

# **Institutions and Values: Climate Change Adaptation Mainstreaming Implementation in Kiribati**

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August 2016

Submitted in fulfilment of the requirements for the Degree of Master of  
Philosophy

Discipline of Anthropology and Development Studies, Faculty of Humanities and Social  
Sciences

The University of Adelaide

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## **Abstract**

Climate change adaptation mainstreaming (CCAM) is considered an effective way of integrating climate change adaptation and sustainable development agendas in policy and practice.

Conventional approaches to CCAM emphasise either: a) a technological response that focuses on ensuring climate change projections influence decision-making; or b) the need for CCAM to incorporate an understanding of the underlying drivers of vulnerability that expose people to climate change impacts. However, both approaches give inadequate attention to political and social conflict in shaping CCAM implementation.

This dissertation presents a case study from the Republic of Kiribati to explore the role of political and social conflict in shaping CCAM. It argues that the Government of Kiribati, in partnership with United Nations Development Program (UNDP), via the National Adaptation Programmes of Action (NAPA), and the World Bank, via the Kiribati Adaptation Program (KAP), failed to effectively implement mainstreaming. Yet the KAP made more progress than the NAPA.

Why was mainstreaming largely unsuccessful in Kiribati? Why did the KAP have more success compared with the NAPA? What does this case study tell us about the political and social pre-conditions for successful CCAM implementation? And what are the implications for CCAM policy and implementation in developing countries?

In addressing these questions, I draw on normative neo-institutionalism and the notion of epistemic communities. Normative neo-institutionalism, and especially Olsen's four pre-conditions for successful reform, provides a powerful framework for understanding the role of political and social factors in reform processes, while the notion of epistemic communities helps us to understand the nature of the values and actors that characterise these factors. According to this approach, successful CCAM implementation depends upon: a) a high degree of normative matching between the reform and implementing institution; b) a high degree of normative matching between the reform and the relevant society; c) a high degree of clarity about reformers' intentions; and d) the capacity and resources of the institution implementing the reform.

CCAM implementation in Kiribati was largely unsuccessful because: a) two competing coalitions became embroiled in political struggles over CCAM; and b) Olsen's four pre-

conditions for successful reform were not met. In regards to the first point, I show that the Ministry for Environment, Land and Agricultural Development formed a coalition with UNDP to support a vulnerability-based approach to CCAM, while the Office of the President formed a coalition with the World Bank to advocate for a technology-based approach.

On the second point, I argue that the NAPA initially succeeded because performance against a majority of the pre-conditions was strong, but it ultimately failed because the government became disenchanted with the coalition's vulnerability-based approach to CCAM. The KAP had more success long term because its coalition of support had greater resources and support from the government to push their technology-driven approach. However, tension within its supporting coalition led to reduced normative matching and capacity to support CCAM implementation. In policy terms, the implication is that CCAM strategies, and the step-by-step guides designed to inform implementation, should take politics and values into account.

## **Thesis declaration**

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Signed by Felicity J. Prance

## **Acknowledgements**

I am incredibly grateful for the unwavering love and support given to me by my Dave, and my parents, throughout this piece of work.

Thanks to my supervisors, Andrew Rosser, John Gray and Nicholas Harvey for their patient assistance.

Generous financial support provided by the Lions Club of Unley, the Unley City Council, the Walter and Dorothy Duncan Trust (administered by the University of Adelaide) and the United Nations Association of Australia – SA Division, enabled my fieldwork trips.

Adam Jarvis provided editorial assistance, restricted to ASEP Standards for “Language and Illustrations” and for “Completeness and Consistency”.



## List of acronyms

ADB	Asian Development Bank
CCAM	Climate change adaptation mainstreaming
CCST	Climate Change Study Team
COP	Conference of the Parties
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
IPCC	International Panel for Climate Change
KANGO	Kiribati Association of Non-Government Organisations
KAP	Kiribati Adaptation Program
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
MEAs	Multilateral Environment Agreements
MELAD	Ministry of the Environment, Land and Agricultural Development
MFED	Ministry of Finance and Economic Development
MPWU	Ministry of Public Works and Utilities
NAPA	National Adaptation Programmes of Action
NAST	National Adaptation Steering Committee
OB Office	Office of the President
OECD	Organisation for Economic Cooperation and Development
PEI	Poverty-Environment Initiative
PICCAP	Pacific Islands Climate Change Assistance Programme
PICTs	Pacific Island Countries and Territories
PPN	Policy and practice note
SIDS	Small Island Developing States
SNPRA	Strategic National Policy and Risk Assessment
SOPAC	Secretariat of Pacific Community Applied Geoscience and Technology Division
SPREP	South Pacific Environment Programme
STUD	South Tarawa Urban District
SWAP	Sector-wide approach
UN	United Nations
UNDAF	United Nations Development Assistance Framework

UNDP United Nations Development Program  
UNEP United Nations Environment Program  
UNFCCC United Nations Framework Convention for Climate Change

## Chapter One - Introduction

Climate change and sustainable development are inextricably linked (Adger *et al* 2003; Denton *et al*, 2014; Klein *et al*, 2007). There are three important elements to this co-dependent relationship. Firstly, climate change is the result of unsustainable economic development. Secondly, climate change threatens the progress of sustainable development. And thirdly, sustainable development can reduce vulnerability to climate change (Huq & Ayers, 2008b: 53). Climate change adaptation and sustainable development are consequently recognised as co-dependent strategies in both climate and development arenas (Ayers *et al*, 2014; Huq & Ayers, 2008b; Klein, 2008; Klein *et al*, 2007; Klein *et al*, 2003; McGray *et al*, 2007; Nurse *et al*, 2014; Olhoff & Schaer, 2010). Sustainable development policy-making therefore needs to take climate change adaptation into account and, conversely, climate change adaptation efforts themselves require development interventions if they are to succeed (McGray, 2007: 1).

Climate change adaptation mainstreaming<sup>1</sup> (CCAM) is considered an effective way of integrating climate change adaptation and sustainable development agendas in policy and practice (Ayers *et al*, 2014: 38; Jones *et al*, 2014; Klein, 2008; Mimura *et al*, 2014). In broad terms, it refers to linking climate change responses with sustainable development through actions that enhance resilience and the capacity to adapt (Jones *et al*, 2014: 198).

The climate change adaptation literature suggests that there are two competing understandings of and approaches to CCAM. These perspectives disagree about *what* should be mainstreamed, rather than the nature of the process itself. The key differences lie in the definition of the problem and setting of priorities (Boyd *et al*, 2009: 662). Specifically, Klein (2008: 41) suggests that “mainstreaming adaptation into development can mean different things to different people depending on whether they hold a *technology based view of adaptation* or a *development based view*” (italics added) (Klein, 2008: 41).

In the technology-based view, CCAM refers to ensuring that climate change projections are considered in the decision-making of relevant government departments and agencies (Ayers *et al*, 2014; Klein, 2008; Klein *et al*, 2007). This approach to CCAM aims to ensure that

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<sup>1</sup> Climate change adaptation mainstreaming is just one form of mainstreaming that has gained traction in development policy and practice. Others include gender mainstreaming (Mukhopadyay, 2004; Woodford-Berger, 2004) and mainstreaming of human rights (UNDP, 2012). Work on these forms of mainstreaming, like the analysis here, has also emphasised the role of politics and social factors in shaping policy and implementation outcomes (Schech & Mustafa, 2010).

technologies and physical infrastructure investments are suitable to withstand future climatic conditions (Ayers *et al*, 2014; Klein, 2008; Klein *et al*, 2007). It prioritises hard adaptation activities that rely on technological innovations to build physical infrastructure, such as sea walls and installing water harvesting tanks. This type of mainstreaming is also referred to as “climate proofing” or “mainstreaming minimum” and typically involves screening development portfolios through a “climate lens” (Klein *et al*, 2007). The technology-based view of CCAM has been challenged for several reasons.

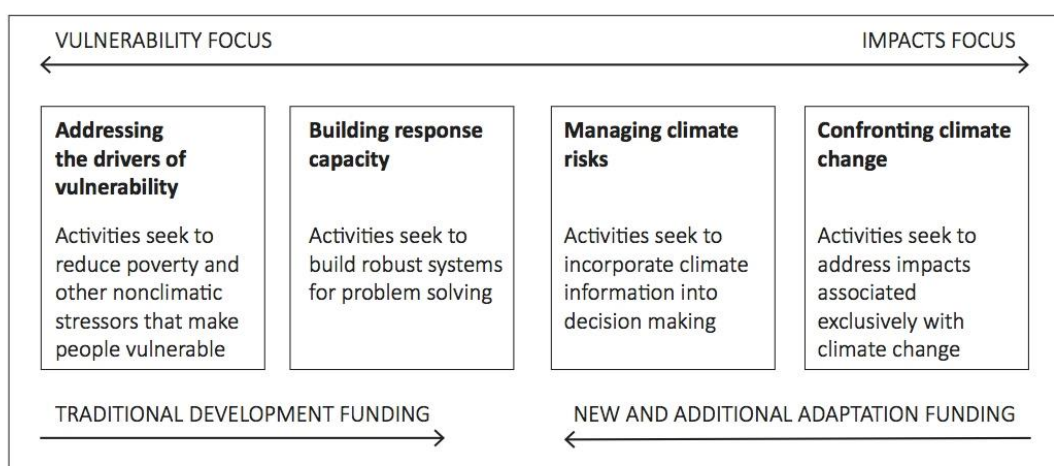
Critics of CCAM generally, and a technology-based view of CCAM in particular, have challenged the reliance upon scientific climate change predictions because climate science is not advanced enough in many countries to project future impacts of climate change in sufficient detail to justify investment in hard adaptation measures (Klein, 2008; Klein *et al*, 2007). This approach does not take into consideration local conditions, including the relevant social and environmental processes, community priorities, and the capacity of national and local agencies. Non-climatic factors and local drivers of vulnerability are overlooked and there is a risk that hard adaptation measures may turn “maladaptive”, that is “actions that may lead to increased risk of adverse climate-related outcomes, increased vulnerability to climate change, or diminished welfare, now or in the future” (Agard & Schipper, 2014: 1769; Barnett & O’Neill, 2010; Klein, 2008; Klein *et al*, 2007). The co-dependent relationship between adaptation and development is not considered and the scope to increase countries’ adaptive capacity, that is their capacity to “adjust to potential damage, to take advantage of opportunities, or to respond to consequences”, is consequently overlooked (Adger & Schipper, 2014: 1758; Klein, 2008; Klein *et al*, 2007).

The development-based view of CCAM, or “mainstreaming plus” emerged in response to these criticisms of the emphasis upon addressing climate change impacts. In addition to climate proofing, this alternative view entails “support to a range of processes that address the underlying drivers of vulnerability that expose people to climate change impacts” (Ayers *et al*, 2014: 40; Klein, 2008; Klein *et al*, 2007). For example, governments can ensure greater macroeconomic stability by mainstreaming climate issues into national economic planning and budgetary processes and thus provide funding for hard and soft adaptation activities (Sperling, 2003: 20). This approach is considered more holistic because it recognises that adaptation involves many actors and requires creating an enabling environment by removing existing financial, legal, institutional and knowledge barriers to adaptation, and strengthening the capacity of people and organisations to adapt (Klein, 2010: 40). The development-based

view of CCAM argues that a combination of hard and soft adaptation activities should be prioritised during CCAM. Soft adaptation activities aim to strengthen institutions and governance structures by capacity-building, awareness-raising and skills-sharing (O'Brien *et al*, 2008: 198). The emphasis here is reducing vulnerability to climate change through building capacities to address a range of challenges, including but not limited to, the effects of climate change (McGray *et al*, 2007: 2).

In summary then, two distinct perspectives inform how people approach CCAM, one that focuses on responding to impacts with technological interventions and hard adaptation activities, and another that focuses on addressing the underlying causes of vulnerability to climate change. However, in practice, many CCAM initiatives “fall between these extremes of orientation towards impacts or vulnerability” (McGray *et al*, 2007: 2). McGray (*et al*, 2007: 18) analysed 135 examples of adaptation projects, policies and other initiatives from developing countries and found that, in practice, many adaptation initiatives fall on a continuum ranging from initiatives aimed at addressing impacts of climate change to those aimed at building response capacity and addressing the drivers of vulnerability (see Figure One). Similarly, Olhoff and Schaer (2010: 3) use the concept of a “CCAM spectrum” to highlight the “wide array of methodologies with different approaches, geared to audiences covering different levels of activity and showcasing a variety of practical applications”.

Figure One: The climate change adaptation mainstreaming spectrum



Source: Adapted from McGray *et al*, 2007: 18 and Klein, 2010: 41

To facilitate CCAM implementation, multi-lateral and bi-lateral donors and the academic community have devised a number of models or step-by-step guides outlining best practice in

CCAM implementation<sup>2</sup>. These models also fall along the “CCAM spectrum” with some being geared towards supporting an impact-focused approach and others a vulnerability-focused approach. They include both generic policy guidance documents attempting to outline a conceptual framework for mainstreaming at various levels and tools or methodologies to support specific components of mainstreaming, such as climate risk assessment tools, computer-based decision-making tools and information-generating databases (International Institute for Sustainable Development, the World Bank and Institute of Development Studies, 2007: 1). Importantly, for the purposes of this dissertation, CCAM is understood as a managerial process that prioritises the role of the state in top-down planning for adaptation, rather than focusing on how policymaking can support the adaptive capacity and resilience of vulnerable communities (Adger *et al*, 2003: 192). Among the most widely used CCAM models in developing country contexts are those designed by the International Institute for Environment and Development (IIED) (Huq & Ayers 2008a), the Organisation for Economic Cooperation and Development (OECD) (OECD 2006, OECD 2009 and Agrawala 2006) and the United Nations Development Program (UNDP) (Holmes 2011; Olhoff & Schaer 2010; UNDP 2010).

### **The problem**

Despite the centrality of CCAM to donor efforts in relation to climate change adaptation and sustainable development, and their development of step-by-step guides to inform implementation, scholars and policy-makers have given little attention to how CCAM has played out in practice (Mimura *et al*, 2014: 877). In particular, they have given little attention to the political drivers of and barriers to CCAM, not just the managerial dimensions. There is emerging recognition in the climate change adaptation and sustainable development literatures that CCAM is an important initiative for Small Island Developing States (SIDS) in particular (Huq *et al*, 2004; Mertz *et al*, 2009; Nunn *et al*, 2014; Nurse *et al*, 2014). However, discussions about CCAM have not progressed sufficiently in terms of an analysis of the factors shaping implementation and practice for SIDS (Ahmad, 2009: 13). Ahmad (2009: 1) claims that “the perceived need to integrate a climate change dimension across all areas of policy-making has undoubtedly become more acute, [but] the evidence base is still weak and there are no accepted methods for achieving it”. Similarly, Mosse (2004: 640) has noted that “Despite the enormous energy devoted to generating the right policy models, however, there is still surprisingly little attention paid to the relationship between these models and the practices and events that they are expected to generate or legitimise in particular contexts”.

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<sup>2</sup> These step-by-step guides are explored in detail in Chapter Two.

The literature identifies a number of challenges associated with promoting CCAM but there is little discussion about how to overcome them. In particular, the literature suggests that CCAM has weaknesses related to: 1) the relevance of climate information for development-related decisions; 2) the uncertainty of climate information; 3) compartmentalisation within governments; 4) segmentation and other barriers within development cooperation agencies; 5) trade-offs between climate and development objectives; 6) awareness-raising and capacity-building; 7) community engagement and ensuring political support from a broad set of stakeholder groups; and 8) orchestrating buy-in from all sectors and sub-national bodies (Agrawala & van Aalst, 2006; Holmes, 2011: 12, and Kok & de Conink, 2007: 588). The real-world experiences of CCAM, the political and social obstacles to change, and efforts to overcome these challenges have not been adequately evaluated to date. In particular, the implementation of CCAM in a SIDS context has not received sufficient scholarly attention.

### **Purpose and case selection**

The purpose of this dissertation is to help address this gap in the literature by examining the challenges and constraints to CCAM implementation in Kiribati. The research aims to improve understanding of the relationship between CCAM policy, on the one hand, and its realisation in practice, on the other, through an analysis of the implementation of two CCAM programs in Kiribati between 2003 and 2010. The first is the UNDP's National Adaptation Programmes of Action (NAPA) and the second is the World Bank's Kiribati Adaptation Program (KAP). While the NAPA adopted a development-based approach to CCAM, the KAP was more focused on technology-based adaptation activities.

The UNDP established the NAPA in collaboration with the Ministry for Environment, Land and Agricultural Development (MELAD) in 2003 and utilised its generic Adaptation Policy Framework for CCAM implementation in Kiribati. The World Bank, in contrast, established the KAP in collaboration with the Ministry of Finance and Economic Development (MFED), subsequently working with the Office of the President (OB Office) after the project was placed under the latter's control in 2005. It designed a six-step CCAM implementation process specifically for Kiribati.

The UNDP and World Bank efforts to implement CCAM have been largely unsuccessful to date. The latter made more progress than the former, in that the KAP received ongoing political support from the OB Office and greater financial backing. But, in the end, neither succeeded in ensuring that the government adopted a whole of government approach to

climate change adaptation (Donner & Webber, 2014). The NAPA is positioned under the “building response capacity” banner on the CCAM spectrum. The project aimed to support a range of processes that addressed the underlying drivers of vulnerability, while at the same time, implementing a number of discrete climate change initiatives that mitigated the impacts of climate change (Government of Kiribati, 2007b). At the other end of the spectrum, the KAP is positioned under the “confronting climate change” banner on the CCAM spectrum because the steps it took focused almost exclusively on addressing climate change impacts. Its technology-driven approach did not include measures to address non-climatic change challenges or non-environmental drivers of vulnerability (McGray *et al*, 2007: 22). Yet neither of these projects, or the combination thereof, successfully mainstreamed an awareness of climate change across government decision-making and activities.

While an awareness of climate change adaptation has been built into the Ministerial Operational Plans for a small number of departments, such as MELAD, a majority of departments have not incorporated climate change adaptation into their forward planning documents, budget estimates and work flow patterns (World Bank, 2011c: iv). A World Bank review (2011c: 12) found that “more time and capacity is needed before climate change adaptation implementation becomes a truly government-owned, led and coordinated process...[and CCAM] 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”. Ministerial departments across the government do not in general demonstrate an awareness of climate change in their policies or practice (World Bank, 2011c).

The government’s patchy uptake of CCAM is reflected by the fact that climate change adaptation is largely absent from key national policy frameworks, such as the *National Development Strategy* (Government of Kiribati, 2012c) and *Kiribati Development Plan 2012-2015* (Government of Kiribati, 2012b). Instead, the government has two separate “stand alone” climate change adaptation policy documents: the *Climate Change Adaptation Strategy* (Government of Kiribati, 2005b) and *Climate Change Statement* (Government of Kiribati, 2005c). These two documents are inconsistent with the aim of mainstreaming because CCAM strives to integrate climate change with existing policy documents, rather than develop new ones. The Climate Change Officer summarised the failure of mainstreaming in Kiribati saying, “Most ministries still think that it’s not their responsibility to think about climate change” during an interview<sup>3</sup>.

