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IMPLEMENTATION COMPLETION AND RESULTS REPORT
(TF-56115, TF-56267, TF-56594)

ON A

GLOBAL ENVIRONMENT FACILITY GRANT

(US$1.80 MILLION EQUIVALENT)

TO THE

REPUBLIC OF KIRIBATI

FOR AN

ADAPTATION PROJECT – IMPLEMENTATION PHASE (KAP II)

DECEMBER 30, 2011

Pacific Islands Sustainable Development
East Asia and Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective November 1, 2011)

Currency unit = Australian dollars
$A 1.00 = US$1.02
US$1.00 = $A 0.98

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AusAID	Australian Agency for International Development
CAS	Country Assistance Strategy
CC	Climate Change
CCA	Climate Change Adaptation
CCST	Climate Change Study Team
COP	Conference of the Parties
ECD	Environmental Conservation Division
EMP	Environmental Management Plan
EPF	Environmental Policy Framework
FM	Financial Management
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEO	Global Environment Objectives
GNI	Gross National Income
GoK	Government of Kiribati
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion and Results Report
ISR	Implementation Status and Results Report
KAP	Kiribati Adaptation Program
KMS	Kiribati Meteorological Services
M&E	Monitoring and Evaluation
MELAD	Ministry of Environment, Lands and Agricultural Development
MFED	Ministry of Finance and Economic Development
MFMRD	Ministry of Fisheries and Marine Development
MHMS	Ministry of Health and Medical Services
MISA	Ministry of Internal and Social Affairs
MOP	Ministry Operational Plan
MPWU	Ministry of Public Works and Utilities
MTR	Mid Term Review

NAPA	National Adaptation Programme of Action
NASC	National Adaptation Steering Committee
NDS	National Development Strategies
NGO	Non-governmental Organizations
NWS	National Water Strategy
NZAP	New Zealand Aid Program
OB	Office of Te Beretitenti (Office of the President)
OP	Operational Policy
PAD	Project Appraisal Document
PDO	Project Development Objective
PIAC	Pacific Infrastructure Advisory Centre
PICs	Pacific Island Countries
PMU	Project Management Unit
PPF	Project Preparation Facility
PUB	Public Utilities Board
RMF	Results Monitoring Framework
RPF	Resettlement Policy Framework
SDP	Sustainable Development Plan
SNPRA	Strategic National Policy and Risk Assessment
TA	Technical Assistance
TMP	Tarawa Master Plan
TOR	Terms of Reference
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

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ICR Team Leader Emilia Battaglini

REPUBLIC OF KIRIBATI

Adaptation Project – Implementation Phase (KAP II)

CONTENTS

A. Basic Information			
Country:	Kiribati	Project Name:	Adaptation Program Phase II - Pilot Implementation Phase (KAP II)
Project ID:	P089326	L/C/TF Number(s):	TF-56115,TF-56267,TF-56594
ICR Date:	01/05/2012	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	REPUBLIC OF KIRIBATI
Original Total Commitment:	USD 1.80M	Disbursed Amount:	USD 1.79M
Revised Amount:	USD 1.79M		
Environmental Category: B		**Global Focal Area: C**	
Implementing Agencies: Office Te Beretitenti			
Cofinanciers and Other External Partners: Australian Agency for International Development (AusAID) New Zealand Aid Programme			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	09/29/2004	Effectiveness:	07/07/2006	07/06/2006
Appraisal:	12/06/2005	Restructuring(s):		08/27/2009
Approval:	06/01/2006	Mid-term Review:	11/15/2008	11/11/2008
		Closing:	06/30/2009	06/30/2011

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Global Environment Outcome	Moderate
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Moderately Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Satisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
GEO rating before Closing/Inactive status	Moderately Satisfactory		

D. Sector and Theme Codes		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Central government administration	24	24
General agriculture, fishing and forestry sector	26	26
General public administration sector	45	45
Sub-national government administration	5	5
Theme Code (as % of total Bank financing)		
Climate change	25	25
Natural disaster management	24	24
Other environment and natural resources management	13	13
Participation and civic engagement	13	13
Vulnerability assessment and monitoring	25	25

E. Bank Staff		
Positions	**At ICR**	**At Approval**
Vice President:	James W. Adams	Jeffrey S. Gutman
Country Director:	Ferid Belhaj	Xian Zhu
Sector Manager:	Charles M. Feinstein	Hoonae Kim
Project Team Leader:	Emilia Battaglini	Idah Z. Pswarayi-Riddihough
ICR Team Leader:	Emilia Battaglini	

ICR Primary Author:	Olivia Warrick	

F. Results Framework Analysis

Global Environment Objectives (GEO) and Key Indicators(as approved)

The objectives of the Project are to: (i) develop and demonstrate the systematic diagnosis of climate-related problems and the design of cost-effective adaptation measures in Kiribati; and (ii) continue the integration of climate risk awareness and responsiveness into economic and operation planning by the Recipient.

Revised Global Environment Objectives (as approved by original approving authority) and Key Indicators and reasons/justifications

(a) GEO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Establishment of lead agency coordinating CCA and related strategies			
Value (quantitative or Qualitative)	None	SNRPA Unit established in OB in first year of implmentation	OB established as lead agency in first year of implmentation	OB established as lead agency in August 2009 (year 3)
Date achieved	06/01/2006	06/30/2007	08/27/2009	06/30/2011
Comments (incl. % achievement)	Target achieved in 2009 with Project director appointed. At Project closing the OB was staffed with a senior policy mentor, climate change policy adviser and disaster risk management adviser with a mandate to coordinate climate risk management activities			
Indicator 2 :	Percentage of climate-affected programs in Ministry Operational Plans (MOPS) that reflect systematic climate risk management			
Value (quantitative or Qualitative)	MOPS did not reflect climate risk management	60% of MOPs integrate climate risk management		KAP II activities incorporated into all relevant MOPs for GoK Financial Years 2007, 2008, 2009, 2010
Date achieved	11/30/2007	06/30/2011		06/30/2011
Comments (incl. % achievement)	Achievement substantially exceeded target			
Indicator 3 :	Consistent use of best practice in the application of risk management, environmental assessment and options analysis to public infrastructure and CCA vulnerability reduction measures.			
Value (quantitative or Qualitative)	None	All large pilot infrastructure constructed under the Project apply		All large pilot infrastructure constructed under the Project apply

		best practices		best practices
Date achieved	06/01/2006	06/30/2009		06/30/2011
Comments (incl. % achievement)	100% achieved. Best practice was applied in the design and construction of 4 coastal protection works (component 2) and 1 water infiltration gallery (component 3)			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Number of National Adaptation Steering Committee (NASC) meetings with participation of Director/Senior Assistant Secretary or higher level officials of at least 4 key ministries			
Value (quantitative or Qualitative)	None	5		7
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	Achievement			
Indicator 2 :	: Number of CCST meetings attended by technical officers of at least 6 key departments			
Value (quantitative or Qualitative)	None	8		5
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	63% achieved. In practice, there was little need for this team to meet more frequently than that			
Indicator 3 :	Consultation and awareness raising activities reflect clear role for NGOs and women			
Value (quantitative or Qualitative)	None	3		All key KAP II consultation and awareness activities include a role for Women and NGO groups
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	It is unclear from the PAD which consultation and awareness raising activities this indicator was targeting. A National Consultation, participatory events and all consultation activities for C2 and C3 involved NGOs and Women			
Indicator 4 :	Climate risk profile produced and used in at least three major infrastructure investments			
Value (quantitative or	None	3		4

Qualitative)				
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	100% achieved. Climate risk profiles were applied to 4 major coastal protection works on South Tarawa			
Indicator 5 :	Pilot investments are based on rigorous analysis of risk treatment options, including economic analysis, environmental and social assessment			
Value (quantitative or Qualitative)	None	All		All
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	100% achieved. Rigorous analysis was applied in the design and construction of 4 coastal protection works (component 2) and 1 water infiltration gallery (component 3)			
Indicator 6 :	Number of reports of coastal and marine ecosystem monitoring			
Value (quantitative or Qualitative)	None	8		1
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	12.5% achieved. An initial baseline marine ecosystem report was produced. However, no further marine monitoring reports have been produced. Coastal monitoring was dropped following restructure and no monitoring was initiated			
Indicator 7 :	National Water Strategy [NWS] adopted and reflected in MPWU MOP and PUB Business Plan			
Value (quantitative or Qualitative)	None	NWS adopted		NWS adopted
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	100% achieved. The National Water Policy and its related Strategy have been used by MWPU and PUB in their effort to comply with Kiribati Development Plan goals. Fulfillment of the NWS objectives by MWPU is often hindered by capacity of MWPU.			
Indicator 8 :	Master Plan for water on Tarawa-[TMP] produced and reflected in MPWU MOP and PUB Business Plan			
Value (quantitative or Qualitative)	None	TMP prepared		TMP prepared
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	100% achieved. Master Plan for Water on Tarawa is fairly new document and therefore only some activities namely leakage detection have been reflected in the MOP 2010 for MWPU.			
Indicator 9 :	Number of new rainwater collection/storage facilities at government/community buildings			
Value (quantitative or Qualitative)	None	20		4
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments	20% achieved. The unit costing undertaken at appraisal significantly			

(incl. % achievement)	underestimated the costs of water and coastal works			
Indicator 10 :	Building code includes freshwater collection and storage as an objective			
Value (quantitative or Qualitative)	None	BC amendments drafted		BC amendments drafted
Date achieved	06/30/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	100% achieved. Draft building code complete but still to be adopted by cabinet			
Indicator 11 :	Percentage reduction in water leakage in target area on Betio islet			
Value (quantitative or Qualitative)	None	20%		0
Date achieved	06/30/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	Leakage reduction was not achieved to any measurable degree. A methodology for leakage detection was developed and capacity built to undertake leakage detection work in PUB. Leakage reduction will be undertaken under KAP III			
Indicator 12 :	Number of water locations assessed and supply improvements implemented			
Value (quantitative or Qualitative)	None	5		1
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	20% achieved. An infiltration gallery was installed in one site. However, water resources assessment at 14 sites throughout South and North Tarawa and Outer Islands were undertaken.			
Indicator 13 :	Number of Outer Island Profiles that contain climate risk information			
Value (quantitative or Qualitative)	None	12		9
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	75% achieved. This achievement had limited applicability because the majority of outer island activities were dropped after MTR.			
Indicator 14 :	KAP II Project management integrated into SNRP unit in OB			
Value (quantitative or Qualitative)	None	Integration complete		Integration complete
Date achieved	06/01/2006	06/30/2007		06/30/2011
Comments (incl. % achievement)	Although a SNRP Unit was never formally established, the PMU was established in the first year of implementation within the OB.			
Indicator 15 :	Percentage of Project progress reports that are timely and reflect a good understanding of progress, critical issues, corrective actions, accountability for actions and timing.			
Value (quantitative or Qualitative)	None	100%		50%

Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	While the Project produced implementation progress reports on time, these reports were not forward-looking and did not reflect critical issues. The exception is the progress report prepared prior to the MTR and the annual progress report produced in 2010.			
Indicator 16 :	Lessons learned compiled (continuously) for future adaptation program design			
Value (quantitative or Qualitative)	None	Lessons fully compiled		Lessons partially compiled
Date achieved	06/01/2006	06/30/2011		06/30/2011
Comments (incl. % achievement)	The PMU or OB did not regularly compile lessons learned as was indicated in the PAD. Lessons were compiled by Bank supervision missions and by consultants. An independent evaluation report commissioned by the GoK identifies several lessons.			

