* ✦ Monitoring/Forecasting capacity (Early Warning System (EWS), Vulnerability mapping system) ✦ Policy reform ✦ Capacity development ✦ Sustainable forest management ✦ Strengthening infrastructure ✦ Agriculture diversification ✦ Improved resilience of agricultural systems ✦ Supporting livelihoods ✦ Mangrove reforestation ✦ Coastal drainage/irrigation system ✦ Community-based adaptation ✦ Erosion control/soil water conservation
	Indicator 2.2.2. Reduced annual property losses from baseline (Changes in annual losses $US in the projected area) Please indicate the measured $US change in annual property losses from the baseline that has happened due to the project.	**Output 2.2.2** Targeted population groups covered by adequate risk reduction measures	✦ Microfinance ✦ Special programs for women ✦ Livelihoods ✦ Water storage ✦ Information and communication technologies (ICT) and information dissemination ✦ Other Indicator 2.2.2.1. % of population covered by climate change risk reduction measures (disaggregated by gender)

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
			Please provide the measured % of population covered by adequate risk reduction measures disaggregated by gender.

Outcome 2.3 Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	Indicator 2.3.1. % of targeted population awareness of predicted adverse impacts of climate change and appropriate responses (Score) – Disaggregated by gender *The score ranges from 1 to 3 and below are the explanations of the rankings based on survey results.* 1. No awareness level (<50% correct) 2. Moderate awareness level (50-75%) 3. High awareness level (>75% correct) Indicator 2.3.2. % of population affirming ownership of adaptation processes (disaggregated by gender)	**Output 2.3.1** Targeted population groups participating in adaptation and risk reduction awareness activities	Indicator 2.3.1.1. Risk reduction and awareness activities introduced at local level (list type and scope[24]) *Examples:* ✦ Monitoring/Forecasting capacity (EWS, Vulnerability mapping system) ✦ Policy reform ✦ Capacity development ✦ Agriculture diversification ✦ Improved resilience of agricultural systems ✦ Sustainable forest management ✦ Strengthening infrastructure ✦ Supporting livelihoods ✦ Mangrove reforestation ✦ Coastal drainage/irrigation system ✦ Community-based adaptation ✦ Erosion control/sustainable land and water management ✦ Microfinance ✦ Special programs for women ✦ Livelihoods ✦ Water storage ✦ ICT and information dissemination ✦ Other Indicator 2.3.1.2. No. and type of community groups trained in climate change risk reduction

[24] In this case, "scope" refers to briefly describing the reach of these activities in terms of people involved, number of programs, number of months of implementation, etc.

Expected Outcome	Outcome Indicator	Expected Output	Output Indicator
OBJECTIVE 3: Promote transfer and adoption of adaptation technology			
Outcome 3.1 Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas	Indicator 3.1.1. % of targeted groups adopting adaptation technologies by technology type (disaggregated by gender)	**Output 3.1.1** Relevant adaptation technology transferred to targeted groups	Indicator 3.1.1.1. Type of adaptation technologies transferred introduced to targeted groups .*Examples:* ✦ Climate resilient irrigation technologies ✦ Desalinization ✦ Artificial reefs ✦ Resilient agricultural systems ✦ Improved seeds ✦ Other Indicator 3.1.1.2. Type of relevant climate change adaptation technology implemented in selected areas by participatory stakeholders (number of households)

Outcome 3.2 Enhanced enabling environment to support adaptationrelated technology transfer	Indicator 3.2.1. Policy environment and regulatory framework for adaptation-related technology transfer established or strengthened (Score) The score ranges from 1 to 5 and below are the explanations of the rankings. 1. No policy/regulatory framework for adaptation-related technology transfer in place 2. Policy/Regulatory framework for adaptation-related technology transfer have been discussed and formally proposed 3. Policy/Regulatory framework for adaptation-related technology transfer have been formally proposed but not adopted 4. Policy/Regulatory framework for adaptation-related technology transfer have been formally adopted by the	**Output 3.2.1** Skills increased for relevant individuals in transfer of adaptation technology **Output 3.2.2** Relevant policies and frameworks developed and adopted to facilitate adaptation technology transfer	Indicator 3.2.1.1. No. of individuals trained in adaptationrelated technologies (disaggregated by gender) Indicator 3.2.2.1: No. of policies developed or strengthened
Expected Outcome	**Outcome Indicator**	**Expected Output**	**Output Indicator**

	Government but have no enforcement mechanism 5. Policy/Regulatory framework for adaptation-related technology transfer are enforced Indicator 3.2.2. Strengthened capacity to transfer appropriate adaptation technologies (Score) (disaggregated by gender) *The score ranges from 1 to 3 and below are the explanations of the rankings based on survey results.* 1. No capacity achieved (<50% correct) 2. Moderate capacity achieved (50-75%) High capacity achieved (>75% correct)		

APPENDIX G – RESPONSES TO COMMENTS RECEIVED ON DRAFT TE REPORT

The following comments were provided on 29 March to 2 April 2023 in track changes to the draft Terminal Evaluation report for the "Enhancing national food security in the context of global climate change (LDCF-FSCC Kiribati Project)"; they are referenced by institution ("Author" column) and track change comment number ("#" column): (separate folder)

APPENDIX H – SIGNED TE REPORT CLEARANCE FORM (TO BE SIGNED BY CO AND RTA)

Annexed as a separate file

APPENDIX I - EVALUATION CONSULTANT AGREEMENT FORM

Evaluator 1:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant over sight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[49]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: __Roland Wong_____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Surrey, BC, Canada* on *28 April 2023*

Evaluator 2:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[50]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: __Kiali Molu_ _____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Tarawa, Kiribati* on *28 April 202*