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<sup>3</sup> The interview was held 17 February 2011 in the Environment and Conservation Division Office, Bikanibeu.



This dissertation aims to answer the following research questions:

1. *Why has the Government of Kiribati failed to effectively implement climate change adaptation mainstreaming?*
2. *What does this case suggest about the conditions under which developing country governments successfully adopt and implement CCAM?*
3. *What are the implications vis-à-vis the development of effective strategies for implementing CCAM in SIDS?*

Kiribati is an important case study because it represents the first application of United Nations Framework Convention for Climate Change (UNFCCC)<sup>4</sup> financing for the implementation of pilot climate change adaptation projects in the world (Global Environment Facility, 2004: 15). The UNFCCC has contributed financially to both the KAP and the NAPA<sup>5</sup>. In addition, the KAP is one of the World Bank's first attempts to mainstream climate change adaptation with a government in the South Pacific (World Bank, 2003: 2). In fact, it marks the first World Bank operation to focus exclusively on adaptation to climate change in the East Asia and Pacific Region as a whole (World Bank, 2003; World Bank, 2005a: 2). The World Bank's approach to CCAM in Kiribati has important ramifications for its operations in the South Pacific because it is intending to "roll out" similar strategies across the region (World Bank, 2006a: 14). Further, the Global Environment Facility (2004: 13) proposes that the World Bank's CCAM model in Kiribati will provide "important lessons which will be instrumental in the approach taken by global funding facilities with respect to such issues as incremental funding, and modalities of cooperation in addressing local and global issues related to climate change".

## **Methodology**

I use an explanatory case study approach to answer my research questions. An explanatory case study design aims to explain how and why a phenomenon has occurred, or not occurred. Explanatory case studies require context-specific information and a large quantity of high quality data to allow the researcher to drill-down and examine the phenomenon in question from a number of different angles (Yin, 1994).

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<sup>4</sup> The UNFCCC is an international treaty that was originally signed in 1992. There are now 195 Parties to the Convention and it aims to assist countries cooperatively consider what they could do to limit average global temperature increases and the resulting climate change, and to cope with the impacts. The UNFCCC Secretariat supports all institutions involved in the international climate change negotiations and especially the Conference of the Parties (COP).

<sup>5</sup> Via the Global Environment Facility and Least Developed Country Fund respectively.

To collect such data, I undertook field work on South Tarawa for five months at the beginning of 2011. During this time, I conducted semi-structured interviews, gathered secondary materials and conducted participant observation in order to develop an understanding of climate change adaptation policy-making and explain CCAM outcomes in Kiribati.

I selected a range of stakeholders from the not-for-profit and public sectors to participate in semi-structured interviews using the “snow ball” sampling technique. The list of questions used in these interviews and a full list of participants are provided in Annex One and Two. Whilst in the field, I collected a range of secondary materials including- government and not-for-profit reports, newspaper and radio clippings and scanned historical documents from the national library. I also conducted participant observation in group scenarios such as community events and focus groups facilitated by government departments. Material collected in the field was supplemented with reports, media stories and academic publications found online. The online literature search aimed to collect all relevant reports and publications regarding CCAM in Kiribati between 2004 and 2011.

To explain how and why CCAM evolved in Kiribati, I used a research method known as “process tracing”. This approach involves using evidence from a wide range of sources and material to identify the “intervening causal process – the casual chain and casual mechanism – between the independent variable (or variables) and the outcome of the dependent variable” (George & Bennett, 2005: 206). The purpose of such analysis is to assess “whether the dynamics of change within each case plausibly reflect the same casual pattern” suggested by theory (Collier, 1993: 115). The approach enables us identify and categorise participant’s beliefs, values and perspectives within a broader framework, or epistemic coalition, in order to understand both the causal ‘what’ and the causal ‘how’ (Vennesson, 2008: 233-234).

Process tracing enabled me to determine the nature of the casual processes linking climate change impacts in Kiribati – the independent variable, and the nature of CCAM policies and their implementation – the dependent variable. After establishing the sequence of key events between 2004 and 2011, using a variety of information sources and evidence, I tested two competing hypotheses to explain why the Government of Kiribati failed to effectively implement CCAM. As explained in greater detail below, the first hypothesis frames mainstreaming as a technology-based process that relies on technical rationality and the construction of consensus whereas the second hypothesis frames mainstreaming as a

development-based process that aims to address the underlying causes of vulnerability. Using the theoretical framework outlined below, I suggest the second hypothesis is correct as the approach adequately considers the role of politics and values in CCAM implementation.

### **Analytical framework and argument**

What explains the UNDP and World Bank's lack of success in promoting CCAM in Kiribati? What do their experiences tell us about the political and social conditions necessary for successful adoption and implementation of CCAM? And what are the implications for policy?

In addressing these questions, I draw on Olsen's (1991) four pre-conditions for successful reform and analysis of administrative reform processes<sup>6</sup> and the notion of epistemic communities (Haas, 1992). This approach injects much-needed concern with the political dimensions of CCAM into the CCAM literature.

Olsen (1991) proposes that there are four crucial pre-conditions for successful policy reform. These are: 1) a high degree of normative matching between the reform agenda and the institution adopting and implementing it; 2) a high degree of normative matching between the reform and the society into which the reform is being introduced; 3) a low level of ambiguity about the reformers' intentions; and 4) strong administrative capacity of the part of the institution adopting and implementing the reform in order to ensure compliance with the reform agenda.

By "normative matching", Olsen (1991: 132) means the degree of correlation between the values basis and beliefs underlying the reform agenda and those of: 1) the institution where the reform is being implemented; and 2) the society where the institution is based. By "institution", he means "the rules that define legitimate participants and agendas, prescribe the rules of the game, and create sanctions against deviations as well as establish guidelines for how the institutions may be changed" (Olsen, 1991: 131).

Institutions are thought to "influence and simplify the way we think and act, what we observe, how we interpret what we observe, our standards of evaluation and how we cope with

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<sup>6</sup> Olsen's (1991) article regarding normative matching and the pre-conditions for successful reform is informed by a number of pieces of work exploring normative neo-institutionalism. For example, March and Olsen, 2005; March and Olsen, 1998; March and Olsen, 1996; March and Olsen, 1984; March and Olsen, 1983; March and Olsen, 1975; Olsen 2009.

conflicts” (Olsen, 1991: 131). In contrast to North<sup>7</sup> (1991, 1990), proponents of March and Olsen’s approach often use the terms “institution” and “organisation” synonymously because both can be applied to a number of collective bodies (Kato, 1996: 555). An analytical distinction is not drawn between institutions and organisations (Bell, 2003: 2). For the purpose of my case study, reform is understood as the adoption and implementation of CCAM, the Government of Kiribati (as a whole), is understood as the institution responsible for adoption and implementing the reform, and the UNDP and the World Bank are understood as institutions committed to promoting reform (in the slightly different forms associated with their respective approaches to CCAM).

Haas (1992: 3) defines epistemic communities as, “a network of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area”. This means that members of an epistemic community share a common interpretation of the problem and the broad policy and political requirements necessary to coordinate a response (Gough & Shackley, 2001: 331). Policy actors and institutions within an epistemic community work collaboratively to further their agenda and push back against competing groups. The notion of epistemic communities is useful for understanding how coalitions of individuals build alliances, develop a common language, construct shared knowledge and influence policy outcomes (Gough & Shackley, 2001: 49).

Using Olsen’s (1991) four pre-conditions for successful reform and Haas’s (1992) notion of epistemic communities together, I map the politics of CCAM in Kiribati and explain the extent and pattern of CCAM reform. In broad terms, my argument has two separate elements. Firstly, I show that two distinct coalitions were involved in political struggles over CCAM in Kiribati. While the Government of Kiribati is one institution, it has been divided by two separate and competing coalitions that have vied to determine the dominant set of values espoused by the institution in relation to CCAM. MELAD formed one epistemic coalition with the UNDP to implement the NAPA. This coalition adopted a development-based approach to CCAM and consequently prioritised a combination of soft and hard adaptation

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<sup>7</sup> Douglass North (1991, 1990) emphasises the interplay between institutions and organisations in order to understand the history of political institutions, and especially, the radically differential performance of economies over time. North (1990:4) distinguishes between formal and informal institutions and organisations. Formal institution refers to the rules that human beings devise, whereas informal institutions are the unwritten codes of behaviour and conventions that dictate how humans should behave (North, 1990: 4). Political, economic, social and educational organisations, for example, are “groups of individuals bound by some common purpose to achieve objectives” (North, 1990: 5). While both institutions and organisations are thought to provide structure to human interaction and influence each other to a certain extent, institutions are the “underlying rules of the game” that influence the development and evolution of organisations (North, 1990: 5). Institutions, rather than organisations, have the greatest “affect on the performance of the economy by their effect on the costs of exchange and production” (North, 1990: 5).

activities. The OB Office, on the other hand, formed a second epistemic coalition with the World Bank to implement the KAP. In contrast, this coalition adopted a technology-based approach to CCAM and consequently prioritised hard adaptation investments. Tension between these coalitions made it impossible for the government to support both projects simultaneously, resulting in the demise of NAPA, while subsequent fractures within the technology-orientated coalition eventually proved the undoing of the KAP. The ultimate result was that CCAM implementation was largely unsuccessful.

Table One provides an overview of the membership of the key coalitions, their respective CCAM projects and these projects' strategies in the case of Kiribati.

Table One: CCAM in Kiribati and the competing coalitions

	<b>NAPA Coalition</b>	<b>KAP Coalition</b>
<b>Membership</b>	UNDP, Ministry of Environment, Lands and Agricultural Development and the Ministry of Fisheries and Marine Resources Development	World Bank and Office of the President
<b>Climate Change Adaptation Project</b>	National Adaptation Plan of Action	Kiribati Adaptation Project
<b>CCAM model</b>	Adaptation Policy Framework	Specifically designed for Kiribati
<b>Approach to CCAM</b>	Development-driven	Technology-driven
<b>Project Priority</b>	Soft and hard adaptation activities to address the vulnerabilities exacerbated by climate change	Hard adaptation activities to address the impacts of climate change

The second element of my argument is that neither the NAPA nor the KAP met all the crucial preconditions for successful reform identified by Olsen. The NAPA initially succeeded because performance against three of the four pre-conditions was strong. Its development-based approach to CCAM and emphasis on a combination of soft and hard adaptation initiatives meant that it was well received by government ministries and local communities.

However, intermediate performance against the fourth pre-condition<sup>8</sup> and shifts in relation to the first pre-condition (the government’s priorities changed in favour of hard infrastructure) meant that it lost traction over time. Strong performance against the first and fourth pre-conditions has the greatest impact on the success of implementation. The KAP had more success long-term because performance against the first and fourth pre-conditions was initially stronger than the NAPA. But it also ultimately failed because of fractures within its supporting coalition. The argument is summarised in Table Two.

Table Two: Pre-conditions for CCAM implementation and project outcomes

Pre-condition for CCAM	Reform Program	
	NAPA	KAP
1. Strong normative match between reform and government	Strong initially but decreased as government priorities shifted in favour of hard infrastructure and a technology-drive approach	Initially strong but decreased over time as differences emerged over hard infrastructure priorities and funding allocations
2. Strong normative match between reform and society	Strong	Weak
3. Low level of ambiguity in reform agenda	Low level of ambiguity	High level of ambiguity
4. Reform process well organised and high level of capacity and resources	Intermediate	Initially strong but became intermediate over time

<sup>8</sup> Olsen’s (1991) fourth pre-condition for successful reform implementation refers to the organisation of the reform initiative. Strong organisational capabilities to stabilise attention and to cope with resistance are considered vital for effective reform implementation (Olsen, 1991: 135).

## **Overview of the dissertation**

In the first section of Chapter Two I critique the four main CCAM models discussed in the literature, namely those developed by the UNDP, IIED, the OECD and the World Bank. The purpose of this section is to understand how scholars and policymakers have understood CCAM so far. It is argued that the literature gives inadequate attention to the role of political and social conflict in shaping CCAM outcomes. Even development-driven approaches to CCAM, such as the NAPA, fail to recognise how competing values shape mainstreaming implementation.

In the second section of Chapter Two I argue it is important that we understand CCAM in terms of a framework that gives culture<sup>9</sup> and values analytical primacy. I draw upon the work of Haas (1992) on epistemic communities and Olsen (1991) on the pre-conditions for reform to illustrate the influence of values, or normatively-based politics, during CCAM.

Chapter Three sets the scene for subsequent detailed analysis of the politics of CCAM in Kiribati. An overview of Kiribati is provided in the first section. This section includes a historical account of major events, key features of traditional society and some key facts about life today. The socio-economic and environmental vulnerabilities, particularly those associated with climate change, are described in the second section. The third section examines the policy context in which efforts to promote CCAM occurred, focusing in particular on the government's response to climate change at international, regional and national scales.

I draw on Haas' (1992) notion of epistemic communities to demonstrate how shared values and priorities enabled two ministries within the Government of Kiribati to form separate and competing epistemic coalitions with regards to CCAM in Chapter Four. On the one hand, MELAD partnered with the UNDP to deliver the NAPA, and on the other, the OB Office formed a coalition with the World Bank to implement the KAP. The NAPA aimed to integrate adaptation and development agendas in order to address the underlying drivers of vulnerability. In contrast, the KAP aimed to protect state assets and facilitate economic development by privileging access to finance, scientific information and human resources during CCAM implementation.

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<sup>9</sup> The importance of culture in the development studies tradition is widely acknowledged (see, for example, Allen, 1992; Frow & Morris, 1993; Pred, 1992; Schech & Haggis, 2008). For reviews of the relevant literature and associated issues, see Schech and Haggis (2008).

In Chapter Five I describe the process and outcomes of CCAM implementation in Kiribati. The first section outlines the nature and evolution of the NAPA and KAP between 2003 and 2011. The second section describes the impact and results of both projects. The final section provides a political analysis of the outcomes that prevailed. Olsen's (1991) four pre-conditions are used to explain why both projects were largely unsuccessful. I propose that strong performance against the first and fourth preconditions are essential for successful policy implementation.

In Chapter Six I provide an overview of my answers to each of the research questions mentioned earlier and summarise why taking politics and values into account is so important for successful CCAM implementation. Policy implications for implementing CCAM in a developing-country context are outlined. Mainstreaming implementation was largely unsuccessful in Kiribati because the government became embroiled in a political battle between proponents of two separate and competing epistemic coalitions. Olsen's (1991) four pre-conditions for reform implementation enable us to understand why the NAPA and the KAP experienced varying degrees of success over time. Institutional capacity and resources are important for ensuring that communication about the mainstreaming process is clear and inclusive. Change management techniques should be employed to share with implicated stakeholders what mainstreaming will mean for them and why it is important. In order for CCAM implementation to be successful in a SIDS context, recipient governments need to have the scope to influence the approach and step-by-step model used by the implementing agency. Country ownership of the mainstreaming process is essential.



## Chapter Two - Understanding CCAM Implementation

To understand how climate change adaptation mainstreaming (CCAM) played out in Kiribati, we need to understand the nature of CCAM implementation first. The purpose of this chapter is to review the literature on CCAM to examine how scholars and policy-makers have understood the implementation of CCAM so far, to present a critique of their approaches, and propose an alternative that addresses their evident weaknesses.

The literature assumes that implementing CCAM is a slow, top-down process driven by governments at the national level and is informed by technical rationality and the construction of consensus at the international level (Agrawala, 2006; Boyd *et al*, 2009: 667; Pelling, 2011). Government officials are portrayed as having a shared understanding of the threats posed by climate change and the most appropriate response. CCAM models assume that policy actors are acting on the basis of scientific advice and technical economic concerns (Boyd *et al*, 2009: 667). At the same time, the literature suggests that any differences of opinion between proponents of CCAM and wider stakeholders can be resolved through participatory development practices and broad consultation with the community (Pelling, 2011). It is taken for granted that country ownership, the key principle of aid effectiveness in international aid policy agreements such as the *Paris Declaration on Aid Effectiveness* (OECD, 2005) and the *Accra Agenda for Action* (OECD, 2008), can be manufactured through such activities (see Enns, Bersaglio & Kepe, 2014; Kyamusugulwa, 2013; or Barnard, 1996 for critiques of participatory development). In many cases, however, CCAM has not proceeded in this fashion (see Burton & van Aalst, 1999; Eriksen & Naess, 2003; and Klein, 2001 for reviews).

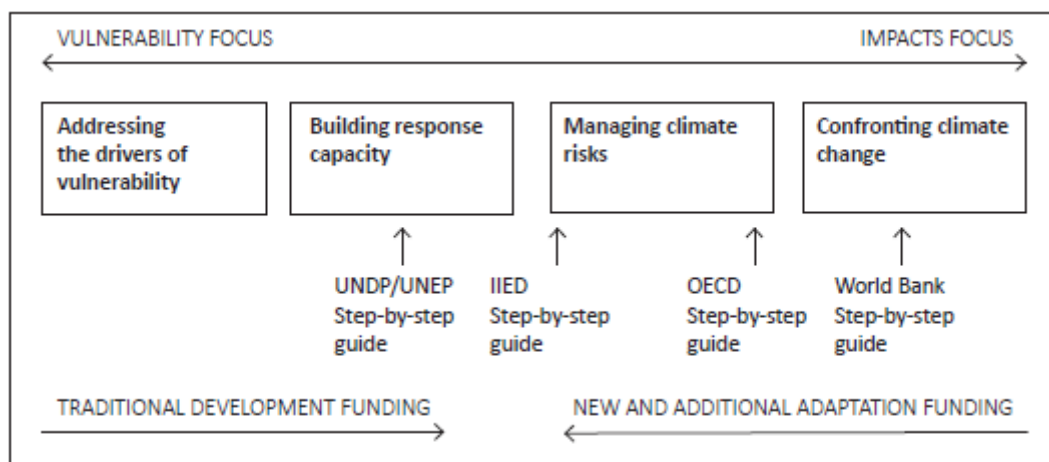
I argue that such accounts give inadequate attention to the role of political and social conflict in shaping CCAM. Policy conflict within government, shaped by different understandings of what sustainable development ought to be, is commonly overlooked (Boyd *et al*, 2009: 670). In particular, the literature frequently fails to recognise: 1) that different epistemic coalitions may hold conflicting understandings of the predicted impacts of climate change and adaptation priorities; 2) that these epistemic coalitions have the resources and capacity to defend their normative values and promote their respective policy agendas; 3) that this, in turn, may limit the scope for consensus in devising CCAM strategies; and 4) that failure to approach CCAM from a shared normative understanding and values base will limit the effectiveness of CCAM initiatives.