G. Ratings of Project Performance in ISRs

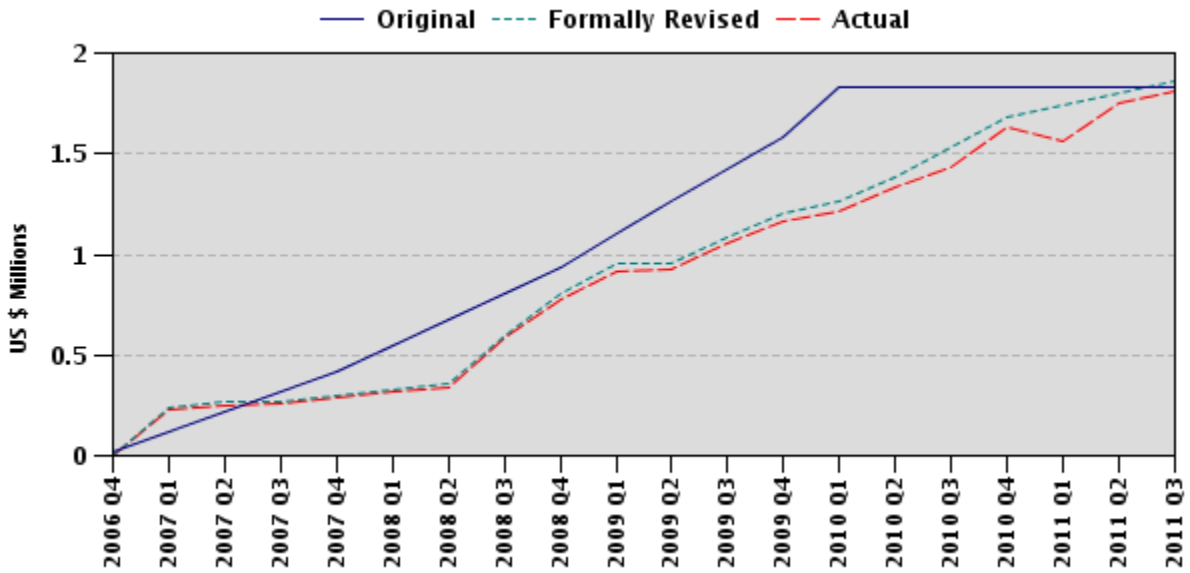
No.	Date ISR Archived	GEO	IP	Actual Disbursements (USD millions)
1	06/29/2007	Moderately Satisfactory	Moderately Satisfactory	0.29
2	06/06/2008	Moderately Satisfactory	Unsatisfactory	0.75
3	01/29/2009	Moderately Satisfactory	Moderately Satisfactory	1.02
4	06/22/2009	Moderately Satisfactory	Moderately Satisfactory	1.15
5	01/07/2010	Moderately Satisfactory	Moderately Satisfactory	1.34
6	06/04/2011	Moderately Satisfactory	Moderately Satisfactory	1.79

H. Restructuring (if any)

Restructuring Date(s)	Board Approved GEO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		GEO	IP		
08/27/2009	N	MS	MS	1.19	To streamline and simplify Project design by reducing the number and scope of activities so as to better match human resources and logistical constraints of implementation in the small and remote country. Key changes were: (i)Strengthen institutional arrangements; (ii)Reduce the scope of the Project and focus on two

Restructuring Date(s)	Board Approved GEO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		GEO	IP		priority areas; (iii)Strengthen Project management capacity; (iv)Change in resource amounts between components to better match the above changes .

I. Disbursement Profile



1. Project Context, Project Development Objective and Design

1.1 Context at Appraisal

Country and sector issues

1. Kiribati is one of the most isolated of the Least Developed Countries, consisting of 32 atolls and one reef island spread over a vast area of 3.5 million km^2 of ocean. At appraisal, the population was 98,400 (2004 est.) of whom nearly half lived in South Tarawa, a densely settled area growing at around 2% per annum. Kiribati is categorized as a lower middle income country; GNI per capita was US$970 per annum (2004 est.) Only 18% of the population is employed in the cash economy and the incidence of poverty is high in comparison to other Pacific Island countries.

2. Kiribati is considered to be one of the most vulnerable countries in the world to climate change and sea level rise. Most of the land is less than 3 meters above sea level and on average only a few hundred meters wide. The islands are exposed to periodic storm surges and to droughts, and some are becoming increasingly vulnerable due to poorly managed high population concentration, accelerated coastal development, and environmental degradation. Extreme weather events associated with climate change and sea level rise could severely affect the main Tarawa groundwater lens, increase the epidemic potential for dengue fever, decrease agricultural productivity, and affect important marine ecosystems and fisheries. In addition to the effects of climate change, coastal degradation and poor mangrove and coral reef management are endangering habitats for important biodiversity. It has been estimated that Kiribati could face economic damages due to climate change and sea level rise of US$8-$16 million a year by 2050, or 17-34 % of its 1998 GDP. Successful atoll development requires that the integrated aspects of the environment and social conditions, as well as external conditions - in relation to stability of global economic systems - are taken into account.

Rationale for Bank involvement

3. There was a clear rationale for the Bank to continue its involvement in climate change adaptation in Kiribati at appraisal. The Bank had been involved in climate change adaptation (CCA) in Kiribati since 1999, when it funded a major study on vulnerability and adaptation for the Regional Economic Report (2000). Following the review, adaptation and natural risk management became one of the pillars of the Bank's program in the Pacific. The first, preparatory, phase of the three-phased Kiribati Adaptation Program (KAP I) (2003-2006) had the objectives to mainstream adaptation in national economic planning and to prepare a pilot National Adaptation Program of Action (NAPA) to reduce the country's vulnerability to climate change, climate variability and sea level rise. KAP I successfully carried out national climate change consultations, raised public awareness, built capacity in risk management, incorporated adaptation into government planning processes and regulations, and undertook a social assessment of potential issues that could affect implementation during KAP II. KAP I was merged with the United Nations Development Programme (UNDP)-Global Environment Facility (GEF) NAPA preparation process.

4. KAP II was the logical follow-on from KAP I, aimed at piloting adaptation measures and consolidating the mainstreaming of adaptation into economic planning. KAP II was a GEF pilot project under the Special Program on Adaptation, demonstrating how adaptation planning and assessment could be translated into national policy and sustainable development planning and action.

1.2 Original Project Development Objectives (PDO) and Key Indicators

5. The objectives of the project are to: (i) develop and demonstrate the systematic diagnosis of climate-related problems and the design of cost-effective adaptation measures in Kiribati; and (ii) continue the integration of climate risk awareness and responsiveness into economic and operation planning by the Recipient.

6. *For reference:* For a GEF funded project, there is a requirement for a Global Environment Objective (GEO). As described in the PAD, the GEO was: "to assist the GoK in enhancing its capacity to plan and implement adaptation measures to the climate-related issues facing the country, which will also reduce the detrimental impacts of climate change on the fragile atoll ecosystems of Kiribati".

7. At appraisal, **key indicators** and targets at the outcome level (for the PDO) were:

(a) Establishment within first year of implementation of the Strategic National Policy and Risk Assessment (SNRPA) Unit as the lead agency coordinating climate change adaptation and related strategic issues;
(b) Percentage of climate-affected programs in Ministry Operational Plans (MOPs) that reflect systematic climate risk management; and
(c) Consistent use of best practice in the application of risk management, environmental assessment and options analysis to public infrastructure and vulnerability reduction measures.

1.3 Revised PDO and Key Indicators, and reasons/justification

8. The PDO was not revised. Two of the three outcome indicators were adjusted when the project was restructured, namely:

(a) Establishment within first year of implementation of the **Office of *Te Beretitenti*** (OB) as the lead agency coordinating climate change adaptation and related strategic issues; and
(c) Best practice in the application of risk management, environmental assessment and options analysis to public infrastructure and CCA vulnerability reduction measures **is applied on a pilot basis.**

9. The changes to the indicators were formalized with project team agreement based on: (a) Government of Kiribati (GoK)'s decision to mandate existing senior staff (rather than a new dedicated unit) in the OB to be responsible for the project and to coordinate

CCA activities; and (b) the reduced scope of activities to be implemented (on a pilot basis) tailored to the capabilities of local implementing agencies in the small country.

1.4 Main Beneficiaries

10. The primary target groups were stakeholders at both the island and national level. At the island level, beneficiaries were expected to be high-risk village populations and subgroups living on or near coastal areas and actually experiencing the impacts of climate risks and climate change. It included households and extended households (*kainga*), traditional village institutions (such as *unimanwe* or traditional decision making body), church groups, and women and youth groups. Other key beneficiaries at an island level include Island Councils and their subcommittees, island level church organizations, and locally seconded representatives of local government who were to receive training and awareness-raising in developing detailed coastal ecosystem adaptation plans for their villages as well as on the impacts of various climate hazards.

11. At a national level, key beneficiaries were expected to be:

- Office of Te Beretitenti/The Office of the President who were strengthened in capacity to coordinate and manage climate change adaptation and disaster risk reduction;
- National Ministries, particularly: Ministry of Public Works and Utilities (MPWU); Ministry of Environment, Lands and Agricultural Development (MELAD); Ministry of Finance and Economic Development (MFED); Ministry of Internal and Social Affairs (MISA); Ministry of Fisheries and Marine Resources Development (MFMRD); Ministry of Health and Medical Services (MHMS)) who received on-the-job training and technical assistance (TA) in design solutions and adaptation measures;
- Civil society notably local non-governmental organizations (NGOs) and the National Council of Churches who benefitted through training in community engagement aspects of climate change adaptation;
- The private sector, particularly local consultants and contractors who benefitted through business opportunities for consultants services and small works funded under the project.

1.5 Original Components

12. The project was broken into five broad components. In line with the PDO, the components were designed to produce immediate investment results while demonstrating and promoting a climate-risk aware approach to planning and design of such activities.

13. **Component 1**: **Policy, planning and information (US$1.17m, 18% of total costs).** The expected outcome of this component was improved consultation, planning and coordination mechanisms to support climate change adaptation. This component supported three core elements of adaptation efforts in Kiribati: awareness raising and consultation; policy coordination and planning including technical assistance for

mainstreaming and climate risk management, and; generating scientific climate risk information.

14. **Component 2**: **Land use, physical structures and ecosystems (US$2.17m, 33% of total costs).** The expected outcome of this component was improved management of climate related hazards to coasts, public assets and ecosystems. This component intended to contribute to reducing the vulnerability of the coastline, including key public assets and ecosystems, shift management practice to a more preventative, technically varied and sustainable approach.

15. **Component 3**: **Freshwater resources (US$2.16m, 33% of total costs).** The expected outcome of this component was improved sustainability of freshwater resources. This component supported the development and management of freshwater resources to reduce their vulnerability to climate variability and climate change.

16. **Component 4: Capacity at island and community level (US$0.55m, 6% of total costs)**. The expected outcome of this component was improved capacity for climate change adaptation at island, government and community level. This component intended to provide technical assistance to MISA to include adaptation in the Outer Island socio-economic development profiles and climate-risk management training for local governments, and to finance a pilot program of small scale adaptation investments in select Outer Islands.

17. **Component 5**: **Project Management (US$0.39m, 8.4% of total costs).** The expected outcome of this component was support provided for the implementation of project activities. This component intended to provide project management, accounting, procurement, and running costs of the Project Management Unit (PMU).

1.6 Revised Components

18. The components were not revised. However, there were changes in the activities and distribution of resources between the components as described in Section 1.7.

1.7 Other significant changes

19. The project was restructured following mid-term review and the number of activities under each component was reduced in order to focus on demonstrating visible results on the ground. Resources were shifted in particular towards activities that supported targeted capacity building under components 2 and 3 (investments) and project management support. This also acted to reduce the geographical scope of the project as many Outer Island activities were cancelled (see Annex 2). The changes in project design, scope, management and implementation arrangements are outlined in section 2.2. In addition, the project timeframe was extended from three to five years because geographical isolation, shipping delays and weak procurement capacity impeded implementation. The Australian Agency for International Development (AusAid) provided additional funds of $A550,000 to make up budget shortfalls due to foreign

exchange loss and a higher cost of labour and materials than envisaged at the time of project preparation.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

20. **Soundness of the background analysis:** KAP II was designed as a follow-on to KAP I which had established adaptation priorities across diverse groups in Kiribati and identified options for pilot investment designs. Analysis from KAP I is clearly reflected in the thematic design of the project components, most significantly: housing the project in a high level coordinating ministry; a balance of 'hard' physical investments and 'soft' behavior change activities; focus on integrating adaptation investments into national economic planning and preparation of sectoral plans and budgets for mainstreaming implementation, and; basing adaptation investments within a long term planning process that linked bottom up consultation with top down planning and policy.

21. **Assessment of Project Design**: The project design was overly ambitious with regards to both the range and technical complexity of activities and taking into account the implementation and management capacity of agencies in a small country such as Kiribati.

22. The major shortcomings were: a large number of diverse activities across multiple sectors; lack of cohesion between awareness and investment activities; some overly technical activities requiring extensive feasibility analysis, and; too many activities focused in remote and dispersed outer islands. Although eclectic, the collection of intended activities might have been appropriate in a different setting but would have required high management capacity, high organizational and planning capacity, and high in-country experience with Bank systems and procedures which were lacking in Kiribati. Overall, the complex design led to implementation delays and slowed the project progress towards achieving objectives and intended outcomes. As a demonstration project, the intention had been to trial as many tools and techniques for climate change adaptation as possible and also to trial institutional arrangements for adaptation coordination. The project was a flagship for the World Bank, being the first to focus entirely on climate change adaptation in the Pacific region. These two factors explain, in part, the somewhat overly ambitious design of the project.

23. **Adequacy of Participatory Processes and Government Commitment.** Stakeholder participation in the design of KAP II was noteworthy. KAP I had mobilized stakeholders early on in consultations and the KAP II design process involved a series of National Consultations for the prioritization of adaptation investments. The National Consultations involved communities, NGOs, church groups, women's groups, youth, and Outer Island local governments as well as implementing ministries. Decision making about the types of investments to be funded by KAP II was integrally influenced by the priorities identified by stakeholders during these consultations.

24. The success of the complex, multi-sectoral and human resource-intensive project design would hinge ultimately upon strong commitment to climate change adaptation at all levels of government. The GoK (OB, MFED and Public Services Office) initially displayed strong high level commitment, demonstrated by support for the establishment of the SNPRA unit. However, national elections and government changes impacted political commitment to the project in the early stages of implementation and the establishment of the SNPRA unit was delayed.

25. **Project Risks and Mitigations.** The project did not adequately identify risks that became apparent in the early years of implementation. Delay in establishing the SNPRA unit was identified as a risk by the design team but was not given enough weight (the risk rating was 'Low'). Further, the mitigation measures identified in the PAD did not clearly address the risk of shifting government support.

26. Insufficient capacity in line ministries to manage the implementation demands of project activities was not identified as a project risk at appraisal. Lack of sufficient experience and capacity in the PMU itself to manage the significant fiduciary demands of the project was not identified as a risk. Given that approximately 85 percent of technical assistance for the project was intended to be sourced nationally, it would appear that the level of technical capacity in Kiribati's private sector also was overestimated and had not been identified as a risk in the PAD.

2.2 Implementation

27. Implementation performance slipped to unsatisfactory prior to the mid-term review. After the mid-term review, several leadership, design and management changes were identified, and the project was formally restructured[1] to respond to shortcomings affecting implementation.

Problem: Lack of GoK leadership on KAP II activities.

28. Staffing of the SNRPA unit did not occur as planned and the project lacked a Project Director for many months. The lack of supervision and direction provided to the PMU and general lack of leadership of multi-sector climate change adaptation activities impeded implementation progress. This constraint was identified as the most critical to the project achieving its objectives, as it limited the commitment of line ministries to their respective project activities and prevented progress towards addressing the further implementation obstacles outlined below.

Actions taken: Strengthening institutional arrangements

29. A restructure of the institutional arrangements for Project oversight enabled implementation to progress. Rather than establishing the SNRPA Unit, the capacity of existing senior staff within the OB was increased to lead and coordinate climate change adaptation. The result was strengthened leadership as the Deputy Secretary (and later,

[1] The Board approved Project restructure on August 27, 2009.

the Secretary) to the OB position was appointed as Project Director. This greatly enhanced GoK ownership of KAP II, demonstrated by the later appointment of a disaster risk reduction officer, climate change policy adviser and senior policy mentor in the OB.

Problem: Project scope was too broad for available human resources

30. A key factor affecting implementation was the lack of skilled and available personnel in core implementation Ministries (especially MPWU, MELAD, MISA) to handle the large number of proposed multi-sector activities, particularly on difficult-to-reach outer islands. For example, although progress with preparing the National Water Policy was good, the installation of rainwater collection and storage facilities on public buildings, freshwater lens assessments, water supply improvements in outer islands and revision of the national building code were all delayed.

Actions taken: Reducing the scope of the Project

31. The number of activities under each component was reduced, some activities deferred for a possible KAP III, some re-focused to better complement other activities, and some dropped entirely (see Annex 2 for details). Overall, activities were adjusted to focus on water and coastal sectors (components 2 and 3) and on activities that would demonstrate tangible results. The geographical scope of the project was reduced. These changes, coupled with new procurement arrangements, brought the project back to a span that was more manageable given implementation capacity in line ministries.

Problem: Project management arrangements were too complex for capacity in the PMU and line ministries

32. The procurement arrangements agreed upon at appraisal - involving a number of relatively small contract values to deliver individual activities - did not account for the GoK's limited experience with procurement at an international standard. Although the PAD claims that the PMU had sufficient experience with World Bank procurement procedures under KAP I, this experience was limited to individual consultants and goods and therefore not sufficient to handle the required pace and scale of procurement under KAP II. The resulting workload was such that procurement activities created a bottleneck preventing implementation of most physical investments.

Actions taken: Strengthen management and implementation capacity

33. Specific actions were taken to increase management and technical capacity within the PMU and MPWU (the line ministry receiving the bulk of implementation following restructure), and to reduce demands on the PMU. Most significantly: an international Management Adviser and Procurement Adviser were recruited for the PMU; Senior Technical Advisers were recruited to build capacity in water and civil engineering units of MPWU; the procurement plan was revised to bring procurement for the bulk of activities into two large firm contracts with multi-member consultancy teams to handle documentation and assist with the procurement and supervision of construction works, including Force Account works. Combined, these actions resolved the bottleneck caused mainly by procurement arrangements and physical works were progressed.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

M&E Design

34. The Results and Monitoring Framework (RMF) established in the PAD was the major formal mechanism for Project-specific results monitoring throughout the project.

35. Outcome level indicators were designed specifically to address the PDO, namely to measure project impact on risk diagnosis and adaptation design and on mainstreaming. Because the PDO was the basis of the RMF, outcome-level indicators did not specifically measure capacity building as this was instead captured by the GEO. The second outcome level indicator (Section F) had limited value in measuring the real impact of the project on mainstreaming climate risk management. Although KAP II activities were reflected in MOPs from 2007 to 2010, this does not necessarily mean that climate risk management was sustainably integrated as a priority in regular ministry work; success in this regard would have been better measured by how many *additional* climate risk-related initiatives were reflected in ministry planning, particularly those that utilized government funding sources. Further, although MOPs are intended to link Ministry work to the Kiribati Development Plan and national budgeting process, in reality they are not generally closely followed. This indicator became less relevant following Project restructuring (to only MPWU and MELAD as implementing Ministries) and should have been revised.

36. The overall design of the RMF was expansive with many indicators and thus proved onerous to implement. In retrospect, the design of the RMF – and target values - should have been formally revised at project restructure to reflect: the significant reduction in project scope and geographic focus; the reduced timeframe for implementation of physical works; and the realized capacity of the PMU. As it was not substantially revised, the final values often suggest unsuccessful outcomes since significantly fewer activities were completed than originally intended in the (somewhat over ambitious) initial project design. The Project Management Adviser, hired following restructure, assisted the PMU to streamline the component-level indicators to better fit revised activities (although this was not formalized). The purpose was to ensure relevant KAP II component outputs could be evaluated as an input to baseline conditions of KAP III. The streamlined Results and Monitoring Framework is reflected in the output level indicators included in Section F.

M&E Implementation

37. Data was not regularly collected by the PMU, as required by RMF implementation arrangements outlined in the PAD. Missions consistently identified that data collection and M&E reporting was unsatisfactory, due to low capacity in the PMU to handle multiple project management demands and implement the expansive RMF. To address this, resources were made available for the appointment of an M&E specialist to revise the monitoring template and data collection procedures and to train the PMU on data collection and utilization in results-orientated progress reporting. However, the consultant hired did not deliver a satisfactory output with regard to either of these deliverables. As a result, the PMU was unable to progress with monitoring. Following

restructure, the PMU allocated M&E responsibility to one staff member which assisted implementation; some headway was made with data collected for some component-level indicators up to year 3 (2009). The presence of the Project Management Adviser greatly assisted the quality of data collection and progress reporting. Data was collected to further update the streamlined Results and Monitoring Framework for the purpose of ICR completion, following project closure.

M&E Utilization

38. Because of limited data collection, the RMF was not utilized in most project progress reports which, although generally submitted, were not forward looking and results-orientated. One progress report utilized outputs of results analysis (Combined Annual Report 2009 and Progress Report to March 2010). From the Bank side, the continuous supervision and mission reports, including detailed Action Plans for PMU follow-up, provided input to the M&E efforts.

2.4 Safeguard and Fiduciary Compliance

Social Safeguards

39. Project design triggered World Bank Operational Policy (OP) 4.12 on Involuntary Resettlement as project subcomponents had the potential to require land acquisition for infrastructure such as seawalls and freshwater abstraction galleries. A detailed Land Acquisition and Resettlement Policy Framework (RPF) was prepared and disclosed which complied with Kiribati's legislation and procedures and the Bank's policy on involuntary resettlement procedures.

40. In the one instance where the Involuntary Resettlement Policy was triggered, compliance with the procedures outlined in the RFP was slow but ultimately satisfactory. The installation of freshwater galleries was suggested at a site where asset acquisition (coconut trees) and land was needed. However, negotiations to acquire land from the community began before the required socioeconomic assessments and other procedures detailed in the RPF had been adhered to. Close supervision by the project team ensured that this subcomponent was put on hold until the appropriate procedures had been complied with.

41. The quality of Bank supervision with regards to social safeguards policy was varied during the project. The departure of the initial Social Safeguards Specialist from the team and the lack of a replacement until mid-2010 meant that there was a gap in supervision for a couple of years. This situation improved from mid-2010 until the project closed.