To address these matters, I advance an alternative approach to understanding CCAM implementation that draws on normative neo-institutionalism and the notion of epistemic communities. Normative neo-institutionalism, and especially Olsen's four pre-conditions for successful reform, provides a powerful framework for understanding the role of political and social factors in reform processes, while the notion of epistemic communities helps us to understand the nature of the values and actors that characterise these factors. According to this approach, successful CCAM implementation depends upon: 1) a high degree of normative matching between the reform and implementing institution; 2) a high degree of normative matching between the reform and the relevant society; 3) a high degree of clarity about reformers' intentions; and 4) the capacity and resources of the institution implementing the reform.

This chapter is organised into two main sections. Four step-by-step guides commonly used to inform CCAM implementation are critiqued in the first section and placed along the CCAM spectrum in order to demonstrate how development-driven and technology-driven approaches are realised in practice (see Figure Two). The UNDP/UNEP model is positioned under the "building response capacity" banner on the CCAM spectrum, as the model aims to support a range of processes that address the underlying drivers of vulnerability, while at the same time, implement a number of discrete climate change initiatives that mitigate the impacts of climate change. The IIED and OECD models sit underneath the "managing climate risks" banner, as both models focus on incorporating climate information into decision-making and do not give due attention to the impact of non-environmental drivers of vulnerability. The World Bank's model is positioned under the "confronting climate change" banner on the CCAM spectrum because the six steps focus almost exclusively on addressing impacts associated with climate change. While the models sit across the CCAM spectrum, all four neglect to acknowledge competing understandings of climate change impacts, adaptation options and the process of responding via mainstreaming (O'Brien *et al*, 2007).

In the section second I introduce normative neo-institutionalism and explain why Olsen's (1991) four pre-conditions for successful reform, when combined with the notion of epistemic communities (Haas 1992), provides the most useful theoretical framework for understanding the role of politics and values during policymaking, and CCAM implementation in particular.

Figure Two: Comparative analysis of CCAM step-by-step guides



Source: Adapted from McGray *et al*, 2007: 18 and Klein, 2010: 41

### **UNDP/UNEP model**

The United Nations Development Program (UNDP) and United Nations Environment Program (UNEP) jointly established the Poverty-Environment Initiative (PEI) in 2005 to help countries “integrate the linkages between the environment and poverty reduction into policy-making, budgeting and implementation processes at national, sector and subnational levels” (Holmes, 2011: 2). As part of this work, they devised an approach to implementing CCAM.

The approach assumes that mainstreaming requires three levels of intervention: first, strengthening the development base; second, promoting “mainstream” adaptation measures; and third, promoting “specific” adaptation measures (Holmes, 2011: 10). A set of activities, methodologies and tools is associated with each level of intervention.

The first level of intervention focuses upon finding entry points and making the case for considering climate change adaptation during development policy-making. This requires building a picture of current development priorities and the threats posed by climate change (Holmes, 2011: xi). The first level of intervention strives to increase the overall resilience of the country by highlighting the synergies between development and climate change adaptation goals, and the opportunities for designing pro-poor adaptation outcomes that decrease net vulnerabilities to anthropogenic climate change and extreme weather events (Holmes, 2011: 10). Actions in the first level of intervention include preliminary assessments to better understand climate-development-poverty linkages, preliminary assessments to better

understand the governmental, institutional and political contexts, raising awareness and building partnerships, and evaluating the institutional and capacity needs of the aid recipient state (Holmes, 2011: 14).

The second level of intervention is about promoting adaptation option and ensuring that climate change is integrated into ongoing policy processes, such as national development plans and sector strategies (Holmes, 2011: 10). Actions in the second level of intervention include: collecting country-specific evidence, influencing policy processes at the national, sector and sub-national levels, developing and climate-proofing policy measures, and strengthening institutions and capacities (Holmes, 2011: 14). During this stage of intervention the emphasis is upon collecting sufficient country-specific evidence to analyse existing policy documents, identify those that need “climate proofing” and include additional priority interventions as appropriate (Holmes, 2011: 13). Economic analyses are considered especially important for convincing policy-makers of the necessity of mainstreaming (Holmes (2011: 36). It is assumed that mainstreaming will be achieved if high-quality, targeted information is communicated in an accessible language and formats that stakeholders can use in practice (Holmes, 2011: 30).

The third level of intervention aims to promote specific adaptation measures that target issues that have not been addressed in the previous two stages and overcome the challenges typically associated with policy implementation. Challenges specific to CCAM implementation identified by the model include: the uncertainty surrounding climate change impacts, the indirect effects of climate change, the long term nature of climate change and measuring the success of adaptation activities that may never occur (Holmes, 2011: 60-61). Actions designed to help overcome these obstacles include: strengthening the national monitoring system for adaptation, budgeting and finance measures, supporting policy measures and strengthening institutions and capacities (Holmes, 2011: 14). The third level of intervention assumes that mainstreaming will be sustained through engagement in budgeting, implementation and monitoring processes (Holmes, 2011: 60). The model suggests that outcome indicators or measures are necessary to track progress towards CCAM implementation and ensure ongoing improvement (Holmes, 2011: 60-61).

The themes of country ownership, applying a “climate lens” and the importance of finding entry points are emphasised by this model. The UNDP/UNEP asserts that maintaining stakeholder engagement throughout the mainstreaming process will help to secure successful

CCAM implementation. Each level of intervention requires the participation of civil society, public and private sector, academia and development partners (UNDP, 2010: 5). The UNDP/UNEP model has been praised for integrating country-driven initiatives and creating linkages between environment and poverty reduction strategies (Dobie *et al*, 2011: 2). International donors are conceptualised as “facilitators” whose main function is to increase national capacity for managing the uncertainties of climate change risks in key sectors (UNDP, 2010: 5). The focus on country-driven CCAM activities and overcoming policy trade-offs between environment and poverty reduction strategies are key features of this model.

### **Critique**

The UNDP/UNEP model is positioned under the “building response capacity” banner on the CCAM spectrum. The model aims to support a range of processes that address the underlying drivers of vulnerability, while at the same time, implement a number of discrete climate change initiatives that mitigate the impacts of climate change. The removal of existing financial, legal, institutional and knowledge barriers to CCAM implementation and strengthening the capacity of people and organisations to adapt are considered important (Ayers *et al*, 2014: 40). Capacity building efforts are thought to “lay the foundation for more targeted actions” (McGray *et al*, 2007: 20). This development-driven approach aims to integrate climate change adaptation and sustainable development agendas at a strategic level during the project and programme design phase, rather than at a technical level where technological adjustments are made in response to the expected impacts of climate change (Klein *et al*, 2007: 41).

The model advocates for a pro-poor approach where addressing vulnerability in the context of sustainable livelihoods, ensuring equitable growth and improving governance are top priorities (Sperling, 2003: 15). The approach is based on the premise that poverty underpins vulnerability and therefore good development must be the starting point for adaptation in development deficit situations (Burton *et al*, 2002). Increasing the adaptive capacity of vulnerable communities is considered paramount (Sperling, 2003: x). Development efforts are consciously aimed at reducing vulnerability by including priorities that are critical to successful adaptation (Klein, 2008: 41). This pro-poor approach to CCAM is consequently positioned towards the vulnerability end of the CCAM spectrum.

The UNDP/UNEP model inadequately considers the role of politics and conflict during CCAM processes. The mainstreaming model aims to overhaul government decision-making processes and transform the day-to-day tasks undertaken by line-ministries. The strategy assumes that government departments will willingly alter their priorities, change their core mandate and take on CCAM without resistance so long as they are furnished with reliable data about anticipated climatic changes, the required technical capacity is built, and they are provided with rational arguments about the costs (especially economic costs) of doing nothing. Dobie *et al* (2011: 2) suggests that the scale of the model is another constraint, describing the model as a “multi-year, multi-stakeholder process, geared to change the very nature of a country’s decision-making culture and practices”. But the model does not have in-built techniques and strategies to help stakeholders overcome conflicts about priority adaptation actions or the process of implementing CCAM.

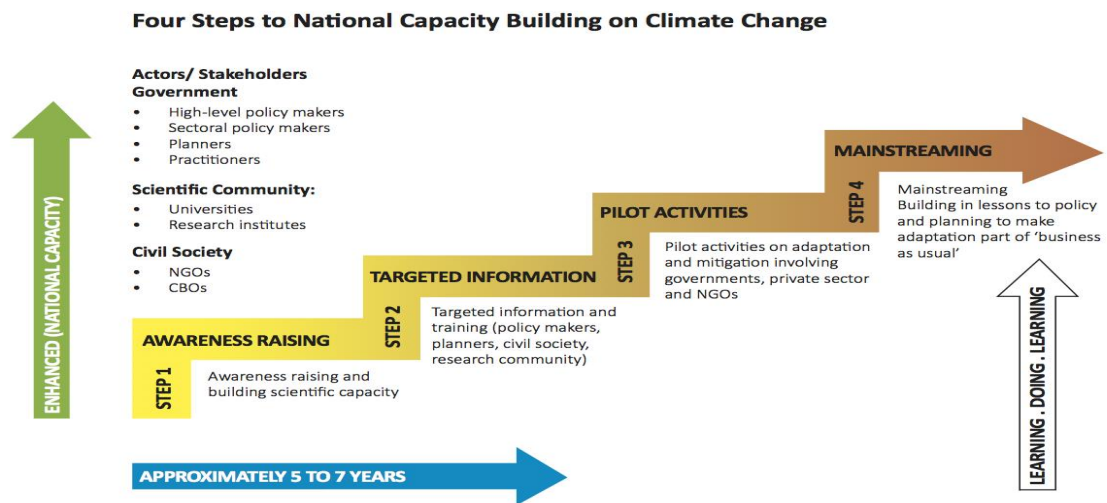
The model assumes that if sufficient technical information is imparted and stakeholders have ample opportunities to participate in the process, mainstreaming should be achieved easily. The framework does not provide tools for fostering political support for the reform agenda or sustaining momentum behind the mainstreaming process. In addition, the model assumes that improved institutional capacity will directly lead to the incorporation of climate change adaptation into the policy-making process, but does not specify how donors should work with aid beneficiaries to build capacity.

### **IIED model**

The International Institute for Environment and Development (IIED) is an influential policy research organisation working at the interface between development and the environment. With the support of the European parliament and the UK Development Studies Association, two researchers in IIED’s Climate Change Group, Saleemul Huq and Jessica Ayers, published a series of papers (Ayers *et al* 2014; Huq & Ayers 2008a; Huq *et al* 2004; Huq, Reid & Murray, 2006) examining the practical dimensions of CCAM in developing country contexts. One of these (Huq & Ayers, 2008a) outlines a four step framework for mainstreaming climate change adaptation. It was prepared in response to a World Resources Institute report that called for more concrete models and approaches to improve the implementation of CCAM and noted that understandings about how CCAM plays out in practice are poorly developed (McGray *et al*, 2007). Ayers *et al* (2014) revisits this work in a later paper and uses Bangladesh as a case study to update the 2008 step-by-step guide and provide further recommendations.

According to Huq and Ayers (2008a: 1), mainstreaming has the capacity to ensure the long-term sustainability of aid investments and reduce the sensitivity of development activities to the effects of climate change. Their framework aims to seamlessly integrate climate impacts into development planning and policy by using a “learning by doing” approach to increase national capacity (Huq & Ayers, 2008a: 1). The four steps strive to avoid trade-offs between climate change adaptation and development objectives by considering them simultaneously. The four steps are diagrammatically presented below in Figure Three.

Figure Three: Huq and Ayer's CCAM Model



Source: Huq & Ayers, 2008a: 2

Step one involves three elements: a) providing decision makers with relevant scientific information; b) raising awareness amongst policy makers regarding the necessity of considering climate change adaptation and development priorities in tandem; and c) building national capacity to enable the implementation of CCAM. With regards to the first of these elements, Huq and Ayers (2008b: 60) suggest that national governments should aim to ensure that the climate information considered during policy-making is accurate and applicable to informing development policies and plans. This requires improving the existing tools for climate change data analysis, investing in scientific research and information that is location specific and up-to-date, strengthening national forecasting and early-warning weather systems, and downscaling climate modelling data to help identify trends at the national, regional and local levels (Huq & Ayers, 2008b: 60). They also stress that scientific information must be “relevant, credible and in particular, meaningful in relation to the everyday risks people experience” (2008b: 3). The importance of generating scientific data that is relevant and useful for policy-makers is emphasised in this step.

The second element, raising awareness about the available scientific information and its importance for development policies and plans, involves providing evidence of the value of scientific data for CCAM purposes and demonstrating that it is essential for aligning



development and climate change adaptation objectives (Huq & Ayers, 2008b: 60). In this way the model assumes that if enough accurate technical information is imparted, stakeholders will unquestioningly act upon the advice<sup>10</sup>. The role of interest groups, or competing epistemic communities, and the associated politics and power relations is not recognised in this strictly technical process (Pelling, 2011: 383-384). It is believed that beginning the mainstreaming process is a simple matter of sharing technical, economic data with policy-makers in step one.

The final element of step one, building national capacity to enable implementation of CCAM, focuses on improving understanding about how mainstreaming provides a mechanism to improve adaptive capacity and achieve climate change adaptation and development objectives concurrently. This element assumes that aid recipient states do not have the capacity or resources to take climate change adaptation information on board and put it into practice because of a human resources problem. Hence, the model assumes that “up-skilling” the workforce in country is necessary before mainstreaming can be achieved successfully. Similar to the discourse of “evidenced-based policy-making”, this model suggests that if access to enough good scientific evidence is facilitated, successful policy outcomes will result (du Toit, 2012).

Step two entails translating the scientific information generated in step one into a format that different stakeholders can use during mainstreaming. Scientific data should be communicated in a format relevant for all sectors and organisations, including policy makers, planners, civil society organisations and research communities (Huq & Ayers, 2008b: 60). This requires establishing communication channels and forums to support information and skills sharing (Huq & Ayers, 2008a: 3). In addition to designing vehicles to communicate scientific data to ensure that it is “taken up” by policy makers, this step encourages policy actors to become more receptive to the idea of using climate change data during development policy and project discussions. Huq and Ayers (2008b: 60) suggest that building such receptivity requires “consideration not only of the type of new information and technologies but also the process needed to deliver, communicate, finance, receive and operationalise it”. Step two consequently

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<sup>10</sup> The “knowledge-deficit model” is a term used in the environmental sciences literature to highlight the assumption that better science, more science and increased scientific literacy amongst policy maker and the public should translate into better, more rationale and more appropriate policies. It is assumed that “knowledgeable people act appropriately, whereas ignorant ones do not. According to this equation, aligning public “perceptions” with scientific knowledge will lead to “appropriate action” (Hall and Sanders, 2013: 502). However, IPCC evidence suggests that “good scientific and technical information alone is rarely sufficient to result in better decisions” (Jones *et al*, 2014: 200). Critiques of this approach are provided by Bell and Lederman (2003), Hall and Sanders (2013), Jasanoff (2010), Pidgeon and Fischhoff (2011) and Wynne (2006).

focuses upon designing communication mediums that will help stakeholders access and apply climate data during policy-making.

Step three involves piloting climate change adaptation and mitigation actions to provide demonstrable results and “good practice” examples for policymakers. Government and non-government organisations should be involved in the piloting process because all policy actors need to be convinced of the relevance of climate change to their work (Huq & Ayers, 2008a: 3). Tools to assist project planners and managers integrate risk reduction and climate change adaptation information should be available during this step. The emphasis here is on demonstrating the positive outcomes from integrating risk reduction and climate change adaptation into development for a broad stakeholder group.

Step four is called “mainstreaming” and involves the full integration of climate change into government policies. Climate change information should be included in all investment and planning decisions and across different sectors and scales (Huq & Ayers, 2008b: 63). Policy actors will shift from “business as usual” to streamlining climate change adaptation into all development policies and projects during this step. Capacity building is required during step four to ensure that lessons from steps one to three are effectively taken into consideration and inform the mainstreaming process. According to this model, building capacity in step four is especially important at the community level because stakeholders engaged in climate sensitive sectors comprise the most vulnerable groups and often the largest number of decision makers who will be responsible for implementing CCAM (Huq & Ayers, 2008b: 66). Huq and Ayers (2008a: 4) assert that once climate change awareness and capacity improve, mainstreaming in step four should be readily achieved.

Ayers *et al* (2014) use Bangladesh as a country case study to revisit this framework and consider the challenges to implementing their model (Huq & Ayers, 2008a). They identify a range of factors that shape the success or otherwise of CCAM implementation. These constraints included inadequate coordination amongst government ministries; loss of institutional memory in relevant agencies leading to “brain drain” and the reappearance of knowledge-gaps; climate change adaptation projects emerging in an ad hoc fashion; funding dictating cycles of project activity; delays in procurement and disbursement; inappropriate human resources; and a strong reliance upon political support (Ayers *et al*, 2014: 48). Ayers *et al* (2014: 48) suggest three improvements to their model based on the lessons learned from this case study.

Firstly, the process of CCAM implementation should not be considered linear. Instead, they suggest that discrete adaptation projects, when implemented alongside more integrated approaches, can have merit in their own right (Ayers *et al*, 2014: 48). Secondly, the authors question their earlier emphasis upon the importance of scientific evidence for decision-making. Community-based knowledge is identified as a good source of information when scientific evidence on climate change impacts is lacking (Ayers *et al*, 2014: 48). The political nature of information, including both how it is generated and how it is used, is highlighted (Ayers *et al*, 2014: 48). Thirdly, Ayers *et al* (2014: 48) recommend extensive consultations with a diverse range of stakeholders because the alternative sources of information will help to address any climate information gaps. The authors conclude that the key learning from the Bangladesh case study is that the mainstreaming process “is made up of a patchwork of processes, stakeholders and approaches that converge or coexist” (Ayers *et al*, 2014: 48). They do not, however, suggest that the four steps or the elements within each step, should be altered in order to incorporate these important lessons learned. The four steps outlined in their earlier work (Huq and Ayers, 2008a; and Huq and Ayers, 2008b) remain the same.

### **Critique**

The IIED model belongs under the “managing climate risks” banner on the CCAM spectrum because the approach privileges activities that seek to incorporate climate information into decision-making (Klein, 2008: 41). The first two steps are both focused on building scientific capacity and providing targeted information and training for stakeholders (Huq & Ayers, 2008a). “Improving climate services, raising awareness of climate information and providing evidence of its value to decision makers” is considered essential for aligning development and climate change priorities at the beginning of the CCAM process (Huq & Ayers, 2008b: 60). In their review of the CCAM model, the authors suggest that technical and community-based knowledge are both important sources of information during CCAM (Ayers *et al*, 2014: 48).

However this model cannot be strictly classified as a “mainstreaming minimum” approach because it moves beyond simply climate-proofing development and recognises that “enabling environments at the national, sectoral and local levels must be created in order for mainstreaming to be effective” (Huq & Ayers, 2008b: 53). Building capacity via upskilling and human resources is emphasised because it is considered one of the best ways to ensure that stakeholders are fully engaged in the entire process (Huq & Ayers, 2008b: 63).

A combination of hard and soft<sup>11</sup> adaptation measures is recommended for improving adaptive capacity amongst local communities and being responsive to different understandings of vulnerability (O'Brien *et al*, 2008). This is considered important because, “the actual implementation of [adaptation] options takes place through stakeholders “on the ground” who must have the capacity and resources to do this” (Huq & Ayers, 2008b: 59). This emphasis upon building adaptive capacity and engaging local communities means that the model is positioned under the “managing climate risks” banner, but towards the vulnerability-focused end of the CCAM spectrum, rather than the impacts focused end.

The IIED model does not sit under the “building response capacity” banner, despite its perceived emphasis upon strengthening local capacity, because the model fails to consider socio-economic drivers of vulnerability. The model does not look beyond technocratic and managerial elements to consider how alternative underpinnings of state capacity or non-environmental drivers of vulnerability could be taken into consideration during CCAM (Klein, 2008: 40). Development-driven activities to increase adaptive capacity at the local level are not included.

In essence, Huq and Ayers’ approach suggests that CCAM is a technocratic and consensual process driven by broad “awareness” of the emerging impacts of climate change, the rational application of scientific knowledge, and broad consensus on the nature of this response (Pelling, 2011). There is recognition that the required awareness, rationality and technical capacity may be lacking. But these problems are seen, not as fundamentally political in nature, but rather, as essentially about information availability and human resources. The key success factors, it is implied, are the ability to effectively get the message about climate change out, the availability of relevant scientific knowledge, and the ability to transfer skills/build capacity effectively. While the revised model recognises the importance of community-based knowledge and the political nature of information, the influence of different cultural values during decision-making is underestimated (Nurse *et al*, 2014: 1640). To the extent that this model views CCAM as a process of struggle, it construes this as one between informed policy actors who have access to accurate scientific information and the uninformed general public who need to be educated about the correct adaptation response via mainstreaming, rather than between competing groups with contradictory interests and values.

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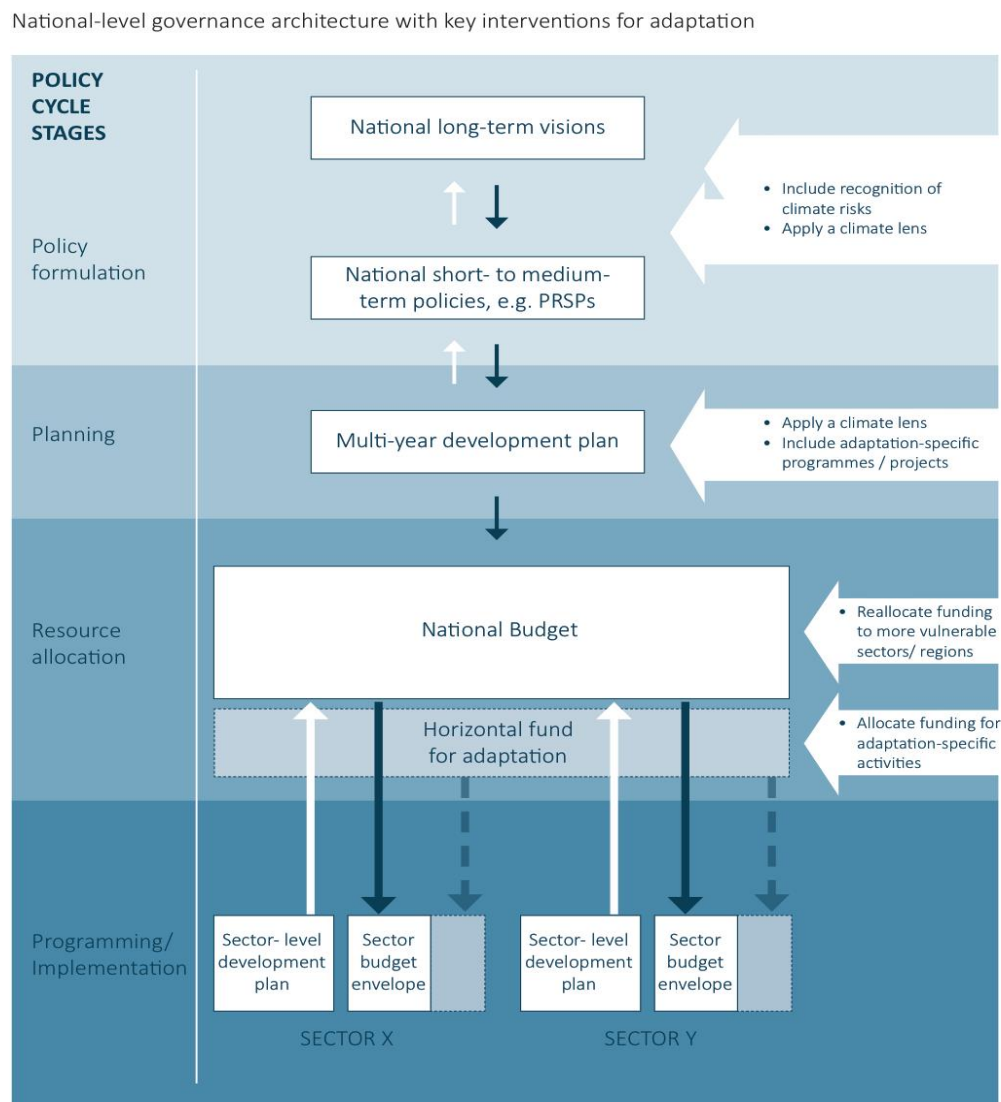
<sup>11</sup> O'Brien (*et al*, 2008: 198) uses the term “indirect adaptation” to describe the “soft” adaptation activities that are required for changing the mindsets and behaviour of large groups of individuals in order to respond to the “wicked problem” of climate change adaptation. Examples include, “diversified cropping strategies, increasing food security through higher income or more secure access to productive land, and improving access to safe and reliable water and sanitation, energy, education and employment” (O'Brien *et al*, 2008: 198).

## **OECD model**

The OECD's approach to CCAM implementation is outlined in two key documents, the 2006 *Declaration on Integrating Climate Adaptation into Development Cooperation* (OECD, 2006) and a report entitled *Integrating Climate Change Adaptation into Development Cooperation* (OECD, 2009). The *Declaration* commits OECD members to “work to better integrate climate change adaptation in development planning and assistance, both with their own governments and in activities undertaken with partner countries” (OECD, 2006: 6). The 2009 report aims to help member countries better understand the possible synergies and trade-offs associated with CCAM and operationalise the objectives outlined in the *Declaration* (Agrawala, 2006: 24).

Broadly, the OECD recommends a “whole of government” approach that focuses on the involvement of key stakeholders, improved coordination amongst ministries and the implementation of related multilateral and regional environmental agreements (OECD, 2009). Its CCAM model includes seven components: awareness-raising, pre-screening for climate risks and vulnerabilities, detailed climate risks assessments, identification of adaptation options, prioritisation and selection of adaptation options, implementation of adaptation options and monitoring and evaluation (OECD, 2009). Methods, resources and tools are proposed for each component (OECD, 2009). However, sector specific information for incorporating adaptation into development cooperation is not provided (Olhoff & Schaer, 2010: 37). The model emphasises the importance of finding entry points along the policy cycle where considerations of climate change adaptation can be incorporated and a “climate lens” applied.

Figure Four: OECD framework for integrating climate change adaptation with development at the national level



Source: OECD, 2009: 85

Key to this approach is the idea that strategies, plans, regulations and programmes should be analysed through a “climate lens”. This involves examining policies and strategies to determine the vulnerability to climate risks; the extent to which climate change risks have been taken into consideration in the formulation stage; whether the policy, strategy, regulation or plan could lead to increased vulnerability (maladaptation); and what amendments might be warranted for pre-existing policies, strategies, regulations, or plans in order to address climate risks and/or opportunities (OECD, 2009: 17). Various tools, such as Strategic Environment

Assessments<sup>12</sup> can readily incorporate a “climate lens”. Applying a “climate lens” also enables the identification of entry points in the policy cycle for raising climate change adaptation awareness and initiatives.

The CCAM model designed by the OECD suggests that stakeholders should look for opportunities where considerations of climate change adaptation could be incorporated into each stage of the policy-making cycle. The aim of identifying entry points is to provide opportunities for the “identification, integration and implementation of measures and investments specifically designed to enable and support adaptation to climate change but which had not been envisaged in the initial plan, programme or project” (OECD, 2009: 17). The OECD recommends that all development cooperation activities should be reviewed during the CCAM process, and that opportunities for streamlining climate change adaptation and development objectives should be identified (OECD, 2009: 6). Specific interventions or climate change adaptation actions can be designed once entry points have been identified. To a large extent the nature of these climate change adaptation actions will be dictated by the location of the entry point in the policy-making cycle. The policy guidance explains that “interventions will generally take a very different form at different entry points in the cycle, since they apply to very different processes and at different authority/jurisdiction levels” (OECD, 2009: 17).

The concepts of applying a “climate lens” and looking for entry points are used throughout the OECD’s CCAM model. Instead of designing mainstreaming modules for specific sectors, the OECD has broken the mainstreaming process into the national, sectoral, project and local levels. The policy guidance outlines a specific approach, recommendations and key priorities for action at each of these levels (OECD, 2009).

The approach to CCAM at the national level will be briefly sketched here because strategic decisions are made at this level. CCAM efforts at this level have implications for public and private sector actors and national visions, development plans and budgets (OECD, 2009: 18). Priorities at the national level according to the OECD (2009: 18-19) include:

- 1) Improving the coverage and quality control of climate monitoring data. This may require commissioning national-level assessments of climate change impacts, vulnerabilities and adaptation options. This will lead to improved and more targeted

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<sup>12</sup> Strategic Environment Assessments are a decision support process that aim to ensure that environmental and sustainability aspects are considered effectively during policy, planning and programme decision making.

information on how climate change affects specific national priorities and core government functions;

- 2) Moving the coordination of adaptation into powerful central bodies, such as the Office of the President or the Prime Minister;
- 3) Including considerations of climate change risks within long-term visions, poverty reduction and sustainable development strategies;
- 4) Making a sound economic case for investing in adaptation because this will ensure adequate resource allocation for the incorporation of adaptation considerations in policies, plans and programmes; and
- 5) Enabling international donors to help implement CCAM through budgetary support mechanisms and country/joint assistance strategies.

Acting upon the priorities identified above should help national governments adopt a “whole of government” approach that creates opportunities for engaging with key stakeholders, improving the availability and quality of climate information available for decision makers and designing “no regret” adaptation actions<sup>13</sup> that will produce beneficial outputs despite the ongoing presence of uncertainties about future climatic conditions (OECD, 2009: 19).

### **Critique**

The OECD model for CCAM implementation at the national level falls under the “managing climate risk” banner on the CCAM spectrum because the approach outlines activities that seek to incorporate climate information into decision-making. The seven components focus on addressing climatic hazards and impacts rather than human development concerns more generally. The range of stressors and underlying causes of vulnerability are overlooked and the model does not create a link to poverty reduction. The approach adopts a technology-driven view of adaptation and is based on the assumption that national governments should develop and implement hard adaptation measures (Klein *et al*, 2007: 26).

Effective implementation, according to this model, depends heavily upon the availability of western scientific information (McGray *et al*, 2007: 21). Information on the implications of both the current and future climatic predictions is considered an important prerequisite for informed decision making and reducing the negative impacts for communities (OECD, 2009: 18). The OECD recommends commissioning climate change impact assessments and “using multi-model ensembles with a clear articulation of associated uncertainties” to improve the

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<sup>13</sup> “No regret” adaptation interventions refers to “actions that generate net social benefits under all future scenarios of climate change and impacts” (Heltberg, Siegel & Jorgensen, 2009: 95).



coverage and quality of climate monitoring data (OECD, 2009: 18). The reliance upon western scientific information distinguishes this “climate risk management” approach from typical development efforts and positions it towards the impacts-focused end of the CCAM spectrum (Pelling, 2011).

The model proposes that CCAM should be applied within the *Paris Declaration* (OECD, 2005) and *Accra Agenda* (OECD, 2008) frameworks for aid cooperation, both of which emphasise the importance of country ownership in shaping aid-supported reform encounters. The authors suggest that CCAM efforts should work through and support partner countries’ own systems. At one point, for instance, they state that the CCAM model “primarily highlights partner country processes and institutions where climate change adaptation could be integrated” (OECD, 2009: 17). However, the model does not provide guidance on how country ownership can be achieved while mainstreaming. The model does not outline a step-by-step guide to help aid donors or aid recipients establish a mainstreaming framework or work flow pattern that protects the recipient state’s national development and climate change adaptation priorities, nor does it enable them to navigate the political and social terrain on which these priorities are based. Non-technical measures to ensure that local conditions are taken into account during CCAM implementation are not prioritised by this model (Klein *et al*, 2007: 28).

The OECD model for mainstreaming climate change adaptation is underpinned by the assumption that obstacles to achieving mainstreaming can be overcome with the correct application of technical tools, such as detailed climate assessments and accurate scientific information. The obstacles to effective CCAM identified by the model include lack of awareness within the development community, limited resources, poor quality information about the relevance of climate information for development-related decisions and the uncertainty of climate predictions (Agrawala & van Aalst, 2006: 136-137). The model does not account for political tensions or conflict between epistemic communities when considering the most effective way to adapt to climate change via mainstreaming. The role of normative values during the policy-making process is not recognised.

### **World Bank model**

The World Bank designed a six-step mainstreaming model as part of the Kiribati Adaptation Project (KAP). Location and sector specific details are at the heart of this model. CCAM is conceptualised as a place-based activity that should be managed by those people,

communities and enterprises most directly at risk. Burton and van Aalst (2004: 13), two senior World Bank staff members suggest:

The prioritisation of adaptation options (should) take place in a national policy context, and this is perhaps the most compelling reason why a broad one-size fits all approach to adaptation is not helpful.

The World Bank approach to CCAM was accordingly designed specifically for Kiribati.

Step one of the World Bank's CCAM model focused on community engagement and providing local I-Kiribati (as citizens of the country are known) with an opportunity to participate. The First National Consultations were held between June 23 and August 15, 2003 in the Gilbert and Line Island Groups. World Bank personnel hosted workshops in local *maneabas*<sup>14</sup> with Chief Councillors, council clerks, government staff from the outer islands, *unimane*<sup>15</sup> representatives, women and youth (World Bank, 2006a: 18). Participants were asked to identify the key climatic changes or environmental hazards experienced over the past 20 to 40 years and the coping mechanisms proposed to deal with them (World Bank, 2006a: 18).

Step two also focused on community engagement, but unlike step one, this step focused on current climatic threats. Participants were asked to focus on contemporary, rather than retrospective, adaptation activities during the Second National Consultation (World Bank, 2006b: 18). The World Bank stipulated that four categories must be used for prioritising the adaptation activities that require government coordination. The four categories were (World Bank, 2006a: 30):

1. Urgent adaptation options which can be done by communities themselves;
2. Urgent adaptation options for which communities need assistance from the government;
3. Adaptation option that are less important/urgent; and
4. Adaptation options for which there is still no need or willingness to implement.

Prioritising the identified adaptation options was the second step in mainstreaming climate change adaptation across the Government of Kiribati. The results of the Second National Consultation are not publicly available.

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<sup>14</sup> *Maneabas* are large physical structures that are used for community gatherings (Maude, 1989: 201). According to Whincup (2010: 144), "*mwane* means to collect or bring together and *aba* refers to the land or the people of the land". These buildings continue to hold great cultural and political significance in Kiribati today.

<sup>15</sup> Each family unit (*utu*) is headed by a male and each *kainga* (family group) is headed by the eldest male descendent referred to as the *unimane* (Lawrence, 1992: 270). The *unimane* act as governing council of the *maneaba* and have traditionally held considerable power in community matters (Lawrence, 1992).

Step three involved assessing the potential global benefits and incremental costs of the proposed adaptation activity. This step involved assessing priority adaptation options on a preliminary basis against their potential global environmental benefits and incremental costs due to climate change (World Bank, 2006a: 31). This was an important step in the mainstreaming process because funding for pilot adaptation projects, provided by the Global Environmental Facility, is conditional upon meeting these criteria.

The fourth step involved dividing adaptation actions according to the nature of the response provided by participants in step three. Five criteria were used to assess the type of response required. These were (World Bank, 2006a: 31):

1. Changes to government policies and strategies;
2. Changes to laws and regulations, with appropriate mechanisms to improve compliance;
3. Interaction of extension and information services with communities and households;
4. Formal engineering and construction works by government, island councils and contractors; and
5. Informal engineering and construction works by households and communities.

A team of consultants circulated the list of adaptation options developed in step four and checked investments against the ministries key programs to ensure that they had a “home” during the fifth step (World Bank, 2006a: 31). The World Bank (2006a: 31) explains that this step was designed to “effect an all-pervading, but incremental, low-key process, eventually affecting all key aspects of the National Development Strategy”.

The final step in the mainstreaming process involved prioritising and specifying the investments according to the criteria provided below in Table Three. The priorities identified in this step were bolstered by technical and economic assessments undertaken by the World Bank and potential investments were matched against the associated Ministerial Operational Plan (World Bank, 2006a: 33).

Table Three: Criteria for prioritising KAP investments

1	Degree of adverse effects/vulnerability being addressed (very high/high/medium/low/very low) Based on risk/vulnerability analysis
2	Importance attached by the national consultations (very high/high/medium/low/very low)
3	Cost relative to benefits (very high/high/medium/low/very low)
4	Timing/urgency (immediate/can wait/unknown)
5	No-regrets (yes/no)
6	Environmental impacts (yes/some/no/unknown)
7	Culturally acceptable (yes/probably/maybe/no - list of potential problems)
8	Level of implementation (generic/sector specific/site specific/sector and site specific)
9	Participatory (bottom up/top down/both)
10	Synergy with poverty reduction (yes/some/no)
11	Synergy with other multilateral environmental agreements (yes/some/no)

Source: World Bank, 2006a: 33

### Critique

The World Bank’s CCAM model is positioned under the “confronting climate change” banner on the CCAM spectrum because the steps taken focus almost exclusively on addressing impacts associated with climate change. The model does not include steps to address non-climatic change challenges or non-environmental drivers of vulnerability (McGray *et al*, 2007: 22). Climatic risks stemming from anything other than anthropogenic climate change, such as historic climate variability or socio-economic factors, are excluded<sup>16</sup>. In this technology-based view, mainstreaming largely refers to ensuring that projections of climate change are considered in the decision-making of relevant government departments and agencies so that technologies are chosen that are suitable for future climatic conditions (Klein, 2008: 41). Hard adaptation measures are prioritised ahead of soft adaptation measures, or a combination of both.