Environmental Safeguards

42. An Environmental Policy Framework (EPF) was adopted. In compliance with GoK's legislation, larger subprojects, with potentially higher environmental impacts, were subject to Environmental Management Plans (EMPs) being drawn up and approved by the Government's Environmental and Conservation Division (ECD) in accordance with the approved EPF. No environmental safeguards were triggered throughout the life

of the project. Both Bank and counterpart safeguard experts monitored and ensured that all safeguard conditions were being observed.

Financial Management

43. The recipient complied with Financial Management (FM) conditions outlined in the GEF grant agreement, specifically: to have the project approved and incorporated into the fiscal year 2006 budget, and; to have adopted the Project Implementation Plan, Operations Manual, and the Pilot Outer Islands Investments Scheme Procedures Manual. The assessment of KAP II rated the FM risk as "moderate" based on the perceived lack of capacity in Public Financial Management and the failure to publish the government accounts. The implementation aspects of the project were mainly rated low risk due to prior experience gained from KAP I.

44. Throughout the life of the project there were only two supervisions conducted by Financial Management Specialist staff . Both supervisions rated the FM performance as satisfactory and no material issues were identified and no follow up recommendations were included in either report.

Procurement

45. Compliance with procurement procedures was generally weak due to lack of experience and capacity in the PMU. Attempts were made to implement agreed mitigation actions – through the appointment of dedicated national and international procurement staff – but staff turnover and poor understanding of procedures continued throughout the life of the project. A procurement post review carried out in June 2008 included recommendations to step up the advisory support and improve the recordkeeping system. Notable improvements in processing were evidenced only in the second half of the project period, with the appointment of a capable procurement officer supported by international technical support, and a gradual understanding of procedures by implementing staff.

46. In view of the assessed low capacity, procurement prior review thresholds were set at very low levels, and required a high level of input from Bank staff based in the Sydney office.

2.5 Post-completion Operation/Next Phase

47. At the request of GoK, a follow-on KAP III was approved by the Board on September 15, 2011. Phase III will build on several key results achieved under KAP II and carries forward a number of activities unable to be implemented under KAP II, including:

- The Government of Kiribati 2010 Water Resources Policy for Kiribati,
- The National Water Resources Implementation Plan, endorsed by the government in 2010;
- Implementing the results of pilot programs on leakage reduction carried out with the Public Utilities Board (PUB) by KAP II in2010.

- The Tarawa Water Master Plan, developed under KAP II and published in February 2011
- Community and hydrological surveys and community consultation for improved water supply in villages in North Tarawa
- Pilot programs on Rainwater Harvesting Systems in South Tarawa, completed in June 2011
- Analysis of the protection of groundwater reserves in Bonriki carried out in February 2010.
- Coastal conditions assessment and identification of highly vulnerable sites.

48. The OB remains as the high level implementation agency. A number of KAP II PMU staff have been re-hired under competitive bidding for the KAP III PMU.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

49. **Objectives.** The *2004-2007 National Development Strategies* (NDS) and subsequent *Sustainable Development Plan 2008-2011* (SDP) highlighted climate change as a key risk to economic development, and provide for consultation-based measures for climate change adaptation. The documents also emphasize the need to care for the islands' fragile environment and for sustainable use of natural resources.

50. The Bank's Four-Year Strategy for the Pacific Islands (June 2005) identified improved hazard risk management as one of the five pillars contributing to the economic growth and job creation. The Kiribati Country Assistance Strategy (CAS) FY2011-2014, is the first climate change-focused CAS in the Pacific region. Thus, the objectives of the project remain relevant to and are consistent with both the national and World Bank strategic priorities.

51. **Design**. Individually, the components and activities included in project design were relevant to the needs of the Government and people of Kiribati which has described itself as being at the forefront of the impacts of global climate change. Activities spanned sectors identified as high risk in the NDS and SDP and targeted priority actions identified by a wide range of stakeholders through an in-depth participatory consultation process. However put together, the number, geographic range and technical complexity of activities were not as relevant to the situation of Kiribati since high management capacity would have been required for successful implementation.

52. **Implementation.** During implementation, restructuring was successful in correcting the relevance of design by re-aligning project components and activities with implementation capacity. Bank implementation support became highly relevant to the needs of key implementing agencies following restructure when in-country visits and dialogue with the OB and its PMU increased. Housing implementation in the OB was appropriate as, following capacity enhancement at restructure, it ensured that project

activities could be coordinated and undertaken by all relevant agencies and communities in the country.

3.2 Achievement of Project Objectives

53. The following is an evaluation of project outputs, as they relate to project objectives. Detailed discussion of component outputs can be found in Annex 2.

54. As captured in the PDO, a key objective of the project **was integrating climate risk awareness and responsiveness into economic and operational planning.** This objective was achieved, although further targeted capacity building is required. Despite initial setbacks, the OB has been established as a central, high level entity with a mandate to coordinate and lead CCA and disaster risk management, thus achieving Outcome Indicator 1. Through the establishment of this institution, leadership capacity for CCA planning has therefore increased within the GoK. MOPs were established as the principal institutional planning vehicle for mainstreaming, linking CCA to national development priorities. KAP II activities appeared in MOPs consistently throughout the life of the project, exceeding the 60% target of Outcome Indicator 2.

55. Although KAP II built capacity and set up the institutional structures to enable the GoK to lead a whole-of-government climate risk management approach, more time and capacity is needed before CCA implementation becomes a truly government-owned, led and coordinated process. Due to limited staffing and multiple commitments, the OB was not able to consistently work towards ensuring line ministries fully understand and are committed to integrating climate risk management in regular ministry operations. Climate change adaptation remains (generally) viewed at all levels of government as a problem separate and additional to other development priorities, that requires external experts and donor funding to solve. The OB is the institution established under KAP to lead the way in changing this perception and therefore leading Kiribati towards climate resilient development. However, further targeted capacity building within the OB is required to increase its understanding and drive to do this.

56. Another key objective captured by the PDO and reflected in project design was **to develop skills for systematic diagnosis of climate-related problems** and the analysis of adaptation options, through both formal training and technical assistance. Two integrated training activities were particularly successful in achieving this objective: 1) capacity building workshops to train cross-ministry staff in coastal climate risk assessments and adaptation planning, and; 2) training in the use of calculators for downsizing global climate change science to Kiribati levels in the coastal and water resource management sectors. These risk assessment methodologies are being utilized independently of KAP II; by ECD-MELAD in the development of their Second National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), and by the Kiribati Meteorological Services (KMS) in drought analysis. International TA placements in ministries and counterpart arrangements with consulting firms significantly increased 'hands-on' technical skills within key implementing and beneficiary ministries. Some examples of skills gained include: data collection techniques for water resource

assessment (Water Unit, MPWU); leakage detection and repair methodology (PUB); good practice in rainwater harvesting installation and construction quality and assurance (MPWU, King Holdings (private contractor)); climate resilient construction techniques for coastal protection measures (MPWU).

57. Although this objective has been achieved, understanding of how and when to apply skills remains limited to a few key individuals within government, which may compromise the sustainability of this success as ministry staff move on to other jobs. As the implementation of components 2 and 3 started only in the last quarter of project life, the efforts of both consultants and Government counterparts were focused on finalizing works which limited their ability to participate in long term capacity building efforts. As a result, skills such as data analysis and application of data in risk assessment and infrastructure design could not be adequately transferred. The value of many earlier capacity-orientated KAP II outputs were diminished since continuation of these was stopped at restructure. Details can be found in Annex 2.

58. The final key objective reflected in the PDO and project design was **to develop and demonstrate the design of cost-effective adaptation measures,** including tools and techniques for adaptation and risk management**.** The implementation of both physical investments and policy-orientated climate risk management strategies successfully demonstrated to the government and the public that solutions are available to offset climate change risks. The importance of this should not be underestimated in Kiribati where the prevailing perception prior to KAP II was that relocation of the national population was the only option.

59. Tools and techniques for coastal protection and water resource management that were specifically appropriate for the Kiribati context were developed and successfully applied on a pilot basis in all physical investments, thus achieving Outcome Indicator 3. For example, the design of 'hard' engineering works for coastal protection was built from a basic design already being applied by MPWU in order to make it simple enough to be replicated outside KAP II. MPWU staff was involved at all stages of the diagnosis and design process. Ecosystem-based measures were also applied on a number of sites on South and North Tarawa and Outer Islands with over 37,000 mangrove seedlings planted. The uptake of this output, led by MELAD, has been sustainable, with communities actively involved in mangrove planting and maintenance. Best practice was applied in the design and construction of seawalls at four sites along the main road in South Tarawa, three on the lagoon side and one on the ocean side, for a total of 0.5 km of coastline (Component 2); 9 freshwater monitoring boreholes in locations in North and South Tarawa, and 1 water infiltration gallery in North Tarawa (Component 3).

60. The process of designing and installing rainwater harvesting and storage facilities on public buildings at four sites demonstrated a simple yet rigorous construction design, building on existing designs being applied by MPWU. Rainwater harvesting guidelines developed under KAP II in collaboration with MPWU are now being applied in a New Zealand Aid Program (NZAP) funded rainwater harvesting project. Piloting of freshwater infiltration galleries for sustainable community water resource management

generated important lessons for future investments in Kiribati and other Pacific Islands. The water resource assessment included more than 1200 measurements of the water lens as well as surveying the conditions of more than 550 household wells and the rainwater harvesting potential of more than 100 communal building. The assessment and community consultation process demonstrated to MPWU, donors, the OB and NGOs the extent of time and resources needed for effective options analysis for infiltration galleries and other waster resource management works.

61. Documentation of lessons (technical and implementation-related) was undertaken by individual consulting firms. However, a compilation of lessons learned from each type of investment (e.g coastal protection measures, infiltration galleries, rainwater harvesting) would facilitate better consolidation of experience gained through pilot activities and therefore enable greater achievement of objectives.

3.3 Efficiency

62. A conventional economic analysis was not applied to the project due to the difficulties of quantifying the damage associated with future climate events and the project benefits associated with climate risk reduction (see Annex 3).

63. The selection of capacity enhancement investments was based on climate related sectors that would experience the worst incremental development costs incurred because of climate change. Economic benefits resulting from investments in the water sector include improved supply of clean water for human consumption and related reduction of public health costs, and reduction of water shortages for agriculture and economic activities and related loss of productivity. Economic benefits associated with more effective coastal hazard protection include reduced damage to coastal structures and ecosystems and associated livelihoods. Although it is difficult to quantify there is consensus in government and among donors and communities that KAP II investments are economically worthwhile, given the risks related to climate change that could amount to US$8–US$16 million in the absence of adaptation (World Bank, 2000).

64. Many important lessons were learned with regard to economic efficiency of investments – particularly regarding the real costs of construction and accessing goods and services in a remote location like Kiribati. The cost of labour and materials was higher than envisaged at the time of project preparation and had to be partly offset by reducing the unit number of coastal and water utility components. Investments within the coastal sector were selected using a cost-benefit analysis to ensure that the selected protection solution was the most cost-effective; for example, by choosing construction methods that would require less or simpler maintenance.