<sup>16</sup> The approach does not recognise that individuals, organisations and institutions frame and perceive risk differently (Hansson, 2010). The importance of iterative risk management in order to address this “wicked problem” is not taken into account and as a result, “different traditional and modern epistemologies, or “ways of knowing”” are lost (Jones *et al*, 2014: 201).

The World Bank strategy for mainstreaming assumes that sharing technical and economic information with stakeholders and up-skilling decision makers to incorporate this data during policy-making are important pre-requisites for successful CCAM implementation. Although community-based information was sought during the National Consultations, implementation relied upon the use of western scientific information. A team of international consultants were hired to manage the consultations (Hogan, 2008; Kiata, 2008; Kaiteie & Hogan, 2008) and priority cross-checking during step five. In addition, technical and economic assessments were conducted by international consultants during the final step (World Bank, 2006a: 33). The hard adaptation activities implemented during phases two and three of the KAP were informed by the World Bank's technical and economic concerns.

The World Bank's traditional view of mainstreaming does not consider the links between climate change adaptation and sustainable development (Klein, 2008: 40). The model is geared to create synergies between climate change adaptation initiatives and strategic policy documents, rather than generate human-centred development outcomes. The complexity of factors driving vulnerability in Kiribati was not accounted for in the World Bank's model. Failure to do so limits the effectiveness of this model because technological adaptation measures may be ineffective if they are not suited to local conditions or turn out to be maladaptive if they are implemented without recognition of relevant social and environmental processes (Klein, 2008: 40). The model is consequently positioned under the "confronting climate change" banner on the CCAM spectrum.

Unlike the other models discussed here, the World Bank model includes steps and activities to facilitate community engagement during CCAM. The first two steps of the World Bank model focus exclusively on community engagement. Insights and learnings from these two early steps are meant to inform the entire process. This differs from the other models that identify stakeholder engagement as important but do not actually include steps in the CCAM process to address it.

The Bank (2003: 4-5) hoped that, "the National Consultations will help to establish strong ownership among key stakeholders and allow them to share lessons learned and discuss their roles in implementing adaptation". The National Consultations were considered to provide a forum for "changing people's attitudes and understanding about the climate" because participatory development processes "itself builds trust and increases understanding among those involved" (World Bank, 2006a: 44). The World Bank (2006a: 18) hoped that the

effectiveness of the KAP was guaranteed because the “people of Kiribati at the local level have been involved in the design of the KAP”, via the National Consultations.

The National Consultations were designed to take stakeholders on a journey from ignorance, through increased awareness and towards support for the mainstreaming agenda. In this respect, the Bank’s emphasis upon sharing technical information with stakeholders is similar to the other CCAM models discussed here. The consultations represent a political tactic to create the sense of empowerment and the illusion of influencing the mainstreaming policy process; in this respect, they share much in common with the participatory processes associated with poverty reduction strategies (Brown, 2004). The World Bank CCAM model assumes that if ample opportunities for community engagement are provided, support will grow amongst stakeholders and the process will be relatively straight forward. The model fails to account for competing adaptation priorities between epistemic communities and the role of conflict in policy-making.

### **Summary of the analysis so far**

Mainstreaming has been proposed as the most effective mechanism to integrate climate change adaptation and sustainable development agendas. Practical step-by-step guides to achieve mainstreaming have been designed by a considerable number of scholars and multi-lateral and bi-lateral donors over the past five to ten years. The models proposed by the UNDP-UNEP, IIED, the OECD and the World Bank have been analysed here.

These models are built on the taken-for-granted assumption that mainstreaming is a rational process of providing stakeholders with access to reliable and useful climatic data and the skills necessary to take this information on board. Awareness-raising, capacity-building and stakeholder engagement are crucial elements in all four models. The World Bank model is unique because it was specifically designed for implementation in Kiribati and outlines where and how community engagement initiatives can be executed during CCAM. But nevertheless, it has a similar emphasis on using technical information to fund physical infrastructure projects and drive economic growth.

The four models critiqued here neglect to acknowledge competing understandings of climate change threats, adaptation actions and the process of responding via mainstreaming (O’Brien *et al*, 2007). The potential for competing epistemic communities to approach mainstreaming from different ideological positions and disagree about the process of implementing CCAM is

not recognised. This means that the models analysed here cannot explain why tensions between epistemic coalitions can stall the mainstreaming process.

Below, I propose a framework for understanding CCAM that highlights the influence of politics and conflict during policy-making. The framework draws simultaneously upon the normative strand within neo-institutionalism and the notion of epistemic communities. I have chosen to intertwine these two theoretical approaches (normative neo-institutionalism and epistemic communities) because normative neo-institutionalism provides a powerful framework for understanding the role of politics in reform processes, while the notion of epistemic communities helps us understand the nature of the agendas at work and the actors who promote them. It is argued that, combined, these two approaches provide a powerful explanation of CCAM<sup>17</sup>.

I begin by describing the key features of normative neo-institutionalism and then epistemic communities. I explore the four variables that Olsen (1991) suggests are necessary for policy implementation to be achieved. The concept of normative matching is discussed in-depth because I build upon this analytic approach to answer my research questions. I suggest that the first and fourth pre-conditions, compared to the second and third pre-conditions, are more important for effective implementation. This chapter concludes by charting how I will use these theoretical models to explain why CCAM was largely unsuccessful in Kiribati.

### **Neo-institutionalism overview**

Within the broad family of neo-institutionalism, a number of different analytic strands extend this understanding of policy-making differently. Cammack (1992: 401) explains that, “the new institutionalists cannot be said to form a single school. Rather, there are a number of more or less well defined “new institutionalist” positions, reflecting a broader renewed interest in institutions, variously defined, in several areas”. These strands are typically classified as historical, rational, constructivist and normative or sociological (Bell, 2011; Hall & Taylor, 1996; Kato, 1996; Reich, 2000; Thoenig, 2003). Discussing the features and critiques of these four theoretical strands within neo-institutionalism is beyond the scope of this dissertation. Instead, I will be focusing upon normative neo-institutionalism because this

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<sup>17</sup> Space does not permit to engage in a debate about why this theoretical approach is more effective for understanding CCAM outcomes compared to other theoretical approaches often used to understand policy-making in a developing country context, such as dependency (Frank, 1966), public choice (Buchanan & Tullock, 1962; Butler, 2012; Tullock, 2006) and political ecology (Borjenhoff, Mulder & Cappolillo, 2005; Orlove 1980; Rocheleau, 2008; Zimmerer & Basset, 2003) approaches. Nevertheless, the relative merits of adopting a neo-institutional approach for understanding the role of governments and policy making in addressing climate change and resilience is widely recognised (for example, Atkinson, 2013).

theoretical framework provides the best approach for understanding the role of values and politics in policy-making.

### **Normative neo-institutionalism overview**

The principal assumption of normative neo-institutionalism is that an institutional structure is a normative framework that broadly defines the interests, goals and behaviour of institution members (Peters, 1986: 175). It is believed that member values are shaped by the normative framework of the institution (Peters, 1986). The normative structure is composed of rules and roles that specify the responsibilities and tasks of institution members. Rules and standard operating procedures are followed because they seem natural, expected and legitimate (March & Olsen, 2005: 8). The institutional framework dictates the “terms of reference” for members and provides a “relevance criteria” that broadly guides research agendas, information collection and criteria for assessing policy options (Egeberg, 2003). In this way the institution’s normative framework shapes information networks and knowledge “validity”. The normative structure of the organisation is thought to “shape or influence the behaviour, power and policy preferences of political actors” (Bell, 2002: 3). The power of institutions to influence actors’ values is stressed by Olsen (1991: 131), who states that institutions “influence and simplify the way we think and act, what we observe, how we interpret what we observe, our standards of evaluation and how we cope with conflicts”.

March and Olsen (1976, 1984, 1989, 1995, 1996, 1998) are the most prominent proponents of normative neo-institutionalism. To advance the theory’s capacity for understanding the process of policy-making and policy reform outcomes, the pair developed the “logic of appropriateness” and “logic of consequences”. The basic argument of this normative approach is that human behaviour is driven by a logic of appropriateness and senses of identity rather than a logic of anticipated consequences and prior preferences. The logic of expected consequences assumes that policy actors are driven by a logic of calculated self-interest and assumes that actors chose among alternatives by evaluating their likely consequences for personal or collective objectives (March and Olsen, 1998: 949). According to this logic, the political order results from rational actors pursuing preferences and negotiating “contracts” with actors who hold conflicting interests because the outcomes are predicted to be beneficial (March & Olsen, 1998: 949). March and Olsen reject the logic of consequences and propose that the logic of appropriateness explains the behaviour of policy actors and institutions more accurately.



The logic of appropriateness asserts that actions and policy decisions are informed by rules, identities and norms. The logic of appropriateness is built into standard operating procedures, conventions and rules-of-thumb (March & Olsen, 1996: 252). Rules, duties, rights and roles define acts as appropriate or inappropriate and this logic informs all decision-making (March & Olsen, 1996: 252). Institutional hierarchies, sanctions, procedures and reward structures are thought to keep actors “in line” (Koelble, 1995: 233). March and Olsen (1998) use the concept of “bounded rationality” to demonstrate that actors ask the question, “What is the appropriate response to this situation given my position and responsibility” rather than “How do I maximise my interests in this situation?”. The established guidelines for acceptable types of behaviour mean that decisions emerge from habit and routine (Koelble, 1995: 234). According to this logic, the “behaviour of an organisation [institution] might be understood better as an attempt to match its actions with some standards of “appropriateness” derived from the history and collective values of the organisation [institution], or even from a broader social function” (Peters, 1992: 211). To a certain extent, this approach assumes that all policymakers have learned and internalised the institutions’ values and are capable of acting within the bounds of the institution’s normative structure (Peters, 1986: 176).

March and Olsen (1984) use a choice and duty metaphor to help differentiate the concepts of logic of consequence and logic of appropriateness. The metaphor of choice or duty is used to prove that political actions are the fulfilment of duties and obligations. According to this metaphor, choice is associated with the logic of consequence and duty is linked to the logic of appropriateness. The metaphor is further explained:

In a choice metaphor, we assume that political actors consult personal preferences and subjective expectations, then select actions that are as consistent as possible with those preferences and expectations. In a duty metaphor, we assume that political actors associate certain actions with certain situations by rules of appropriateness. What is appropriate for a particular person in a particular situation is defined by the political and social system and transmitted through socialization (March & Olsen, 1984: 741).

According to the logic of appropriateness, political actions and policy decisions are understood as expressions of an institution’s normative structure (March & Olsen, 1996: 251). Once individuals have learned the institution’s logic of appropriateness and internalised those values, the individual is expected to comply with the normative structure of the institution. March and Olsen (1996) use the logic of appropriateness and the concept of “duty”, rather than the logic of consequences and the concept of “choice” to outline their theoretical stance

towards the role of institutions during policy-making. The logic of appropriateness is used to understand the policy-making process and outcomes.

### **Pre-conditions for successful reform implementation**

Normative neo-institutionalism helps us to uncover the values of an institution. Olsen's (1991) concept of "normative matching" extends these ideas and suggests that the success or failure of policy change is determined by the extent to which four pre-conditions are met. This requires investigating: the normative match between reforms and institutions; the normative match between reforms and society; the ambiguity of reformers' intentions and the institution's capacity to organise the process of reform. I argue that the first and fourth pre-conditions are the most important for successful reform implementation.

#### **Pre-condition 1: Normative match between reforms and institution**

Reform efforts are more likely to succeed if the values base and beliefs underlying the proposed reform agenda match that of the institution. If the values base underlying the reform agenda does not match the institution, the institution will mobilise resources to resist external attempts to change internal parts of the institution which are closely related to the identities of key policy actors (Olsen, 1991: 133). Policy actors will fight to protect their role description and responsibilities if they feel it is closely linked to their identity and position in the institution. The normative match between reforms and institutions is useful for understanding why policy actors, who may have been in power for extended periods of time and are heavily indoctrinated in the logic of appropriateness, are less likely to support and implement comprehensive reforms that undermine the current normative framework (Olsen, 1991: 133). Examining the normative match between the proposed reforms and institution can also explain why it is more difficult to implement reforms into a large institution with many networks, rather than a smaller institution. Radical change is less likely to occur if the institution is heavily integrated into the larger political order (Olsen, 1991: 133).

#### **Pre-condition 2: Normative match between reforms and society**

Exploring the normative match between reforms and society also helps to understand policy reform outcomes. Olsen (1991: 133) suggests that reform efforts are more likely to succeed if the reform mirrors those changes already occurring within society and long term trends at an international scale. Circumstances that surround the reform are thought to shape how the reform is deliberated within government and public responses. Implementing reform

measures will be easier if institutions and the general population are already pushing for policy change. However the reverse is also true. If society is largely content with the status quo and only a sub-group or one institution is eager to introduce reforms, the conditions are not conducive for successful implementation.

**Pre-condition 3: Ambiguity of reformers' intentions**

The ambiguity of reformers' intentions is the third pre-condition necessary for successfully implementing policy reform. Reform efforts are more likely to be successful if the rationale for the reform agenda is well defined and clearly articulated (Olsen, 1991: 134). It is assumed that the existence of well-defined goals helps to implement the mechanisms of control and coordination necessary for reform (Cohen, March & Olsen, 1972: 2). A clear reform agenda is more likely if the reformers' values basis matches the institution and social context. In other words, if there is a strong normative match between the first two pre-conditions, the reformers are likely to communicate the reform agenda clearly and provide sufficient information about the reform process and outcomes.

On the other hand, if the reformers' belief system contradicts the normative structure of the institution and its environment, the reformer is more likely to vaguely formulate their goals and represent their intentions. Creating ambiguity about the reform is a tactic used to encourage support for the reform agenda from a number of different parties. Indeed, Mosse (2004: 663) suggests that policy "vagueness, ambiguity and lack of conceptual precision is required to conceal ideological differences, to allow compromise and the enrolment of different interests, to build coalitions, to distribute agency and to multiply criteria of success within project systems". Yet, radical policy change or mainstreaming is unlikely to occur if there is a high level of ambiguity surrounding the reformers' intentions because institution members and the general population are likely to judge the proposed reforms with a high level of scepticism. Limited "buy-in" to the reform agenda means that there will be inadequate support for implementation and progress will be slow, if not, non-existent.

**Pre-condition 4: Institutional capacity to organise reform**

An institution's capacity to organise the reform process is the fourth factor to influence the success of implementation according to Olsen (1991: 135-136). This pre-condition has two elements. Firstly, the capacity to achieve comprehensive reform depends upon the institutions' internal capacity to manage the implementation process and to cope with resistance. Access to political, financial, managerial and technical resources will all determine

the capacity of an institution to organise the reform and overcome resistance from competing line-ministries or institutions. Capacity to organise reform will increase if the institution also has decision makers who are equipped to assess resource availability and consider how resources might be expanded or mobilised.

The second element of this pre-condition relates to the capacity of the institution where the reform is being implemented, rather than the institution that is seeking to administer the reform. For example, how does the institutional capacity of the World Bank compare to the Government of Kiribati? The World Bank is more likely to achieve successful reform outcomes in Kiribati if the government does not have enough institutional capacity to push back against the Bank's agenda and coordinate an alternative policy response. If the authority and power of the institution is considerably weaker than normal they may not have the capacity to oppose reform implementation (Olsen, 1991: 136).

One institution will be able to achieve radical change if it has organised the reform process well *and* the other institution has poor capacity, institution members are not well indoctrinated in the "logic of appropriateness" or there is political tension about the institution's normative values. The concept of institutional capacity is used to understand the internal strength of an institution and its capacity to withstand external pressures for change.

### **Epistemic communities**

Haas (1992: 3) defines epistemic communities as "a network of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area". This means that members of an epistemic community share a common interpretation of the problem and the broad policy and political requirements necessary to coordinate a response (Gough & Shackley, 2001: 331).

Epistemic communities are characterised by four features. Firstly, a shared set of normative and principled beliefs which provide a value-based rationale for the social action of community members. Secondly, shared causal beliefs which are derived from their analysis of practices leading or contributing to a central set of problems in their domain and which then serve as the basis for elucidating the multiple linkages between possible policy action and desired outcomes. Thirdly, shared notions of validity or internally defined criteria for weighting and validating knowledge in the domain of their expertise. Fourthly, a common policy enterprise or set of common practices associated with a set of problems to which their

professional competence is directed, presumably out of the conviction that human welfare will be enhanced as a consequence (Haas, 1992: 3). These characteristics distinguish epistemic communities from other types of policy networks and groups active in policy-making.

The term epistemic community refers to a large network of policy actors who share a common approach to a particular policy problem and are recognised as experts in this field. The term is typically used to denote a large international network. The main institutions responsible for CCAM implementation in Kiribati are members of various epistemic communities on an international scale. The boundaries of these epistemic communities go beyond the specific partnerships in Kiribati. The purpose of this dissertation is to investigate how and why these institutions formed two separate and opposed coalitions on a national level to push their respective CCAM agendas in Kiribati. I refer to these coalitions as “epistemic” coalitions to denote the fact that they were consolidated by shared underlying values and normative principles based on membership of distinct epistemic communities.

### **Applying a normative neo-institutionalism and epistemic communities framework to understanding CCAM**

In this section I explain why drawing upon both normative neo-institutionalism and epistemic communities is the best approach for understanding CCAM. Normative neo-institutionalism provides a powerful framework for understanding the role of politics in reform processes while the notion of epistemic communities helps us to understand the nature of the values and actors that characterise this politics. After sketching the similarities and differences between these approaches I discuss in the following section how, together, they form the most appropriate theoretical framework for answering my research question.

Normative neo-institutionalism and epistemic communities are different in a number of respects. Normative neo-institutionalism primarily focuses upon the role of institutions to understand policy-making. It is believed that political institutions are relatively autonomous and mediate the pressure of international structures and domestic forces upon decision-makers (Haas, 1992: 33). Policy decisions are informed by historically inherited preferences and the institution’s internal culture. In contrast, those adopting the epistemic community approach use the collective networks between institutions as the primary unit of analysis. This model examines how policy actors congregate around policy problems and shared normative values to formulate policy alternatives beyond formal bureaucratic channels (Haas, 1992: 31). The

approach highlights how epistemic communities create new ideas that influence decision-makers and push policy options in a new direction. Despite these differences, a number of similarities mean that they can be applied together.

Both frameworks emphasise the power of normative structures, values and taken-for-granted assumptions during policy-making. Just like normative neo-institutionalism, the epistemic communities approach suggests that members within each network make decisions according to the communities' collective beliefs and shared values. March and Olsen (1998) use the term "logic of appropriateness" to describe how institutional norms and values are internalised by individuals. It is proposed that individuals congregate and identify themselves with a group that shares similar beliefs because this increases the power and leverage of the epistemic community to influence decision making (Haas, 1992: 19). In addition, both approaches place value upon the internal structure of institutions.

Normative neo-institutionalism suggests that institutional structure is one of the most important factors when trying to understand institutional reform because reform implementation will be challenging if it does not match the reformers' intentions or the social context. The epistemic community approach asserts that institutional structure is important because the location of stakeholders dictates the form of the network. The influence of epistemic communities is determined by the "ability of the groups transmitting knowledge to gain and exercise bureaucratic power" (Haas, 1992: 30). Thus, these two approaches share three similarities: a) emphasising collective rather than individual decision making; b) highlighting the influence of normative structures during the decision making process; and c) focusing upon the internal structure of institutions. I will be using both models in partnership to understand CCAM outcomes in Kiribati.

The notion of epistemic communities combined with normative neo-institutionalism is useful for understanding the collaboration and partnerships that develop between separate institutions. The epistemic communities approach enables us to identify key stakeholders or policymakers and map the networks they form with like-minded counterparts in different institutions. Shared values and norms bring these seemingly disparate policymakers from separate institutions together. The approach enables us to see and understand how epistemic communities rally around a shared policy problem and common reform agenda. Key stakeholders within an epistemic community pool their resources to increase the leverage of the epistemic community during policy-making and push back against competing positions.

Normative neo-institutionalism provides a framework for identifying the values, norms and standard operating procedure of institutions and key stakeholders within them. The approach suggests that institutions are the best way to understand “the rules that define legitimate participants and agendas, [and] prescribe the rules of the game” (Olsen, 1991: 131). Further to this, the approach provides a method for examining how the values of an institution interact with the reform agenda, society and key stakeholders within the institution. We can explain why one reform agenda has more success compared with another by applying Olsen’s (1991) four pre-conditions for successful reform. Thus, the approach enables us to understand two key issues. Firstly, the shared values that bind epistemic communities and secondly, the differential performance of their reform progress.

This approach therefore entails an understanding of CCAM implementation that differs markedly from that offered by the conventional step-by-step CCAM guides reviewed above. Rather than a top-down, state led process driven by technical rationality and the construction of consensus, it suggests that CCAM implementation is an inherently political process characterised by conflict between different epistemic coalitions whose orientations reflect fundamentally different underlying values. It further suggests that CCAM implementation will not only be achieved when Olsen’s four pre-conditions for reform are met.

### **Understanding CCAM outcomes in Kiribati**

Accordingly, I argue in the rest of the dissertation that CCAM policy-making in Kiribati was relatively unsuccessful because different epistemic communities disagreed about climate change adaptation priorities and processes of mainstreaming. Both epistemic communities consequently worked to pursue their own goals and objectives while hampering the efforts of the other. This competition or political conflict is not recognised in the CCAM models discussed in Chapter Two. The model I have designed for CCAM aims to overcome this weakness and suggests that the politics of decision-making must be central during policy-making.

### **Conclusion**

In this chapter, I have provided an overview and critique of four common step-by-step guides for CCAM implementation and outlined an alternative framework for understanding CCAM that brings politics into the centre of the analysis. In the following chapters, I use this framework to argue that CCAM policy-making in Kiribati was largely unsuccessful because

competing epistemic communities disagreed about climate change adaptation priorities and the process of mainstreaming. Each community consequently worked to pursue their own goals and objectives while hampering the efforts of the other and consequently CCAM implementation was unsuccessful. Before I present this analysis, however, it is necessary to first set the scene by: a) providing an overview of Kiribati, its history, political system and society; b) examining the vulnerabilities that the country faces which are associated with climate change, particularly of the environmental and socio-economic nature; and c) outlining the broad nature of the environmental policy context- international, regional and national- within which the country has addressed the issue of CCAM. These matters are the subject of following chapter.



## **Chapter Three - Kiribati: Background and Context**

This chapter sets the scene for subsequent detailed analysis of the politics of CCAM in Kiribati. An overview of Kiribati is provided in the first section. This section includes a historical account of major events, key features of traditional society and some key facts about life today. The socio-economic vulnerabilities facing Kiribati, particularly those associated with climate change, are outlined in the second section and include rapid population growth and urbanisation on South Tarawa, high levels of unemployment, low economic growth and high levels of intergenerational poverty. The environmental vulnerabilities associated with climate change, especially in relation to land, water and food security, are also described in this section. The third section examines the policy context in which efforts to promote CCAM occurred, focusing in particular on the government's response to climate change at international, regional and national scales.

### **An overview of Kiribati**

The Republic of Kiribati is made up of thirty-two coral atolls and reef islands and stretches across 3.5 million km<sup>2</sup> at the intersection of the Equator and the International Dateline in Micronesia, in the South Pacific Ocean. The islands that make up Kiribati are divided into the Gilbert, Line and Phoenix Groups.

The Gilberts can be further divided into three subgroups on the basis of rainfall. The Central Gilberts Group stretches from Marakei to Aranuk, the Southern Gilberts Group includes the islands from Nonouti to Arorae and the Northern Gilberts Group includes Makin and Butaritari. (Thomas, 2009: 569). Tarawa is located in the Central Gilberts Group and can be further divided into two districts. The South Tarawa Urban District (STUD) is the capital, seat of national parliament, administrative centre and most densely populated area. Traditional agricultural practices and subsistence diets, dwellings built from traditional materials and cultural customs are more common in the North Tarawa District and on the outer islands<sup>18</sup>.

The Phoenix Group is a cluster of eight largely uninhabited atolls and reef islands approximately 1400 km east of the Gilberts and the Line Islands are located almost 3,330 km from Tarawa atoll (Thomas, 2009: 569).

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<sup>18</sup> This view was commonly shared during my fieldwork, but in particular, Tebufonga Ereata, Director of Lands, Lands Management Division within MELAD shared this point during an interview on 15 February 2011, Lands Management division office, Bairiki.



### **Historical background**

Kiribati was first discovered by Thomas Gilbert, a British sea captain, in 1788 (Van Trease, 1993: 3). Whaling ships, traders and missionaries visited the islands regularly during the 19<sup>th</sup> century but European settlement was not common (Van Trease, 1993: 3). Kiribati came under British rule when Captain Davis of the HMS *Royalist*, part of the Royal Navy's Australian squadron, proclaimed (as directed) a protectorate over the Gilbert Group in 1892 (Van Trease, 1993: 4). The Gilbert and Ellice Islands became a British crown colony in 1916. The colony later expanded to include the Banaba, Tabuaeran, Teraina and Kiritimati Islands in 1919 and the Phoenix Islands in 1937 (Van Trease, 1993: 5). During this period of colonial rule, phosphate was mined from Banaba and the Reserve Equalisation Fund was established for the export royalties paid. Self-government was granted in 1971 and the Ellice Islands broke away to form the independent state of Tuvalu in 1978. The Gilberts, Line and Phoenix Islands formed the independent Republic of Kiribati on 12 July 1979.

### **Traditional society**

Family households (*utu*) were traditionally composed of one heterosexual couple and between four and six children. These family units would typically live amongst their wider kinship group, known as the *kainga* (Newhouse, 1979: 18). *Kainga* refers to related family members who reside in separate houses on shared clan land. The term encompasses both the households and the land that they occupy. The land of the *kainga* would usually stretch between the ocean and lagoon and include the coastal reefs (Newhouse, 1979: 18). Each *kainga* was headed by the eldest male descendent referred to as the *unimane* (Lawrence, 1992: 270). The *unimane* acted as governing council of the *maneaba* and traditionally held considerable power in community matters. The cultural ethos of egalitarianism remains strong amongst the *kainga* and society was described as, "paternalistic, very conservative, collectivist and consensual" (Asian Development Bank, 2009: 10).

Each *kainga* belonged to a larger social group known as the *maneaba*. The *maneaba* was both the district comprised of several *kainga* groups and a physical structure that was used for community gatherings (Wilson, 1994: 22). Decisions regarding the broader community were traditionally made on a consensus basis in the *maneaba*. In the Northern Gilberts, the *maneaba* was located at a central point within the district and used to resolve disputes between *kainga* groups, make political decisions and laws, participate in ceremonies and accommodate visitors (Kuruppu, 2009: 59). However, each *kainga* was assigned a *boti* in the district *maneaba* in the Southern Gilberts. The *boti* was a seating position within the *maneaba*

structure that was assigned according to genealogy (Maude, 1989). While the *kainga* and *maneaba* systems continue to inform the parliamentary system to some extent, a myriad of factors, such as the increasing presence of the church, urbanisation, in-migration from the outer islands, the growing importance of the cash economy and role of international donors, are threatening traditional power structures and decision-making practices<sup>19</sup>.

### **Contemporary society**

The Republic is home to 103,058 people according to the most recent census in 2010 (Government of Kiribati, 2012: 31). Ninety-one per cent of the population live in the Gilbert Group and 48 per cent live in the STUD (Duvat, Magnana & Pouvat, 2013: 424). The STUD occupies 2.2 per cent of the total land area of Kiribati but experienced a population growth rate of 20 per cent between 2005 and 2010 (Duvat, 2013: 376). This demographic boom is largely a result of in-migration from the outer islands and the relatively young population seeking more opportunities. The Asian Development Bank (ADB) estimated that more than 40 per cent of the population was under the age of 15 in 2009 (Asian Development Bank, 2009: 3). South Tarawa offers these young people better economic opportunities and access to health and education services compared to the outer islands.

### **Formal political institutions and processes**

Kiribati has a mixed presidential-parliamentary system in which the president is elected for a four year term. The cabinet is chosen by the president from among sitting members of the ruling party. The president's party has numerical strength but party unity is weakened by the cabinet ministers' primary allegiance to their electorates (Asian Development Bank, 2010: 1). Cabinet ministers are expected to use their considerable discretionary powers to provide support for their constituencies by creating jobs, appointing constituents to public enterprise boards and looking after the people's "every needs" (Asian Development Bank, 2009: 13).

The Constitution of Kiribati is the supreme law and establishes a modern governing order based on the traditional *maneaba* system. Acts of parliament are enacted with the assent of the president and subsidiary legislation is made within the ambit of these Acts (Hay & Onorio, 2006: 84). The *1984 Local Government Act* provides the main governing framework and establishes Local Government Island Councils (Hay & Onorio, 2006: 78). While key

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<sup>19</sup> This view was commonly shared during my fieldwork, but in particular, Tebufonga Ereata, Director of Lands, Lands Management Division within MELAD shared this opinion during an interview on 15 February 2011, Lands Management division office, Bairiki.

decisions and budgetary control are exercised by the central government on South Tarawa, there are 20 Island Councils and three urban councils on South Tarawa. Small administrative sub-centres are run by District Officers on Abemama, Beru, Butaritari, Christmas and Tabiteuea. The Clerks to Island Councils are employed by the national government to service the Island Councils. Their functions include maintaining local order, supporting the local-level operations of government agencies and improving awareness of state policies amongst residents. Island Councils have the power to delay central government policy implementation and discretionary powers, such as bylaws to issue licenses for business development and transportation costs (Asian Development Bank, 2010: 1). A high degree of political consensus is required if reform measures are to be successfully implemented in this environment (World Bank, 2011a: 1). This governing order was designed to increase community participation in the national governing process and formalise the legal power of the traditional governing system (Hay & Onorio, 2006: 78).

Political representation in parliament is not proportional. This means that despite the population on the outer islands being relatively insignificant compared to South Tarawa, each populated island has a representative in parliament. Representation in the legislature is heavily weighted towards the outer islands as a result. While the six members for South Tarawa represent approximately 45,000 people, 35 members represent 50,000 people living on the outer islands (Asian Development Bank, 2010: 1). Due to this, political decisions, especially regarding the budget, can favour the outer islands rather than South Tarawa.

The Office of the President (OB Office) is responsible for providing the administration of executive government services and managing government policy. It is the lead agency in all policy matters. The OB Office is charged with formulating the *National Development Strategy* and *Kiribati Development Plan* in partnership with MFED. These strategy documents are accompanied by the annual budget and multi-year budget framework. The annual budget is approved by parliament towards the end of each financial year and the multi-year budget framework provides a rolling seven year plan to illustrate recent fiscal performance and the fiscal implications of the government's *National Development Strategy* and *Kiribati Development Plan* (Government of Kiribati, 2005a: 3). Ministerial Operational Plans are the key planning tool for all government ministries and public enterprises because they are combined with the government's budget and are subject to biannual progress reporting (World Bank, 2006a: 29). A Ministerial Operational Plan is "the only comprehensive statement of the ministry's responsibilities and access to resources. It

describes the activity programmes and target outputs of the ministry in the same form as is used in the budget and is to be used by the Ministry and MFED for quarterly reporting on performance” (Government of Kiribati, 2003: 2).

### **Economy and poverty**

Kiribati is classified as a Least Developed Country by the United Nations (UN). This means that Kiribati is a low-income country suffering from the most severe structural impediments to sustainable development (Department of Economic and Social Affairs, 2014). The country’s economy relies heavily on the sale of fishing licenses, remittances, earning from the Revenue Equalisation Reserve Fund<sup>20</sup> and international aid (Asian Development Bank, 2010: i). Net Official Development Assistance in 2014 was US\$79.1 million or 35.1 per cent of Gross National Income (OECD, 2014). The top three bilateral donors of gross official development assistance in 2013-2014 were Australia (US\$27.04 million), New Zealand (US\$11.33 million) and Japan (US\$10.80 million) (OECD, 2014). The Gross National Income per capita was estimated to be US\$2,620 in 2013 (Asian Development Bank, 2014: 173). Poverty remains an ongoing problem in Kiribati, despite support from bilateral and multilateral donors.

One household in five or almost one person in four lives below the national minimum cost of living or basic needs poverty line in Kiribati (Asian Development Bank, 2010: 4). The Australian Aid program’s 2013 poverty assessment reports increasing incidence of hardship and declining ability for I-Kiribati to meet family needs (Department of Foreign Affairs and Trade, 2014). Four social trends are thought to be hampering development progress: 1) an increasing need for cash; 2) limited formal employment opportunities; 3) decreasing opportunities to practice traditional agricultural methods; and 4) ongoing exclusion of vulnerable groups (Department of Foreign Affairs and Trade, 2014: 5-6). Kiribati is ranked 133 out of 187 on the 2014 Human Development Index (Asian Development Bank, 2014: 154). Progress towards achieving the Millennium Development Goals (MDGs) is poor and it was considered highly unlikely that Kiribati would achieve the target of halving poverty by 2015 (Asian Development Bank, 2010: i). The Pacific Islands Forum Secretariat’s 2012 *Pacific Regional MDGs Tracking Report* only reported “on track” performance for MDG 3.1

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<sup>20</sup> The Revenue Equalization Reserve Fund is a sovereign wealth fund established in 1956 during the United Kingdom’s colonial administration and was capitalised using phosphate mining proceeds before phosphate deposits were exhausted in 1979. It is one of the main sources of fiscal income and budget financing for Kiribati (International Monetary Fund, 2014: 3).

– eliminating gender disparity in primary and secondary school education, preferably by 2005, and in all levels of education by 2015<sup>21</sup> (Pacific Islands Forum Secretariat, 2012: 61).

### **Urbanisation and environmental changes**

Rapid urbanisation has resulted from this steady population growth in the STUD. Severe land shortages have forced migrants to settle close to the shoreline or on unstable areas of the coastline, such as sand spits, beach ridges and water reserves (Duvat, 2013: 376). Settlers usually undertake reclamation works to raise the height of the land and enable settlement. Major reclamation projects on Bonriki-Taborio and construction projects on Betio and Bairiki increased the total atoll land area by approximately 360 hectares between 1968 and 1998 (Biribo & Woodroffe, 2013: 361). Seawalls are the most common form of coastal protection and represented more than 77 per cent of coastal stabilisation structures in Duvat's (2013: 377) study of coastal structures and their characteristics on Tarawa atoll<sup>22</sup>. These human interventions will become increasingly unsustainable under almost any climate change scenario in the future (Biribo & Woodroffe, 2013: 361).

While there is ongoing debate about the physical responses of reef islands and atolls to rising sea levels, researchers agree that human factors are increasing the vulnerability of Kiribati to coastal hazards (Biribo & Woodroffe 2013; Ford 2012; Rankey 2011; Webb & Kench 2010). Rapid population growth and unmanaged urbanisation are exacerbating the challenges presented by climate change and in particular, threatening access to potable water, solid waste management systems and sanitation facilities (Storey & Hunter, 2010). Human interventions on the coast further complicate the implementation of urban management reforms and efforts to address land-use patterns, land-tenure conflicts and traditional hygiene practices (Jones & Lea, 2007). Lack of political will and commitment combined with human, financial and technical resource deficits further reduce the adaptive capacity and resilience of the I-Kiribati and exacerbate development challenges.

### **Environmental and socio-economic vulnerabilities associated with climate change**

Kiribati is recognised as one of the countries that is most vulnerable to the consequences of anthropogenic climate change and predicted sea-level rise (Nurse *et al*, 2014). Environmental

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<sup>21</sup> “Off track” performance is reported for MDGs 1, 2, 6 and 7. “Mixed results” are recorded for MDG 3, 4, and 5 (Pacific Islands Forum Secretariat, 2012: 61).

<sup>22</sup> The characteristics of coastal structures typically include location, type, condition and management status (Duvat, 2013: 123). Duvat (2013) proposes that the management status of coastal structures and the availability of building materials and funding have the greatest impact upon the characteristics and physical condition of coastal structures.

hazards associated with climate change include land degradation, declining freshwater stocks and worsening food security (Pacific Island Forum Secretariat, 2012). These environmental vulnerabilities are briefly discussed below.

### **Land**

Tarawa is an atoll and is consequently described as a chain of small islets set around a lagoon (Catala, 1957: 1). The lagoon is up to approximately 25 metres deep and includes a number of slightly submerged reefs (Catala, 1957: 2). The opposite side of the atoll is protected by an uplifted fringing reef in the wave zone on the ocean side (Thaman, 1992: 130). The reef is normally covered by a ridge made from coral rubble that ranges from between 350 to 500 metres wide (Rapaport, 1990: 3 and Catala, 1957: 2). The coral flat is the result of sediment produced during major storms on the outer reefs (Rapaport, 1990: 3 and Thaman, 1992: 130). The main belt of discontinuous land rarely exceeds three metres above sea level and has an average width of just 450 metres (World Bank, 2006a: 22).

Sea-level rise and increasing incidences of extreme weather events, such as king tides, consequently present a serious threat to the local population. The World Bank suggests that 18 to 80 per cent of the land in Buariki, North Tarawa and up to 54 per cent of land in Bikenibeu, South Tarawa could become inundated by 2050 if adaptation interventions are not effectively implemented (World Bank, 2006a: 23). The effects of climate change are also likely to decrease the available land for dwellings and food cultivation. This means that more people are likely to be living on less land. Reduced land resources means fewer options for the disposal of hard rubbish, oils, pesticides and heavy metals (Cocklin & Keen, 2000: 398). Decreasing freshwater resources and food security are related concerns.