3.4 Justification of Overall Outcome Rating

Rating: Moderately Satisfactory

65. The overall rating is based on the relevance of the objectives, the extent to which they were achieved, and the efficiency in doing so (see Section 3.3). Project objectives remain highly relevant to the current strategic priorities of Kiribati and the World Bank. Project design had some shortcomings that a restructure and increased implementation support were able to successfully address. The restructure delivered a number of largely satisfactory outputs that enabled all project objectives to be achieved to some extent. The integration of climate risk awareness and responsiveness into economic and operational planning was moderately satisfactory. Shortcomings stemmed from the shortened timeframe of the project; more time was needed to truly build ownership of climate change adaptation at the highest level of government. The development of skills for systematic diagnosis of climate-related problems and the analysis of adaptation options was also moderately satisfactory. A shortened timeframe meant that increasing capacity and skills building outputs became secondary to completing physical investments. The demonstration of tools and techniques for adaptation and risk management was satisfactory since the project produced and documented a number of valuable lessons for future adaptation investment. Overall, the short timeframe of actual implementation of most activities – especially physical investments – meant that the value of some outputs was often not as high as envisaged at appraisal[2]. The necessary discontinuation of some subcomponents resulted in a number of earlier 'orphan' outputs that did not therefore significantly contribute to achieving Project Objectives.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

66. Women and NGOs had a clear role in project activities (Intermediate Indicator 3). Low income households and women headed households explicitly were consulted in the initial project design consultations and in subsequent implementation of works such as the water infiltration gallery and seawalls. NGOs played an integral role in design consultation for physical works and their skills were developed as a result.

(b) Institutional Change/Strengthening

67. Strengthening the capacity of key institutions to lead, coordinate and manage CCA efforts is a fundamental aspect of the project objectives. As discussed in Section 3.2 the OB has been successfully established as the lead agency coordinating CCA and related strategies. The institutional capacity of key climate affected sectoral ministries to implement climate risk management strategies has been increased through training and skills transfer.

(c) Other Unintended Outcomes and Impacts

68. There were no unintended outcomes or impacts, positive or negative.

[2] For example, the Original Target Value for the number of water supply improvements implemented (Intermediate Indicator 13) was 5 while the number achieved was 1.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

69. There was no beneficiary survey or stakeholder workshop.

4. Assessment of Risk to Development Outcome

Rating: Moderate.

70. The follow-on phase – KAP III – builds upon the successes and lessons learned during KAP II and therefore minimizes the risk that development outcomes will not be achieved.

71. However, some risk remains:

(a) Political and institutional risks. With a change of government, the political will to enforce various outputs produced from KAP II (such as the building code, water resource management plans, guidelines and manuals) could lessen. This risk has a moderate likelihood but would have a high impact since fostering government ownership of climate risk management is fundamental to the PDO.

(b) Technical risks: some of the tools produced for risk assessment (particularly calculators and risk assessment methodologies and guidelines) are based on climate change projections that are constantly being updated as climate science progresses. The design of investments based on these assessments may not be sufficient to withstand the latest projections of changes in sea level and extreme events. The likelihood of this is moderate since climate science is progressing quickly, however the potential impact is low since most investments are designed to reduce risk to current climate stress as a way to reduce risk to future climate.

5. Assessment of Bank and Recipient Performance

5.1 Bank

(a) Bank Performance in Ensuring Quality at Entry

Rating: Moderately Satisfactory

72. In retrospect KAP II exhibited weakness at entry in four areas: i) the number and geographical/sectoral scope of activities was too ambitious for implementation capacity specific to Kiribati; ii) procurement arrangements were too complex for available management capacity, nor did they reflect the lack of locally available consultants and contractors; iii) institutional arrangements for project leadership did not account for the risk of shifting political commitment, and; iv) many project risks were not recognized or adequately addressed. These weaknesses at appraisal accounted for poor progress towards meeting development objective and inevitably contributed to unsatisfactory implementation progress in the early life of the project.

73. It is likely that these weaknesses at entry reflected the lack of global knowledge and experience with climate change adaption project design and implementation and the limited country knowledge and experience rather than poor Bank performance in the identification and preparation phase. It is important to stress that KAP II was the first Bank investment in Kiribati and the first adaptation project of this scale in the region (and among the first globally), with no possibility to compare or gain any insights from previous or similar effort. At the time of design, most climate change adaptation-related initiatives in the region were at the stage of *vulnerability assessment* rather than *adaptation implementation*. There were therefore few implementation and management lessons to draw upon in designing KAP II.

(b) Quality of Supervision

Rating: Moderately Satisfactory

74. Quality of Bank supervision increased over the life of the project. During the first two years of the project, the Bank did not provide the level of implementation support that is needed in a capacity-constrained environment such as Kiribati. By the time implementation started, the project had moved to a third task team leader who already had a very large program under development. A significant lag between project launch and the first supervision mission contributed towards the waning commitment of GoK central and line ministries, as stakeholders experienced few outputs and other priorities took over. As a result of infrequent initial supervision, the full extent of capacity and implementation constraints that were limiting the acceptable implementation of the project – and the actions required to address these constraints - were only realized two years into the (initially) three year project.

75. Following the second review mission in April 2008 during which many implementation constraints were formally recognized, supervision increased to two official visits per year with interim visits by social and environmental safeguards staff who also worked on other projects in Kiribati. Both procurement and FM stepped up their support in the Pacific (with more staff in Sydney) which in turn meant more regular supervision missions. This enabled problems and solutions to be more swiftly identified and dealt with and especially assisted compliance with Bank policies and systems.

(c) Justification of Rating for Overall Bank Performance

Rating: Moderately Satisfactory

76. The overall rating for Bank performance is based on moderately satisfactory ratings for both quality at entry and supervision. The Bank adapted appropriately as project design weaknesses became evident and implementation issues emerged. Shortcomings at entry were in part a reflection of unrealistic expectations due to lack of CCA implementation experience in the region. Aspects of preparation were exemplary, particularly the in-depth participatory design process. Initially significant shortcomings in the Bank's proactive identification and resolution of threats to development outcome

were rectified by the restructure which facilitated moderately satisfactory achievement of objectives in the timeframe remaining.

5.2 Recipient

(a) Government Performance

Rating: Moderately Satisfactory

77. Government performance improved over the life of the project. Although project leadership was the responsibility of the OB, initial commitment to this function apparent at appraisal did not materialize and the SNRPA Unit – crucial to progressing implementation - was not staffed for the first 18 months of the project. However, commitment to achieving project objectives increased as implementation issues became apparent and the government, led by the OB, proactively worked with the Bank to resolve these and restructure project activities. The OB was eventually appropriately staffed – including the addition of a Climate Change Policy Adviser - following agreement from the government. This development is to be commended, as strengthening the government climate change policy and coordination capacity is one of the main goals of the government strategy for climate adaptation and is a key objective of the KAP program.

78. The functioning of the National Adaptation Steering Committee (NASC)[3], the entity responsible for promoting and monitoring coordination among implementing agencies, was inconsistent with frequently low attendance at Secretary or Deputy Secretary level. The NASC rarely had enough leverage to effectively steer KAP II. As a result, reporting of KAP II decisions, critical issues, updates and progress to Ministerial Secretaries and to Cabinet has not been consistent.

(b) Implementing Agency or Agencies Performance

Rating: Moderately Satisfactory

79. Implementing agencies were the PMU (housed within the OB) and line ministries involved in activities funded by KAP II. Moderate shortcomings in performance were due to initial lack of capacity rather than lack of commitment to achieving development objectives. The PMU showed high commitment to carrying out post-mission Action Plans and this was fundamental to the completion of physical investments. Capacity constraints were markedly addressed by the appointment of a Project Management Adviser and Procurement Adviser, including greater engagement with line agencies, enhanced supervision of TA inputs, better office processes and more streamlined management of procurement processes. M&E responsibilities were performed inadequately however, impacting the quality of project reporting.

[3] Chaired by the Secretary of the OB (also the Project Director)

80. Initially low commitment to KAP II activities within line ministries was linked to inconsistent leadership and coordination at a higher level and irregular Bank supervision missions. Low commitment shown by MISA, in part due to other competing priorities within the Ministry, contributed to the reduction in geographic scope of KAP II. Following the procurement arrangement restructure, MPWU committed considerable staff resources to the implementation of demonstration projects in water and (especially) coastal sectors. Technical supervision and most of the construction works under the protection of coastal public assets component was successfully carried out by MPWU under force account. MPWU also committed staff resources to assessments carried out under the Improvement of the Sustainability and Supply of Freshwater component. Compliance with GoK environmental consent process (processed by MELAD) was sound for both contracts. The performance of MPWU in implementation and management of these components was greatly enhanced by international TAs placed in the ministry, who provided capacity building and supplementation. However, the commitment of MPWU to community consultation engagement under the freshwater component was low.

(c) Justification of Rating for Overall Recipient Performance

Rating: Moderately Satisfactory

81. The overall rating for Recipient performance is based on ratings of moderately satisfactory for both government and implementing agency performance. Despite insufficient leadership during the first 18 months of the project, alternative options were proactively implemented by the government to increase leadership capacity in the OB. Government oversight of KAP II management became sufficient following restructure – albeit with moderate shortcomings because of inconsistent functioning of the NASC. The capacity of the PMU and line ministries to perform the required functions was successfully enhanced although reporting remained inadequate.

6. Lessons Learned

82. Experience from KAP II has informed the design of KAP III and will be carried forward in project implementation. Lessons are of direct relevance to further adaptation projects in the Pacific region and globally. The lessons presented below relate to three aspects of climate change adaptation project design and implementation: policy mainstreaming and political commitment; management, and; implementation of investments and capacity building.

Policy mainstreaming and political commitment:

83. **Consistent high-level leadership is crucial to integrating climate change adaptation into development processes.** Strong political commitment to climate change adaptation alongside other priorities takes a long process of engagement. Project (and climate change adaptation) leadership and oversight needs to be housed in a high level ministry. Donors need to provide regular implementation support to ensure commitment to project oversight is regular and to ensure understanding of and commitment to climate change adaptation is thorough. The value of regular face-to-face contact should not be

underestimated in Kiribati where trusting personal relationships are important to accurate communication of facts and opinions, the negotiation of durable agreements, and mutual commitment to project objectives.

Management:

84. **Effective and timely project implementation depends on appropriately skilled individuals and, in particular, a strong Project Manager**. Expertise and cohesion built within the KAP II PMU was instrumental to the accelerated success of the project post-restructure. A thorough analysis of institutional capacity for project management should be undertaken prior to final project design. Experienced technical advisers that mentor individuals in procurement, financial management, monitoring and evaluation and day to day management are likely to be necessary to build necessary expertise locally. PMUs should be headed by a Project Manager with considerable project management experience. The following are important to effective project management: pro-activity and initiative in stakeholder coordination; facilitation of collaboration between ministries; regular communication between ministries, and; ongoing necessary reporting.

85. **Complex procurement arrangements may prevent effective implementation progress.** In the absence of considerable experience with World Bank procurement processes, a complex procurement plan prevented KAP II implementation in the first two years. A thorough procurement capacity analysis should be undertaken before the procurement plan is developed and should guide project design. Technical advisors should be provided where necessary to build procurement capacity to international standards. A key lesson learned, which is systemic across the region, is that Bank staff need to provide a high level of support upfront, with procedures being explained in simple, diagrammatic form and through interactive sessions. Further, given the remoteness of the country, attracting competent international experts is difficult and therefore necessitates a concerted effort to promote more knowledge transfer programs among nationals.