### **Water**

Tarawa's small size, low elevation and the porosity of the coral bedrock mean that there are no surface freshwater streams. Residents are dependent upon rainfall soaking through the porous surface soil and replenishing the lens of slightly brackish freshwater hydrostatically floating on the higher density saltwater beneath (Thomas, 2002: 2 and Thamn, 1992: 132). The salinity and depth of freshwater lenses are determined by the elevation, geology, texture, shape and width of the islets (Thaman, 1992: 132). Salinity generally decreases from both lagoon and ocean beaches towards the centre of the islets (Thomas, 2003: 2). The World Bank (2006: 23) predicts that the thickness of the groundwater lens (primary water supply) will



decline by 19 to 38 per cent as a result of sea level rise, changing rainfall patterns and higher temperatures altering evaporation patterns by 2050 (World Bank, 2006a: 230).

Tarawa's equatorial oceanic climate is characterised by two distinct seasons (Catala, 1957: 1). The *te Aumeang* (wet) season lasts from September to March and is typically characterised by strong westerly winds, heavy rains and irregular ocean currents (Kuruppu & Liverman, 2011: 4). Whereas *te Au Maiaki* (dry) season from April to August traditionally features steady easterly winds, lower rainfall and regular currents (Kuruppu and Liverman, 2011: 4). Weather patterns are chiefly characterised by an average temperature of 28 degrees Celsius (Catala, 1957: 1) and extreme rainfall variability (Thomas, 2002: 164). Average rainfall for Tarawa is close to 2000mm annually and prolonged drought conditions are common (Thomas, 2009: 169 and Thomas, 2002: 164) Considering that Tarawa is dependent upon rainfall to replenish the freshwater lens and fill rainwater tanks, climate variability poses a significant threat to the population currently residing on South Tarawa.

The risk of human and animal wastes contaminating drinking water increases as the population continues to grow on South Tarawa. Ineffective sanitation and hygiene facilities and practices mean that the likelihood of waterborne diseases is high in Kiribati (Cocklin & Keen, 2000: 298). Higher temperatures and wider areas of flooded land are predicted to increase the prevalence of vector borne disease such as dengue fever (International Monetary Fund, 2009: 12). The effects of climate change will increase the frequency of health problems resulting from inadequate water supply and sanitation facilities (Storey & Hunter, 2010: 171).

### **Food security**

Agricultural production in Kiribati is limited by poor soil quality. Soils are typically shallow, highly alkaline, calcareous and coarsely textured (Thomas, 2002: 164). They have poor water-holding capacity and little organic matter. There are few available macro and micronutrients, except for calcium, sodium and magnesium (Thomas, 2002: 164). Fertility is dependent on organic matter for the concentration and recycling of plant nutrients, lowering soil pH and for soil water retention (Thaman, 1992: 132). Poor soil quality has contributed to the limited number of indigenous plant species in Kiribati.

The total sum of vascular plants ever reported in Kiribati is fewer than 300 species, including weeds and exotics (Thomas, 2003: 22 and Thomas, 2002: 166). This small number of plant species is typically explained by the restricted landmass, sheer distance from other continents

and relatively young geological age of the atolls (Thomas, 2002: 164). Staple food crops are limited to breadfruit, pandanus, coconut and babi (Thomas, 2009: 577). However, instances of home-gardening have decreased on South Tarawa because they are “undervalued and destroyed to make way for future development” (East & Dawes, 2009: 341). A majority of urban residents rely on imports such as rice and flour to guarantee food security today (East & Dawes, 2009: 345).

The anticipated impacts of climate change will exacerbate the environmental vulnerabilities already facing Kiribati. Sea-level rise and the increasing frequency of extreme weather events will further decrease the land available for dwellings, agricultural production and protected saltwater lenses. As a result, public health and food security are expected to worsen in urban areas on South Tarawa. Vulnerability in Kiribati is a result of the interplay between these environmental and socio-economic factors. A number of institutions and processes have been developed to assist Kiribati address these vulnerabilities and improve development outcomes.

### **Climate change policy context**

Efforts to promote CCAM in Kiribati, in particular those associated with the NAPA and KAP, played out against a background of growing concern within Kiribati over the threats posed by climate change, especially sea-level rise. By the late 1980s/early 1990s, the Government of Kiribati had already begun to call for international assistance in relation to the impacts of sea-level rise and extreme weather events. These efforts also played out within an evolving policy context. The 1990s and early 2000s witnessed the introduction of a range of policy initiatives to address the effects of climate change at the international and regional levels that the Government of Kiribati endorsed. This period also witnessed important domestic policy initiatives related to climate change. Some initiatives, particularly at the South Pacific regional level, envisaged moves towards CCAM. However, they did not yield much change in Kiribati prior to the introduction of the NAPA and the KAP. Below, I review the Government of Kiribati’s approach to climate change policy at the international, regional and national levels and the implications of these for CCAM.

### **International climate change policy initiatives**

The Government of Kiribati has considered membership and participation in international fora, and especially UN processes and negotiations, important since gaining Independence in 1979 as access to international finance is considered integral to development and prosperity in

Kiribati<sup>23</sup>. The government became a party to the UNFCCC in 1994 and it entered into force for Kiribati in May 1995. The Kyoto Protocol was ratified on 7 September 2000 and it entered into force on 16 February 2005. As a party to the UNFCCC, Kiribati adopted the Paris Agreement<sup>24</sup> at the twenty-first session of the COP in Paris, December 2015; however, it has yet to be signed.

Kiribati is recognised by the UN as a Least Developed Country<sup>25</sup> and as such, receives support from the LDC Expert Group<sup>26</sup> and the Least Developed Country Fund<sup>27</sup> in order to develop and implement their NAPA. Described in-depth in Chapter Four, the NAPA process is designed to give LDCs an opportunity to identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change. Kiribati submitted their NAPA to the UNFCCC in January 2007 and the top three adaptation priorities are: 1) water resource adaptation and simple well improvements; 2) coastal zone management for adaptation; and 3) strengthening climate change information and monitoring (Government of Kiribati, 2007b).

Developing country parties to the Convention are required to submit National Communications within the first three years of entering the Convention and every four years after that. National Communications provide information on greenhouse gas inventories, measures to mitigate and to facilitate adequate adaptation to climate change and information relevant to achieving the objective of the Convention (UNFCCC, 2011). Kiribati submitted their Initial National Communication on 30 October 1999 and Second National Communication on 27 June 2013<sup>28</sup>. More details about these National Communications are provided below.

The government has endorsed a number of international and regional Multilateral Environment Agreements including, the Convention on Biological Diversity on 8 August

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<sup>23</sup> This view was shared by many, but in particular, Andy from the Office of the President made this point during an interview on 22 March 2011, in Bairiki.

<sup>24</sup> The *Paris Agreement* (OECD, 2005) requires all Parties to put forward their best efforts through “nationally determined contributions” and to strengthen these efforts in the years ahead. The *Agreement* aims to “combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future” (UNFCCC, 2016b).

<sup>25</sup> Kiribati’s status of a Least Developed Country is further explained in the “Economy and Poverty” section earlier in this Chapter.

<sup>26</sup> The LDC Expert Group was established by the COP in 2001 to provide technical support and advice to LDCs on the NAPAs and broader adaptation work programmes.

<sup>27</sup> The Least Developed Country Fund was established to support a work programme to assist LDC Parties prepare and implement their NAPAs. It is operated by the Global Environment Facility.

<sup>28</sup> Kiribati has not submitted a Biennial Update. These reports provide an update of the information presented in the National Communications. Least Developed Country Parties and Small Island Developing States submit these reports at their own discretion.

1994; the Cartagena Protocol on Biosafety; the UN Convention to Combat Desertification; and the Stockholm Convention on Persistent Organic Pollutants on 8 September 1998 (World Bank, 2006a: 1 and Global Environment Facility, 2004: 7).

### **Regional environmental policy initiatives**

The Government of Kiribati is a member of a number of regional policy institutions, such as the Pacific Islands Forum, the Secretariat of the Pacific, the Alliance of Small Island States and Small Island Developing States Network. These regional institutions all recognise climate change as a serious threat to the environmental, economic and social health of Pacific Island communities (see, for example, Pacific Islands Forum Secretariat, 2013: 10). Climate change is framed as a threat to achieving sustainable development in the region (Secretariat of the Pacific Regional Environment Programme, 2005: 3). Climate change adaptation strategies and CCAM in particular, are recommended as priority responses.

The *Climate Change Engagement Strategy* (Secretariat of the Pacific, 2016) provides an overarching framework for the Secretariat of the Pacific Community's climate change work and aims to assist Pacific Island countries adopt a sustainable "whole of country, whole of region" approach to addressing climate change challenges. Similarly, the *Pacific Islands Framework for Action on Climate Change 2006 – 2015* (Secretariat of the Pacific Regional Environment Programme 2005), was developed to assist Pacific Island leaders implement climate change adaptation actions at the national, regional and international levels (Secretariat of the Pacific Regional Environment Programme, 2005: 3). The framework states, "climate change considerations [should be] mainstreamed into national policies, planning processes, plans and decision-making at all levels and across all sectors" by 2015 (Secretariat of the Pacific Regional Environment Programme, 2005: 8). More recently, leaders endorsed the *Majuro Declaration for Climate Leadership* (2013) during the Forty-Forth Pacific Islands Forum (September 3-5, 2013). The Declaration highlights, again, that Pacific Island Leaders have a strong political commitment to implementing climate change strategies, declaring:

We commit to accelerate and intensify our efforts to prepare for and adapt to the intensifying impacts of climate change, and to further develop and implement policies, strategies and legislative frameworks, with support where necessary, to climate-proof our essential physical infrastructure, adapt our key economic sectors and ensure climate-resilient sustainable development for present and future generations (Pacific Island Forum Secretariat, 2013: 11).

These examples illustrate the importance of climate change adaptation initiatives for governments in the South Pacific. The Government of Kiribati is an active member of these regional bodies and signatory to the declarations discussed. The government also endorses the regional push to attract international assistance for climate change adaptation initiatives. During the Preparatory Committee for the UN Conference on SIDS Accelerated Modalities of Action (S.A.M.O.A. in February 2014, New York), the Kiribati representative stated, “Adaptation is important as it provides us with some short term solutions to help cope with the changes brought about by climate change” (Government of Kiribati, 2014: 3).

The Government of Kiribati, like all Pacific Island Countries and Territories, is entitled to support from the South Pacific Environment Programme (SPREP) and the Secretariat of Pacific Community Applied Geoscience and Technology Division (SOPAC). These regional capacity building institutions aim to apply science and technology to realise new opportunities for improving the livelihoods of Pacific communities. The GeoScience for Development Programme is one example of a SOPAC program that provides technical services for improved development, management and monitoring of natural resources and coastal systems (Secretariat of the Pacific Community Applied Geoscience and Technology Division, 2016). It is hoped that better access to scientific data will assist Secretariat of the Pacific Community member countries participate in regional policy forums and implement the recommended adaptation strategies (Secretariat of the Pacific Community Applied Geoscience and Technology Division, 2016).

CCAM began to infiltrate approaches to climate change policy in the South Pacific by the early 2000s. The objectives of the *Pacific Islands Framework for Action on Climate Change 2006–2015* (Secretariat of the Pacific Regional Environment Programme 2005) and the ongoing commitment to climate change adaptation expressed during annual Pacific Island Forums (see every *Forum Communique* since 1991) demonstrate a commitment to incorporating climate change adaptation and disaster risk reduction strategies into national development planning and budget cycles. However, the commitment to CCAM in regional policy frameworks was not accompanied by action steps or implementation mechanisms. The implicit assumption is that participating governments will make the necessary structural and procedural changes to coordinate a whole of government approach to achieve mainstreaming. The Government of Kiribati’s efforts to implement a national environmental policy agenda are indicative of the challenges associated with CCAM implementation in a SIDS context.

### **National environmental policy initiatives**

The Government of Kiribati's *National Environmental Management Strategy* (1994) states, "the Government and the people of Kiribati are acutely aware of the threat posed by predicted climate change and predicted sea level rise" (Government of Kiribati, 1994: 25). Section 3.1 focuses on global warming, sea-level rise, assessing vulnerability and coastal zone protection (Government of Kiribati, 1994: 26). The government's early priorities were (Government of Kiribati, 1994: 26):

1. To review work already done on Kiribati's vulnerability to projected sea level rise, and advance it to a level where it is possible for economic and resource development planners to generate coastal zone management strategies; and
2. To institute early protection measures against coastal erosion through coastal vegetation establishment and rehabilitation.

It is clear from these priorities that the government wanted to build upon the foundation of scientific studies already undertaken in Kiribati to develop both soft and hard climate change adaptation options. The Ministry of Environment and Natural Resources Development (precursor to MELAD) was given the responsibility of addressing these aims over a three year period, however there is little evidence of these plans being carried out.

The *Kiribati State of the Environment Report* (Wilson, 1994) and *Environment Legislation Review* (Pulea & Farrier, 1994) were released in 1994. Both documents identify climate change as a significant threat to Kiribati and highlight the necessity of Kiribati contributing to international climate change negotiations in order to access international funding opportunities. Despite the government's early involvement in climate change adaptation policy discussions, implementation of CCAM was limited at this time.

The US Country Studies Program assisted the government to establish the Climate Change Team in 1995 (World Bank, 2006a: 1 & 25). With the support of the Pacific Islands Climate Change Assistance Programme, Global Environment Facility funding and UNDP, this team started preparing Kiribati's Initial National Communication<sup>29</sup> to the UNFCCC. The Government of Kiribati submitted an Initial Communication at the 5<sup>th</sup> Conference of the Parties in 1999 (COP5) and states in the preface, "Climate change is occurring [and] the people of Kiribati are observing extensive coastal erosion taking place, not only on the beach but also on the land; displacing some of them [I-Kiribati] from their traditional house plots

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<sup>29</sup> Developing countries, who are party to the UNFCCC, are required to submit their First National Communication within three years of entering the Convention, and every four years thereafter. They provide information on greenhouse gas inventories, measures to mitigate and to facilitate adequate adaptation to climate change, and any other information relevant to achieving the objective of the Convention (UNFCCC, 2016a).

since the early 1900s and felling coconut trees and other varieties of vegetation at the coastal areas” (Government of Kiribati, 1999b: iii). This early submission to the UNFCCC illustrates the government’s belief that climate change is already occurring and requires a coordinated international response.

The *Environment Act* was released in 1999. Described as an Act to “provide for the protection, improvement and conservation of the environment of the Republic of Kiribati and for connected purposes” (Government of Kiribati, 1999a: 1), Part 3 is dedicated to “development control, environmental impact assessment, review and monitoring” (Government of Kiribati, 1999a: 9). The *Environment Act* strove to enable the government to fulfil its obligations under international environment conventions to which it is party (Government of Kiribati, 2007b: 9). The Act does not, however, cover any details on how this is to be achieved and limits the potential for MELAD to introduce measures to meet these obligations (Government of Kiribati, 2007b: 9). There is no explicit mention of climate change and associated impacts in the *Environment Act*.

The *Climate Change Adaptation Policy Statement/Note and Strategy* (Government of Kiribati, 2005b & 2005c) were both released in 2005 and endeavour to increase climate change awareness at the national policy level and facilitate the mainstreaming process. The stated aims of the *Climate Change Adaptation Policy Statement* include (Government of Kiribati, 2005b: 1):

1. Kiribati should be mentally, physically, and financially well prepared to deal with whatever climatic trends and events the future may hold;
2. This should be achieved through a nationally co-ordinated, consultation based adaptation programme carried out by official and private agencies; and
3. The financial costs attributed to the national adaptation programme should be met wherever possible.

The *Strategy* was designed to help ministries achieve mainstreaming by re-orientating their operation planning and implementing actions in eight priority areas; these are (Government of Kiribati, 2005b: 2-3):

1. Integration of climate change adaptation into national planning and institutional capacity;
2. Use of external financial and technical assistance;
3. Population and resettlement;
4. Governance and services;

5. Freshwater resources and supply systems;
6. Coastal structures, land uses and agricultural practices;
7. Marine resources; and
8. Survivability and self-reliance.

## **Conclusion**

This chapter has set the scene for the analysis that follows in subsequent chapters by; a) providing an overview of Kiribati's early history, traditional and contemporary society, formal political institutions and processes, economy and poverty and current demographics; b) examining the socio-economic and environmental drivers of vulnerability in Kiribati; and c) describing the government's approach to climate change at the international, regional and national scales.

The following chapter outlines who the key actors are and their approach to CCAM in Kiribati. The values and priorities of the World Bank, the OB Office, MELAD and UNDP are examined because a common approach allowed two epistemic coalitions to emerge. The World Bank and the OB Office worked together to achieve CCAM via the KAP, whereas MELAD and the UNDP worked together to achieve CCAM via the NAPA. Both epistemic coalitions formed to implement CCAM, but tension between these groups limited their success.



## **Chapter Four - The Competing Epistemic Coalitions**

The Government of Kiribati, the UNDP and the World Bank are the three institutions primarily responsible for CCAM implementation in Kiribati. CCAM implementation was largely unsuccessful because these three institutions disagreed about climate change adaptation priorities and funding allocations. This disagreement reflected the fact that these institutions were permeated by separate and competing epistemic coalitions that had different values, ideas and agendas in relation to CCAM.

On the one hand, MELAD formed a coalition with the UNDP to implement the NAPA, and on the other, the OB Office partnered with the World Bank to implement the KAP. The NAPA and the KAP, like the respective coalitions underpinning them, had very different approaches to climate change adaptation and mainstreaming in particular. The NAPA was driven by a development-based approach and consequently strove to implement a combination of soft and hard adaptation activities to improve adaptive capacity and resilience at the local level. In contrast, the KAP was driven by a technology-based approach and sought to protect state assets and create economic growth opportunities with the implementation of hard adaptation projects. Tensions between these coalitions meant that implementing CCAM in Kiribati was problematic. While the KAP had more success mainstreaming (compared to the NAPA), neither were totally effective.

The first section introduces the UNDP and MELAD and their respective approaches to CCAM in Kiribati. The section is divided into two parts. Firstly, I outline the UNDP's approach to climate change, climate change in the South Pacific and CCAM in Kiribati. Secondly, I introduce MELAD's approach to climate change adaptation and CCAM in particular. Both institutions favour soft adaptation or community-based adaptation activities that aim to increase capacity at the local level and deliver environmentally sustainable outcomes in global, regional and national policy forums. These values are favoured by the Poverty-Environment Initiative and the adaptation activities prioritised for implementation under the NAPA. I demonstrate how these separate institutions (the UNDP and MELAD) formed a coalition and worked together to implement the NAPA.

In the second section I introduce the World Bank and the Office of the President (OB Office). Firstly, I outline the World Bank's approach to climate change, climate change in the South Pacific and CCAM in Kiribati. Secondly, I introduce the OB Office and their approach to

climate change adaptation and CCAM in particular. This coalition favoured hard adaptation initiatives that aimed to protect state assets and facilitate economic development. Access to finance, scientific information and human resources were considered vital for effective mainstreaming. The coalition's common priorities and approach to CCAM were evidenced by their participation in and contribution to various global, regional and national CCAM initiatives discussed below.