86. **Research and information generated by a project needs to be consolidated and shared.** The large archive of research and advice generated by KAP I and KAP II, mostly of high quality and on subjects not previously studied in depth in Kiribati, is unique. A common problem in the Pacific is that research outputs from projects are not collated or made publically available. This can result in research duplication in future projects, thereby wasting funding and time. Wide public access to CCA-related data and research should be promoted at no or nominal cost. Information could be electronically linked to similar facilities in regional organisations and universities. The website www.climate.gov.ki should be used to facilitate public access to information.

Implementation of investments and capacity building activities:

87. **A simple project design with focussed scope is required to maximise project performance and in-country capacity building.** The pre-restructure design of KAP II was overly ambitious, assuming a project implementation capacity and expertise not available in Kiribati at the time. Project design for CCA should be strongly aligned with

select government development priorities. Project components and activities should be cohesive and clearly work towards a simple project development objective. A balance should be sought between scaling up and building upon past successful initiatives and introducing new activities for CCA.

88. **Skills gained may be quickly lost if they are not regularly applied in regular ministry work.** There is a risk that skills will be lost if they are not applied in regular development activities within ministries. Technical capacity enhancement needs to be directly linked to project implementation activities rather than be limited to training workshops. Training initiatives need to have regular follow-up throughout the lifespan of a project rather than being one-off.

89. **Community ownership of 'hard' investments is fundamental to sustainable climate change adaptation**. Although envisaged in the project design, thorough analysis of community cultural, livelihood, land use and socio-economic situations was not undertaken prior to community consultation for the potential installation of water infiltration galleries during KAP II. A focused campaign on coastal resilience and water resource management was problematic under KAP II as it was difficult for stakeholders (MELAD, KAP PMU, and World Bank advisers) to reach agreement on the terms of reference (TOR) for this task. The result was a lack of adequate integration of village community perspectives into water resource management and issues arose over land ownership, access and use rights. Sustained community engagement programs following the installation of water tanks was not possible due to time restrictions following restructure. As a result, there are gaps in community maintenance and management capacity.

90. Feedback from stakeholders in ministries, NGOs, civil society groups, and consulting firms included the following:

- Consultations need to begin well in advance of scientific assessments so communities are fully engaged in the identification of risks faced and in decision making about options for addressing these. Consultations need to be equal two-way information sharing rather than one-way information dissemination
- Consultations need to be regular and lengthy and involve the same core facilitators. Personal trust and relationships need to be built between the consultation team and the community. The time that this takes should be factored into the project implementation plan
- Follow-up support needs to be given equal weight to pre-works consultation. Community engagement needs to continue regularly following the completion of works to engender community ownership; address problems; sort out management and maintenance arrangements; facilitate adaptive behavior
- Teams need to include experienced and skilled local facilitators to coordinate and facilitate consultation programs. Community engagement strategies need significant design inputs from local specialists experienced in participatory community development. Local experts should play a more significant role than language and cultural translation. Overall responsibility for facilitating

community consultation should not rest solely with external consultants because this largely precludes sufficiently regular follow-up and support. Specific responsibilities of external consultants should be outlined in Terms of Reference developed in consultation with local community engagement experts

- Ministry staff should be engaged in consultation program design and provided with considerable capacity building to ensure they are equipped with the skills to undertake effective consultations.
- Staff from government agencies – especially MPWU and MELAD - need to work together to ensure messages delivered to communities are consistent. Consultations need to be well organized and internal issues and options finalized prior to visiting the communities so that community members' questions receive complete and consistent messages over the course of engagement.

7. Comments on Issues Raised by Recipient/Implementing Agencies/Partners

(a) Recipient/implementing agencies

91. The GoK raised two issues related to project implementation: 1) significant erosion of the shoreline experienced at either end of some seawalls; and 2) large amount of funds spent on international consultants relative to on-the-ground investments. The World Bank acknowledges the erosion problems that are occurring at some sites of the KAP II seawalls. As these seawalls were pilot investments intended to develop and demonstrate a design and construction technique rather than protecting the full coastline, they were limited in length and located in only a few of the most vulnerable sites. The way the waves interact with the seawall and how the sand and coastline react to it is critical information that will inform and be incorporated in the improved design of future coastal protection investments, including seawalls built during KAP III.

92. The World Bank also acknowledges that KAP II financed significant international TA relative to physical investments. The implementation of pilot investments was grounded on extensive and detailed technical and scientific assessments and feasibility studies which – given the limited country capacity - were mostly supported by external TA. In addition, to overcome the limited progress in project implementation during the first two years, additional external advisory support was required to avoid overburdening the PMU and line ministries with project management and implementation duties, thus detracting from their already demanding work programs. The expectation however is that some of the scientific and technical work carried out under KAP II will be used as foundation for up-scaling and improving investments under KAP III with on-the-ground investments taking place from very early on in project implementation.

93. The GoK carried out an independent evaluation of KAP II that is generally in line with the main conclusions of the Bank's ICR and provides a good list of lessons learned and recommendations. It provides a comprehensive account of design, implementation and management challenges and how these were addressed, particularly through the restructure. In assessing project outputs and outcomes against objectives, the GoK's ICR could have better considered the pilot nature of KAP II and its focus on capacity building.

The Recipient's ICR suggests that project outputs primarily improved infrastructure and policy frameworks for water resource management and coastal protection rather than achieving CCA. This does not recognise that reducing vulnerability to current climate and social stresses is a significant component of reducing vulnerability to future climate change; this was the entry point for KAP II investments. Through capacity building, KAP II increased the ability of the GoK to maintain and improve infrastructure in a climate change sensitive way.

(b) Cofinanciers

94. No comments were received from Co-financiers.

(c) Other partners and stakeholders

95. Comments by the Pacific Infrastructure Advisory Centre (PIAC) recognize KAP II contribution to the Kiribati water sector (see Annex 8).

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions) (*a)*	Percentage of Appraisal
Policy, Planning and Information	1.17	1.28	109.4
Land Use, Physical Structures and Ecosystems	2.17	1.79	82.5
Freshwater Resources	2.16	2.95	136.5
Capacity at island and community level	0.55	0.10	18.2
Project management	0.39	1.58	405.1
Total Baseline Cost	**6.46**	**7.70**	
Physical Contingencies	0.12	0.00	
Price Contingencies			
Total Project Costs	**6.58**	**7.70**	
Project Preparation Facility (PPF)			
Front-end fee IBRD			
Total Financing Required	**6.58**	**7.70**	**117%**

(a) There is a large margin of error due to fluctuations in exchange rate since the appraisal estimate is in USD but accounts were kept in AUD. These figures use the exchange rate of November 1, 2011.

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
AUSTRALIA: Australian Agency for International Development	Joint	1.49	3.43	230.2
Recipient	Parallel	2.32	1.42	62.0
Global Environment Facility (GEF)	Joint	1.80	1.80	100.0
NEW ZEALAND, Govt. of (Except for Min. of Foreign Affairs)	Joint	0.97	1.05	102.9
TOTAL		**6.58**	**7.70**	**117.0**

Annex 2. Outputs by Component

Outputs and dropped/discontinued activities by component

Component/Subcomponent	*Major outputs and dropped or discontinued activities*	*Comments*
Component 1: Policy, planning and information		
1.1 Frameworks and processes for participation and awareness	One review of quality and effectiveness of existing public consultation methods in Kiribati (completed in 2008) Operational manual for public consultation prepared	This activity was discontinued with the decision not to undertake further national consultations (see below). The review was undertaken in the first year and identified gaps in existing consultation methods. Recommendations and the manual were not thoroughly incorporated into community consultations for investments that occurred later in the project since consulting firms were not aware of the reports.
1.2 National consultation, participation and awareness	One National Consultation regarding building awareness of climate change adaptation across stakeholders	Discontinued. National consultations to inform the ongoing design of KAP II activities were intended to be twice yearly. However, no further consultations were conducted after 2007. The outcomes of this output were therefore limited.
	CCA-based participatory events on South Tarawa and 6 Outer Islands to raise awareness in the public up to mid-term review (MTR). Radio, newsletters and educational material produced up to MTR	Discontinued. Participatory events and media material (below) were discontinued at MTR as these were not directly linked to physical investments under components 2 and 3. Good-practice in participatory learning about CCA using radio, drama and print media was developed and is recorded in a report. This resource has potential to be used during community engagement components of KAP III
	Baseline survey of public attitudes towards climate change (completed in 2007)	Discontinued. Surveys were intended to be completed annually in order to measure the impact of Component 1.2 on increasing awareness. These were discontinued and the baseline study has not been used in monitoring

	Bilingual glossary of CCA related terms produced	The use of this output in actual community consultation under components 2 and 3 was limited because contractors were not aware of them. Both of these outputs can be used in the implementation of KAP III
	Focused behavior change campaign on coastal resilience and water resource management	Dropped since it was not linked to specific physical investments. Funds were refocused to community consultations for water infiltration galleries (see below)
	Initial consultation completed with three villages in North Tarawa in relation to proposed installation of infiltration galleries for village water supply	This output was added following MTR. This has laid the groundwork required for installation of galleries in two of the three villages in KAP III. Although galleries were intended to be installed under KAP II, valuable lessons about community perspectives on water resource management, livelihood impacts and the features and structure of successful community consultation were learned.
1.3 Policy coordination and planning	OB established as lead agency coordinating CCA and related strategies	Fundamental to achieving CCA mainstreaming objectives. The institution was set up by April 2009. At appraisal, the target was the first year of project implementation, which was not achieved.
	Climate-affected programs in MOPs for GoK FY 2007, 2008, 2009 and 2010 include KAP II activities	Direct contribution to achieving CCA mainstreaming objectives. This provided the institutional planning basis for mainstreaming CCA, linking KAP II to national development planning.
	Coastal hazard risk diagnosis and planning process reviewed, recommendations for improvements produced, capacity building workshops to train cross-ministry staff in coordinated assessment and planning completed (MPWU, MELAD, MFMR KMS).	Direct contribution to CCA mainstreaming and capacity building objectives. Protocols in coastal hazard management were strengthened. Skills in climate risk assessment and adaptation planning in the coastal sector were significantly increased. Foreshore Management Committee, an inter-ministerial technical group was trained with the skills to complete coastal risk assessments and develop climate change strategies. Risk assessments completed under this component (integrating the outputs of Component 1.4 below) were used in the design of

		physical works in components 2 and 3. Visual outputs showcased the work of KAP at the Conference of The Parties (COP) at the UNFCCC in 2009.
1.4 Information for climate risk management	Development of and training in the use of calculators for rainfall and drought, and coastal storm surge and sea-level rise projections.	Direct contribution to capacity building objectives. Members of the Foreshore Management Committee (from MELAD, MFMR, MPWU, KMS) were successfully trained in the use of calculators. Calculators were used in risk assessments under components 2 and 3 by MPWU and contractors as part of physical works. Calculators are being used outside KAP II by ECD-MELAD in the development of their Second National Communications to the UNFCCC, and by KMS in drought analysis indicating a sustainable outcome
1.5 Climate monitoring systems	Rain gauges installed in Outer Islands (installation costs covered by KAP II only) and staff trained	Direct contribution to capacity building objectives . Climate data is essential for climate risk diagnosis into the future. Staff trained in data collection on Outer Islands are fulfilling their tasks and collect data on an ongoing basis.
Component 2:Land use, physical structures and ecosystems		
2.1 Integrating CCA into land use policies	Raise awareness, strengthen regulations, permitting and enforcement processes, particularly for monitoring and measurement of beach mining activities	Dropped. At the time of restructure, the activity had not begun so was dropped to simplify project design.
	Monitoring of economic impacts of EU-GoK lagoon aggregate mining project	Dropped at restructure because the implementation of the lagoon aggregate mining project was delayed.
2.2 Improve protection of public assets	FS6: multi-member consultancy team produced the following outputs: • Preparation of a detailed	Direct contribution to investment demonstration and capacity building objectives. FS6 enabled techniques in coastal protection to be demonstrated and piloted. Engineering design and methodology is suitable for local capacity in MPWU and could

	coastal engineering condition assessment for most of South Tarawa. • Preparation of shoreline protection design guidelines & training workshops. • Preparation of adaptation strategies for six selected assets on South Tarawa. • Preparation of detailed engineering designs of selected shoreline protection works (4) • Procurement and construction supervision support for the demonstration shoreline protection works at four sites for a total of 0.5km of coastline.	be replicated by ministry staff. Mentoring provided by the consulting firm transferred skills in MPWU. A longer timeframe would have enabled more skills transfer.
	Civil engineering capacity in MPWU strengthened through an international TA secondment	Direct contribution to capacity building objectives. The TA assisted in supervising and executing works contracts in FS6 since capacity in MPWU to do this was low. This enabled the pilot works to be completed. The TA was also tasked with skills transfer to local counterparts. This was successful although limited by the short timeframe and multiple roles required by the TOR.
2.3 Monitoring coastal ecosystems to support biodiversity	Coral benthic monitoring on South Tarawa and shoreline change monitoring on South Tarawa and	Discontinued. MFMRD staff were successfully trained in coral and coastal monitoring. Initial monitoring to establish a baseline was completed. The extent to which coral monitoring is being

	outer islands.	continued is unclear. Shoreline change monitoring is not being continued by MFMRD. Although these activities produced useful outputs, they were not coherently linked with other components and as such have limited value in the context of KAP II
	Mangrove restoration on South Tarawa and 4 outer islands for a total of 37,000 seedlings planted.	Direct contribution to investment demonstration objectives. MELAD successfully developed a community engagement process for local skills enhancement and ownership of mangrove planting and maintenance. Mangrove planting has been sustainable and is increasing habitat for coastal and marine species important to local livelihoods
Component 3: Freshwater resources		
	FS7: multi-member consultancy team produced the following outputs, contributing to subcomponents 3.1, 3.2 and 3.3 below : Strengthened capacity in water resources assessment Revision of national building codes to include rainwater harvesting and storage provisions Water resource assessments on South and North Tarawa, and Tabiteuea North and Tamana (Outer Islands) including: • Well condition surveys (563	Direct contribution to all objectives. FS7 was a single firm contract established following the restructure to simplify procurement procedures. FS7enabled techniques in water resource management to be demonstrated and piloted. MPWU staff were successfully trained, through partnership arrangements, in freshwater lens assessment. NGO staff were trained in participatory techniques for community consultation. A longer timeframe would have enabled more thorough training in (technically complex) water resource assessment. An infiltration gallery was successfully installed in one location at a school in North Tarawa. The gallery, and the processes of engagement and installation, is viewed positively by the community. The school now has a sustainable supply of water during the dry period. Water is not currently being used for drinking however, because of discoloration and smell (although quality is fine). Infiltration galleries were not able to be installed in three further locations as intended, because the extent of community

	household wells) • Rainwater harvesting potential assessment of communal building roofs (104 buildings) • Geophysical freshwater lens assessments in South and North Tarawa and two outer islands (1247 measurements taken) Monitoring boreholes installed in 9 locations in North and South Tarawa. Infiltration galleries for improved water supply installed in one site Community consultations undertaken for potential installation of infiltration galleries in three further sites Rainwater harvesting and storage guidelines produced Rainwater harvesting and storage facilities installed at 4 sites on public buildings	consultation regarding land and livelihood compensation required was underestimated. However, community consultation laid the groundwork for potential installation of galleries in two further locations under KAP III. The most important outcome of this component was experience gained in community engagement processes for water resource management. Lessons will be carried forward into KAP III. Skills in rainwater harvesting and storage design and construction were successfully built in MPWU and local private sector contractors. An important outcome is lessons learned about community engagement required for appropriate operation and self-sustained maintenance. These lessons will be carried forward to KAP III. Guidelines produced were suitable for local capacity and are currently being used by NZAP in a rainwater harvesting project.
3.1 Update national water policy, standards, and capabilities	National Water Policy developed and adopted	Direct contribution to outcome 1. The National Water Policy is the first policy framework for a coordinated national response to water resource management issues. It sets out a number of principles currently being used to shape donor investments in

		Kiribati, including KAP III
3.2 South Tarawa planning, remedial action, pilot projects	Water Master Plan for South Tarawa completed	Direct contribution to outcome 1. The Master Plan puts into action the principals set out in the National Water Policy. The intention is for it to guide long term planning in MPWU and PUB. The Asian Development Bank's (ADB's) Water and Sanitation Project, KAP and NZAP's Temaiku subdivision project now all generally align with the Master Plan.
	Study feasibility of freshwater lens creation by land reclamation	Dropped due to its potentially technically and politically contentious nature.
	Pilot rainwater collection for groundwater recharge	Dropped in efforts to simplify project design because not considered a priority
3.3 Outer Islands assessments and public and private systems upgrades	Re-assess feasibility of non-polluting sanitation systems	Dropped to simplify project design since the history of sanitation improvements in Kiribati is not positive and requires a more concerted focus than would have been possible
3.4 Strengthen capacity in water resource management	Water engineering capacity in MPWU strengthened through an international TA secondment	Direct contribution to capacity building objectives. . The TA assisted in supervising and executing works contracts in FS7 since capacity in MPWU to do this was low. This enabled the pilot works to be completed. The TA was also tasked with skills transfer to local counterparts. This was successful although limited by the short timeframe and multiple roles required by the TOR.
Component 4: Capacity at island and community level		
4.1 Local consultations and participatory risk assessments	Consultations undertaken on five outer islands	Consultations were discontinued after mid term review. Outcomes of this component were few since the majority of Outer Island activities were dropped.
4.2 Training in local government CCA roles and responses		Dropped to simplify project scope and design as not a priority and most outer island investment activities were dropped

4.3 Include climate change vulnerability in outer island profiles	9 Outer Island socio-economic profiles, incorporating climate change vulnerability information, completed	Profiles did not contribute to KAP II outcomes because the majority of outer island activities were dropped after MTR. Profiles provide useful baseline information that can be used in KAP III
4.4 Pilot small scale Outer Island adaptation investments scheme	Outer Islands loan scheme for roof catchment	Dropped to reduce scope of project since the feasibility was yet to be researched and would require considerable technical and administrative inputs from project management
Component 5: Project management		
5.1 Operation of Project Management Unit within OB	PMU established as agency to manage KAP II	The PMU was staffed by 2008 with an I-Kiribati team: Project Manager, Project Coordinator, Procurement Officer, Finance and admin Officer, Procurement Assistant, Project Monitor, Project Office Assistant, Assistant Accountant.
	International TA Project Management Adviser seconded to PMU	This greatly increased capacity in the PMU to undertake day to day and longer term project management to international standards. Project reporting and office functions (such as filing) improved significantly following appointment.
	International TA Procurement Adviser seconded to PMU	This greatly increased procurement capacity in the PMU. Lack of procurement skills to international standards had previously hindered project progress. This enabled the evaluation of bids and subsequent contract negotiations with preferred bidders for FS6 and FS7. In conjunction with the Project Management Adviser, the Procurement Adviser built skills through on-the-job involvement of the PMU in every aspect of procurement and contract management.

Annex 3. Economic and Financial Analysis

1. Traditional measures of efficiency such as cost-benefit analysis were not undertaken during project preparation and implementation although a qualitative incremental cost of climate change impacts was undertaken at appraisal. A conventional economic analysis could not be applied to KAP II as a stand-alone project because of two fundamental uncertainties related to delivery of intended benefits:

a. the pace and severity of climate change impacts in the next 20-50 years is uncertain meaning the value of damage avoided from KAP II investment cannot be quantified precisely enough, and;
b. the benefits of the Project will depend on the sustained effort of government, communities and the private sector in utilizing the capacity created.

2. Further, the largest portion of funds were directed towards institutional strengthening, technical assistance and capacity building (approximately 80% TA to 20% investment), making it difficult to measure the project benefits in economic terms.

3. The expected economic benefits identified at appraisal included: maintenance of livelihoods otherwise threatened by climate change; avoidance of damage to coastal assets and ecosystems; avoidance of climate change and disaster-induced limits to economic growth; avoidance of public health costs due to insufficient and contaminated water supply; avoidance of productivity losses due to water supply-related public health impacts; enhancing public sector investment that requires reliable and safe water supply.

4. Although it is difficult to quantify there is consensus in government and among donors and communities that KAP II investments are economically worthwhile, given the risks related to climate change that could amount to US$8 to 16 million in the absence of adaptation (World Bank, 2000). Project implementation provided useful information regarding the actual costs of construction and accessing goods and services in a remote location like Kiribati that can be used in the design and evaluation of future investments. The cost of labour and materials for example was consistently higher than what was estimated at appraisal. Investments within the coastal sector were selected using a cost-benefit analysis to ensure that the selected protection solution was the most cost-effective; for example, by choosing construction methods that would require less or simpler maintenance. Investments in the water sector were driven largely by the immediate urgency of improving supply of freshwater to reduce current risks to population associated with availability and quality of drinking water. This was highly valuable as ‘no regrets’ adaptation measure (which provides benefit regardless of climate change) but most adaptation solutions were piloted on such a small scale that it would not be possible to carry out any meaningful cost-benefit analysis.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit
Lending		
Idah Z. Pswarayi-Riddihough	Task Team Leader	EASER
Sofia U. Bettencourt	Task Team Leader	AFTEN
David Michael Chandler	Sr Financial Management Specialist	EAPCO
Bruce M. Harris	Consultant	EASTE - HIS
Hoonae Kim	Sector Manager	EASSD
Maarten K van Aalst	Consultant	GFDRR
Nurul Alam	Senior Procurement Specialist	ECSO2
Supervision/ICR		
Idah Z. Pswarayi-Riddihough	Task Team Leader	AFTEN
Marianne Grosclaude	Task Team Leader	LCSAR
Emilia Battaglini	Task Team Leader	EASNS
Melinda Good	Sr Counsel	LEGES
Johanna Van Tilburg	Sr Counsel	LEGES
David Michael Chandler	Sr Financial Management Specialist	EAPCO
Stephen Paul Hartung	Financial Management Specialist	EAPFM
Cristiano Costa e Silva Nunes	Procurement Specialist	EAPPR
Miriam Witana	Procurement Specialist	EASPR
Olivia Warrick	CCA Specialist	EASNS
Tiresa Slade	Team Assistant	EACNF
Gitanjali Ponnambalam	Team Assistant	EACNF
Michelle Lisa Chen	Program Assistant	SASDO
R. Cynthia Dharmajaya	Program Assistant	EASER
Nathan Hale	Program Assistant	EACNF

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget GEF Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY05	14.26	126.05
FY06	14.65	168.83
FY07	0.75	3.62
FY08		0.00
Total:		289.03
Supervision/ICR		
FY07	8.22	70.09
FY08	9.21	46.51
FY09	11.76	73.43
FY10	9.58	65.06
FY11	11.77	89.24
FY12	0.83	11.72

Annex 5. Beneficiary Survey Results

Not applicable

Annex 6. Stakeholder Workshop Report and Results

Not applicable

Annex 7. Summary of Recipient's ICR and/or Comments on Draft ICR

GoK comments on draft Bank ICR

Comments to the World Bank Draft ICR, provided by Mr. Tangitang Karueata, Secretary, Office of the President, Government of Kiribati

Milina

Here are some comments raised by the team and some MPs during the workshop:

- the KAPII seawalls have serious erosion problems and this needs to be acknowledged by the WB

- from the GoK perspective, too much money in KAPII was spent on overseas consultants relative to on-the-ground projects.

Both points were raised again by elected MPs when briefed on CC by Mike; I am certain they were raised with Olivia but they are not visible in the document.

On the positive side, the bit in the document about public consultation is excellent.

Cheers

Tangitang

GoK: "*Unfinished Business*", KAPII Implementation Completion Report for Government of Kiribati, May 2011

Summary of the Report¶

1. KAP grew out of increasing international awareness of climate change in the late1990s, and the clear risks to Kiribati posed by sea-level rise and more severe droughts and storms. Rivalry developed between WB and UNDP to be the lead aid agency for CCA by developing countries. WB sponsorship of KAP and UNDP's backing for NAPA exacerbated divisive tendencies among GoK ministries and hindered whole-of-government support for KAP. This was WB's first project in Kiribati, and its first attempt to assist a small country to deal with climate change. Mistakes were made on both sides. The project design of KAPII, as the pilot implementation phase, proved complex and difficult to manage, comprising a mix of soft and hard outputs and intended impacts with varying degrees of relevance to CCA. The hard outputs included replacements or upgrades to public infrastructure that were largely necessitated by population growth and failure to maintain earlier works, and the actual work was directed mainly at public utilities on Tarawa.¶

¶

2. KAPII began in mid-2006. It started slowly, and in early 2008 both commitments and disbursements were found to have fallen well behind schedule. The project was then restructured with specialist consultant assistance. Soft components that had not yet

started were dropped or postponed to KAPIII (including development of the crucial link between CCA and population policy). The main causes of underperformance against project schedule were found to be: 1) complex project design including a large number of individual contracts that placed a heavy load on an inexperienced project team; 2) non-implementation by GoK of the agreed oversight arrangement requiring direct engagement of OB in CCA advocacy and supervision of KAP; and 3) failure of WB to follow its heavy involvement in project design with close back-up to the PMU.

3. The restructure of KAPII and additional support to the PMU have been successful and the project is on track, albeit with extended timing and reduced scope. GoK has taken action to strengthen supervision of KAP by OB. Hard outputs are being delivered relating to water supplies and coastal protection in South Tarawa. Many soft CCA activities supported by KAPII have produced useful results or can do so if the effort is sustained, *eg*, heightened awareness of CC and CCA among the general public; sharper international focus on the level of CC risk faced by Kiribati; completion of the National Water Resources Plan after fifteen years of fieldwork and study; draft glossary of CCA terms in the Kiribati language; stronger GoK-sponsored committees formed to improve foreshore management; mangrove-planting on vulnerable beaches; practice by GoK officials and consultants in use of multi-disciplinary teams for extension work; production of CC science data in accessible form for use in project and activity design; renewed attention to the need for appropriate land tenure for water reserves; GoK support for an EU-funded project to replace beach mining by developing deepwater sources of aggregate; and the growth of a cadre of national consultants with experience in advising on CCA-related topics. Some of this might have happened without KAP, but KAPII's activity has certainly advanced the CCA agenda among those it has reached.

4. Nevertheless, the tangible outputs of KAPII have had more to do with the overdue repair and extension of infrastructure in South Tarawa than with CCA as such, and the project's impact on the country's preparedness to deal with CC is at best doubtful. GoK has been alerting the international community about Kiribati's vulnerability to rising sea levels, but has seemed less sure what to say at home. Awareness that the climate is changing in ways that will reduce the carrying capacity of the atolls has spread through the community from many sources, and is causing concern and uncertainty for many people, but GoK has not so far produced a coherent and convincing message about CC or how to adapt to it. The people of Kiribati have long experience in dealing with climate variability, and improved plans and projects for coastal protection and the management and use of groundwater reserves are valuable, but not different in nature from what a competent government would be doing even if the climate were not changing. Through KAPIII and in other ways GoK has to reach out to the whole country and assist people to understand and come to terms with climate change. National development strategies must integrate CCA with other policies that will help to reduce population pressure on the capacity of the atolls to support an acceptable way of life.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Comments from Pacific Infrastructure Advisory Centre (PIAC)

Hi Milina,

Thanks for the report.

I quickly scanned the report and I think it more or less provides a realistic assessment of the outcomes and achievements of KAP II.

From the water sector's point of view, I think KAP II has provided valuable contributions, especially in preparing the Water Master Plan for Tarawa, which has been a very useful input for PIAC's assessments of the sector and for ADB's PPTA for the sanitation sector improvement project.

The efforts to improve physical infrastructure in the water sector have not always fully achieved the objectives, but it is good to note that the efforts will be continued in KAP III.

The design of KAP III has incorporated a number of the lessons learned in KAP II and continues to build on its' achievements. With the continued urbanization of South Tarawa, I think that it will be important to help strengthen the capacity of the Government and utilities to plan and "enforce" or implement measures (such as management of the Bonriki reserve, or reduction of leakage) that will benefit the majority of the population.

Best regards,

Jan Willem

Jan Willem Overbeek
Deputy Manager
Pacific Infrastructure Advisory Center
Asian Development Bank
1 Margaret Street, Sydney
NSW 2000, Australia

Annex 9. List of Supporting Documents

See http://www.climate.gov.ki/library.html for most KAP II reports, guidelines and assessments

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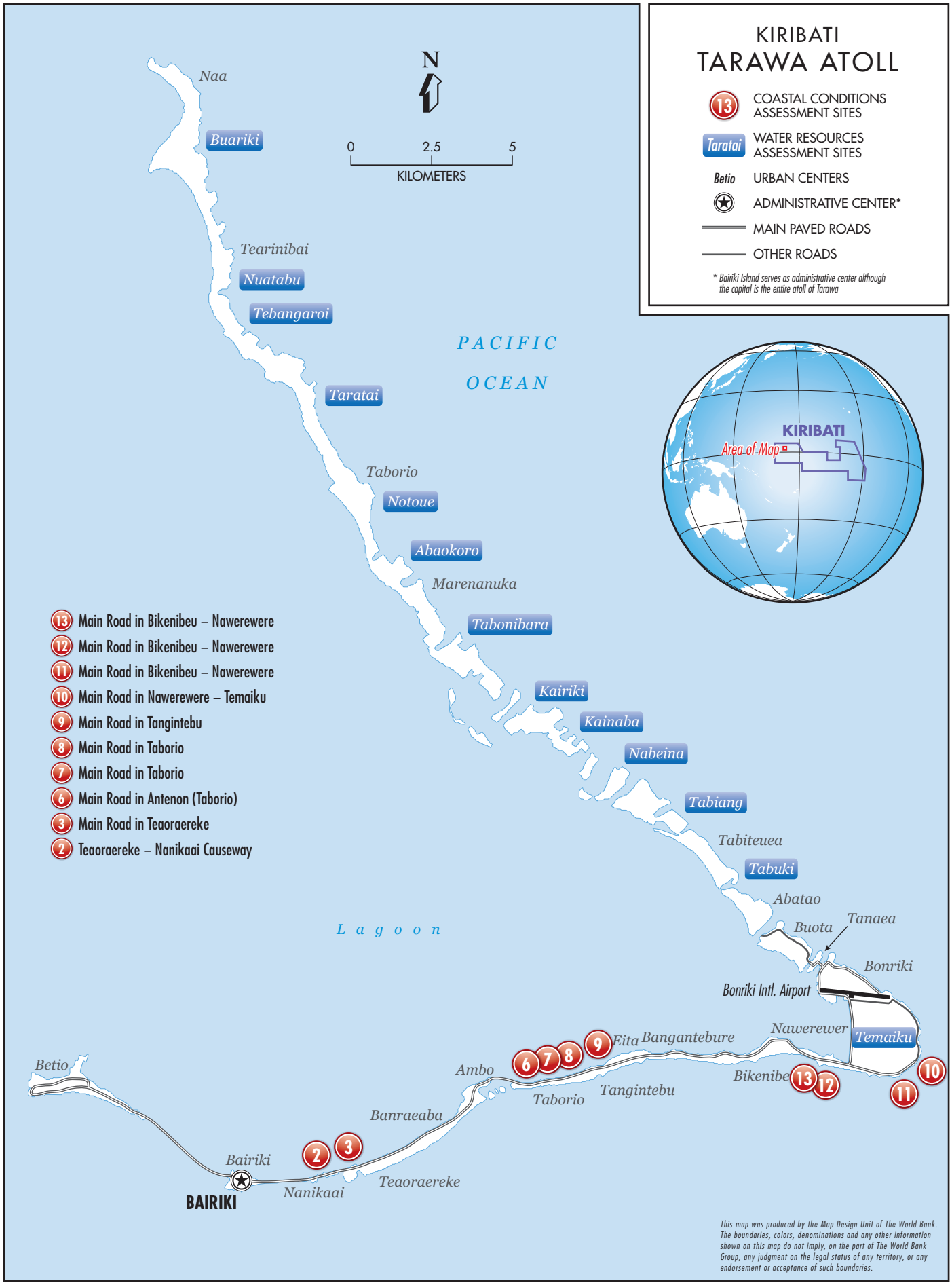


JULY 2011

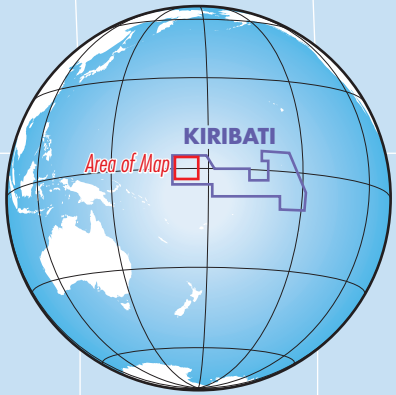
KIRIBATI
GILBERT ISLANDS

Tamana WATER RESOURCES ASSESSMENT SITES

VILLAGES

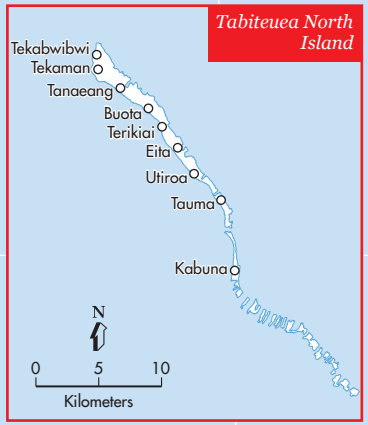
ADMINISTRATIVE CENTER*

* Bairiki Island serves as administrative center although the capital is the entire atoll of Tarawa



Tamana Island

Tabiteuea North Island



Makin
Butaritari
Marakei
Abaiang
Tarawa
Maiana
Abemama
Kuria
Aranuka
Nonouti
Banaba
Tabiteuea North
Tabiteuea South
Beru
Nikunau
Onotoa
Arorae
Tamana

PACIFIC OCEAN

Gilbert Islands

N

0 100 200
KILOMETERS

173° E 174° E 175° E 176° E 177° E
171° E 172° E
3° N 2° N 1° N 0 -1° S -2° S

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AUGUST 2011

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