## **UNDP and MELAD**

### **United Nations Development Program (UNDP)**

The UNDP is a multilateral development agency that supports the work of the UN and its commitment to “maintain international peace and security and to achieve international cooperation in solving international problems of economic, social, cultural or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion” (UNDP, 2016c). The agency has been responsible for leading the UN's development work for more than 50 years and plays a key role in a number of UN bodies<sup>30</sup> (UNDP, 2016c). These bodies are working to create a paradigm shift towards demand-driven capacity-development amongst all UN agencies; rather than supply-driven technical assistance (UNDP, 2016b).

### ***The UNDP's approach to climate change***

The UNDP's approach to climate change, climate change adaptation and CCAM are framed within the sustainable development agenda and informed by a number of agreements that have resulted from UN conferences<sup>31</sup>. The UNDP (2016b) works with national, regional and local planning bodies to help them respond effectively to climate change and promote low-emission, climate resilient development by focusing on three areas:

Connecting countries to knowledge, experience and resources to help people build a better life, helping countries build more resilient societies, and strengthening the capacity of countries to access, manage and account for climate finance.

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<sup>30</sup> The UNDP manages the Resident Coordinator System as part of the United Nations Development System and is Chair of the United Nations Development Group (UNDP, 2016c).

<sup>31</sup> These include- the Rio Declaration on Environment and Development (1992), UN Global Conference on the Sustainable Development of SIDS or BPOA (1994), Earth Summit+5 (1997), Five Year Review of the Barbados Programme of Action or BPOA+5 (1999), World Summit on Sustainable Development (2002), Mauritius Strategy of Implementation (2005), Five-year review of the Mauritius Strategy of Implementation (2010), United Nations Conference on Sustainable Development (2012), Inaugural session of the High-level Political Forum on Sustainable Development (2013) and the Third International Conference on Small Island Developing States (2014).

Climate change adaptation is identified by the UNDP as a key strategic priority for developing countries because many LDCs are the most vulnerable to the future threats of climate change but have limited capacity to adapt (UNDP, 2011). In 2011, the UNDP's adaptation program leveraged more than US\$800 million to support the development of national, sub-national and community-level capacities to adapt to climate change in 75 countries and a raft of methodologies and resources to support this work<sup>32</sup> (UNDP, 2011: 1).

The UNDP plays an instrumental role helping LDCs prepare their NAPAs for submission to the UNFCCC. NAPAs provide a process for LDCs to identify priority activities that respond to their urgent and immediate needs to adapt to climate change. The adaptation activities and projects identified are those where further delay could increase vulnerability or lead to increased costs at a later stage. The NAPAs are commonly understood as the “primary climate change initiative facilitated by the UN that builds on traditional ecological knowledge and local environmental observations in developing countries” (Lazrus, 2012: 291). The UNDP is the largest implementing agency for the Least Developed Country Fund and has provided support for NAPA interventions in more than 24 LDCs (UNDP, 2011).

Capacity building lies at the heart of the UNDP's approach to climate change adaptation because it is assumed that “robust and responsive institutions, capable public and private sector management and skilled human resources” are necessary for governments to implement effective climate change adaptation policies (UNDP, 2016d). The UNDP provides capacity development support for climate change adaptation initiatives in three key areas: 1) integrated policy and planning; 2) financing and implementing climate-resilient projects and programmes; and 3) knowledge management and methodology support (UNDP, 2016d). The first key area, integrated policy and planning, refers specifically to climate change adaptation mainstreaming (CCAM). The UNDP supports policy dialogue on the risks of climate change to development in an effort to strengthen integrated policies and improve the uptake of CCAM (UNDP, 2016d).

Another integral element of the UNDP's approach to climate change is community-based adaptation. The UNDP considers community-based adaptation important for “helping to foster innovative ways of addressing and solving environmental and sustainable development problems that can have lasting impact” (UNDP, 2012: 4). The UNDP has been the

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<sup>32</sup> UNDP methodologies and resources to support climate change adaptation initiatives include the Adaptation Policy Framework (APF), a Toolkit for Designing Climate Change Adaptation Initiatives, Strategic Environmental Assessments, a series of country adaptation profiles and the Adaptation Learning Mechanism (UNDP, 2011: 1).

implementing agency of Global Environment Facility's Small Grants Programme since 2002. The programme provides financial and technical support directly to community based organisations and non-government organisations for initiatives that conserve and restore the environment while simultaneously enhancing people's livelihoods and wellbeing<sup>33</sup> (UNDP, 2012: 24). Community-based adaptation is considered important for sharing lessons from natural resource management initiatives to promote global learning (UNDP, 2010: 2). For these reasons the UNDP's approach to mainstreaming is considered development-driven and located at the "vulnerability" focused end of the CCAM spectrum.

### ***The UNDP's approach to climate change in the South Pacific***

The United Nations Development Assistance Framework (UNDAF) for the Pacific Sub-Region is a five year strategic framework that outlines the collective response of the UN to development challenges and national priorities in 14 PICTs for the period 2013-2017. Its overarching ambition is to "promote sustainable development and inclusive economic growth to address the social, economic and environmental vulnerabilities affecting society at all levels and to ensure human security in the Pacific, with a focus on the most vulnerable groups" (UNDP, 2016e). The UNDAF is aligned with *The Secretary-General's Five Year Action Agenda*<sup>34</sup> (2012) and informs the UNDP's regional programme for the Asia Pacific.

The UNDP Pacific Centre's<sup>35</sup> approach to climate change in the South Pacific is informed by a large number of UN conferences<sup>36</sup> and declarations that recognise the special disadvantages facing SIDS in the region<sup>37</sup>. A unified policy response that tackles both climate change adaptation and disaster risk reduction is considered especially important (UNDP, 2016a). Five

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<sup>33</sup> For example, UNDP established the Global Partnership for Community-Based Adaptation (GPCBA) in partnership with governments, civil society and philanthropic donors in 2010. GPCBA aims to "directly empower vulnerable communities to build resilience against climate impacts" and functions under the auspices of the UNDP/Global Environment Facility Small Grants Programme (UNDP, 2010: 2). The Community-Based Adaptation program "seeks to encourage systematic change in national adaptation-related policy through evidence based results from a portfolio of community-driven climate change risk management projects" (UNDP, 2010: 2).

<sup>34</sup> *The Secretary General's Five Year Action Agenda* was released on 25 January 2012 and provides a framework of action to support the Secretary General's propierties for his second term.

<sup>35</sup> The UNDP Pacific Centre was established by the Regional Bureau for Asia and the Pacific in 2006. It is based in Suva, Fiji and aims to ensure "effective, timely and responsive support tailored to the needs and priorities of Pacific Island Countries" (UNDP, 2016a).

<sup>36</sup> UN Conference on Environment and Development in Rio de Janeiro, 1992; UN Global Conference on the Sustainable development of Small Island Developing States in 1994, United Nations General Assembly holds a special session to review progress towards the Barbados Programme of Action 1999; World Summit on Sustainable Development in 2002; the Mauritius Strategy 2005; the General Assembly undertakes a 5-year review of the Mauritius Strategy 2010; the General Assembly designates 2014 as the "International Year of Small Island Developing States and the Third International Conference on Small Island Developing States was held in September 2014.

<sup>37</sup> Among these challenges, "physical isolation, small economies of scale, limited governance structures, small populations and markets, limited natural resources (in most cases), uneven infrastructure, the impact and variability of climate change, natural hazard risks, and the vulnerability to economic shocks" are identified as the most pressing (United Nations, 2013: 6).

key programming principles<sup>38</sup> inform the UNDP's approach to results planning, implementation, monitoring and evaluation across all sectors in the region. These five principles were identified during consultations about the UNDAF with the UN Country Teams in the South Pacific and describe "the shared genetic material that drives the development footprint of the UN family" in the region (United Nations, 2013: 5). Initiatives purely focused on economic development do not feature in the UNDP Pacific Centre's approach to activities in the region (UNDP, 2013).

### ***The UNDP's approach to CCAM in Kiribati***

The UNDP's efforts to assist Kiribati cope with the threats posed by climate change have historically centred on enabling the government to participate in UN activities and especially, UNFCCC processes. The UNDP consequently supported the governments' preparations for submitting the NAPA in 2007 and the Second National Communication to the UNFCCC in 2013. The principles of capacity development, community-based adaptation and sustainability are evident throughout these documents because they are priorities shared by the UNDP and MELAD (Government of Kiribati, 2013; Government of Kiribati, 1999b).

In 2007 the UNDP began helping MELAD prepare its Second National Communication to the Conference of the Parties of the UNFCCC. The project was designed to "further enhance national capacities and raise general knowledge and awareness on climate change and its effects" (UNDP, 2007: 1). The UNDP recognised that "there is a need to continue and improve the efforts in training and awareness raising on climate change issues at the community and national level" (UNDP, 2007: 17). Local NGOs, such as the Kiribati Association for Non-Government Organisations (KANGO) and the Kiribati Trust, local communities and the media were invited to participate (UNDP, 2007: 19). The importance of public participation was reiterated by the UNDP Programme Field Officer in Kiribati:

"Community engagement is important because it gives people the chance to understand and accept a project before it starts. If they are engaged through consultations they will get a sense of ownership. Development projects are created to have a positive impact on people's everyday lives. They should help people meet their basic needs"<sup>39</sup>.

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<sup>38</sup> These are: 1) environmental management, climate and disaster risk management; 2) gender equity; 3) poverty reduction and inclusive economic growth; 4) basic services; and 5) governance and human rights (United Nations, 2013: 6).

<sup>39</sup> Momoe Kaam, UNDP Programme Field Officer gave this quote during an interview on 14 March 2011 in the UN Joint Presence Office, Teoraereke.

Community engagement was understood as a mechanism to ensure that sustainable environmental management and development would improve the livelihoods and security of the poor (UNDP, 2007: 5).

Similarly, the NAPA process was designed to ensure a high degree of community engagement and capacity building. Public participation was considered “an important source of information, recognising that grassroots communities are the main stakeholders” (UNFCCC, 2011: 17). The NAPA focused on taking into account existing coping strategies to identify priority activities, rather than relying on a large number of technical reports, climate modelling and long term planning at the state level (UNFCCC, 2011: 17). The UNDP worked closely with MELAD to ensure that the adaptation priorities outlined in the NAPA accurately reflected the urgent and immediate concerns expressed by local communities. A strong working relationship formed between these two entities and was described as follows: “the NAPA preparation process was completed with the help of UNDP and an excellent relationship existed between UNDP and the NAPA team (in Kiribati)” (UNFCCC, 2011: 48).

The UNDP’s approach to CCAM in Kiribati was driven by a preference for soft adaptation activities that enable community participation, capacity building and environmentally sustainable outcomes. These values are evident throughout the UNDP’s approach to climate change, climate change adaptation and CCAM at international, regional and national scales. In Chapter Two I described how these values informed PEI, the UNDP’s model for CCAM. In this chapter I have illustrated how these values have also shaped what adaptation activities<sup>40</sup> the UNDP considered priorities for mainstreaming in the context of Kiribati.

#### **Ministry of Environment, Lands and Agricultural Development (MELAD)**

MELAD priorities and activities are informed by their official mission: “to ensure Kiribati is fully participating along with countries both regionally and internationally in combating detrimental effects of climate change affecting food and water security, biodiversity and waste management by engaging people in agricultural, environment, and land management activities that are most appropriate” (Government of Kiribati, 2009: 2). MELAD is responsible for monitoring and facilitating the implementation of national environmental policy frameworks

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<sup>40</sup> Priority activities are 1) water resource adaptation project, 2) simple well improvements, 3) coastal zone management for adaptation, 4) strengthening climate change information and monitoring, 5) project management and institutional strengthening for the NAPA, 6) upgrading of meteorological services, 7) agricultural food crops development, 8) coral monitoring, restoration and stock enhancement, 9) upgrading of coastal defences and causeways and 10) enabling Kiribati to effectively participate at regional and international forums on climate change (Government of Kiribati, 2011: 2).

and ensuring that Kiribati meets the obligations and targets stipulated under the Multilateral Environment Agreements to which it is party (Government of Kiribati, 2009).

The minister provides guidance and direction regarding relevant policies and decisions in accordance with the government of the day; hence, it is essentially a political role. The secretary, on the other hand, is the head of the ministry and it is a bureaucratic position. It is the role of the secretary to provide advice and support to the minister and the directors of each division<sup>41</sup>. The directors are specialists in their own areas and are responsible for executing the technical and professional tasks allocated in the Ministerial Operational Plans.

#### ***MELAD's approach to climate change***

MELAD was traditionally the lead agency responsible for climate change issues because staff members held the bulk of technical expertise, including sea-level rise monitoring, environmental monitoring and evaluation activities and adaptation design (World Bank, 2006a: 54). MELAD was responsible for heading the national team under the Pacific Islands Climate Change Assistance Programme (PICCAP), preparing the National Communications for the UNFCCC and the *Climate Change National Implementing Strategy* (2003). MELAD ministers and senior policy advisors have attended a large number of international and regional climate change negotiations to disseminate information about the threats posed by climate change to SIDS in the Pacific and the urgency of coordinated international responses. In many instances, attendance at these regional and international conferences and political negotiations was facilitated by the UNDP. The UNDP provided ongoing support by facilitating access to travel fund allowances and assisting MELAD staff to advocate for Kiribati's position<sup>42</sup>. The ministry's full list of responsibilities, in relation to climate change, is detailed in Table Four below.

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<sup>41</sup> There are four divisions within in MELAD – Headquarters (responsible for administration and policy development), Environment and Conservation Division, Land Management Division, and the Agriculture and Livestock Division (Government of Kiribati, 2009).

<sup>42</sup> The UNDP supported MELAD staff to host a side event at the 2009 Conference of the Parties; entitled "Our Road to Copenhagen".

Table Four: MELAD responsibilities

	Stakeholder interests/responsibilities	Relevance to climate change/reasons for inclusion	Role in the self-assessment process
Environment and Conservation Department	<ul style="list-style-type: none"> <li>-implementing agency and operational focal point of the GEF, including UNFCCC, UNCCD and CBD and other MEAs. Responsibilities:</li> <li>-management of the state of the environment</li> <li>-national coordination of activities and programmes related to MEAs including implementation, monitoring and evaluations</li> <li>-issuance and vetting of projects including permits and environmental impact assessments</li> <li>-liaising with relevant national agencies for assistance to ensure the effective representation of Kiribati at meetings of the Parties to the Convention and other relevant meetings,</li> <li>-managing or participating in any project, or part of a project, aimed at implementing any aspect of environmental concerns,</li> <li>-preparing reports, and information papers for the Ministers and Cabinet in relation to the implementation of any Conventions,</li> <li>-review and improvement of regulations, policies and strategies for implementing environmental concerns,</li> <li>Provide technical support to any other relevant government department or agency to implement any obligations under a Convention</li> </ul>	<ul style="list-style-type: none"> <li>-Climate Change Unit, established under the Environment and Conservation Department</li> <li>-Climate Change Study Team (CCST) is established under the auspices of the ECD/MELAD with administrative and management support from Climate Change Unit</li> <li>-responsible for preparation of the INC and its submission to the COP</li> <li>-responsible for preparation of the draft National Implementation Strategy in collaboration with other relevant agencies</li> <li>-responsible for the NCSA</li> <li>-responsible for preparation of the National Biodiversity Strategy and Action Programme under the CBD</li> </ul>	<ul style="list-style-type: none"> <li>-consultations on national priorities, mainstreaming climate change in national environmental strategies, programmes and other documents, and on current and planned projects</li> <li>-regular consultation with the UNFCCC partners for discussion of the proposal of the second national communication in terms of technical issues, opportunities for synergy among various projects and institutional arrangements</li> <li>-regular consultations on the needs and priorities for capacity building</li> <li>-regular consultations on the implementation of work at the ECD, NBSAP and the formal adoption of NIS</li> <li>-operational focal point of the UNFCCC and the GEF</li> </ul>

Source: UNDP, 2007c: 20



The underlying principles of sustainability, capacity building and community engagement inform MELAD's approach to climate change, climate change adaptation, and CCAM. For example, staff from the Fisheries Division within MELAD wanted to develop a new policy to protect sea cucumbers from the adverse impacts of climate change. The Officer in Charge and Senior Fisheries Officer explained<sup>43</sup>:

“The idea is to develop information packages, education brochures and an awareness campaign. We will bring all the fisherman and Local Councillors to Tarawa for an information workshop and get their feedback after our presentations. We would give them education flyers to take home (about protecting the sea cucumber stocks). This would empower them to use their initiative, practice sustainable fishing practices and respond to climate variability”.

In order to address the problems associated with climate change the Director of Lands for the Land Management Division within MELAD wanted to create a coastal management plan for the future. The proposed coastal management plan would highlight climate change and aim to protect Kiribati's natural environment<sup>44</sup>. The Deputy Secretary for the Agriculture Division of MELAD identified the re-introduction of cutting copra and traditional agricultural practices to diversify family incomes, preserve foodstuffs for climatic variability and protect the lands as important initiatives to build local resilience to climate change impacts<sup>45</sup>. The priorities identified by senior MELAD staff indicate a strong preference for a combination of soft and hard adaptation activities that aim to improve resilience and adaptive capacity at the local level.

MELAD's commitment to community adaptation and environmental sustainability are further demonstrated by their early engagement with the UNFCCC and the NAPA process. The Initial Communication (1999) emphasised the “melding of traditional practices in agriculture and extreme weather event preparation” (Dohan *et al*, 2011: 71). Priority adaptation projects identified by the NAPA include: 1) a water resource adaptation project; 2) simple well improvements; 3) coastal zone management for adaptation; 4) strengthening climate change information and monitoring; 5) project management and institutional strengthening for the NAPA; 6) upgrading of meteorological services; 7) agricultural food crops development; 8) coral monitoring, restoration and stock enhancement; 9) upgrading of coastal defences and

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<sup>43</sup> Karibanang Tamuera, Office in Charge and Taratau Kirata, Senior Fisheries Officer participated in a joint interview on 24 February 2011 in the Fisheries Division Office, Tanae.

<sup>44</sup> Tebufonga Ereata, Director of Lands, Lands Management Division within MELAD shared this opinion during an interview on 15 February 2011, Lands Management division office, Bairiki.

<sup>45</sup> During an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

causeways; and 10) enabling Kiribati to effectively participate at regional and international forums on climate change (Government of Kiribati, 2007b). The adaptation activities outlined here demonstrate MELAD's preference for a combination of soft and hard adaptation initiatives that build capacity at the local level.

### *MELAD's approach to CCAM*

The same values inform MELAD's approach to CCAM. MELAD believes soft adaptation activities that engage local communities to help them better understand the likely impacts of climate change and implement activities at the grassroots level are important because they are considered the best way to improve environmental resilience<sup>46</sup>. MELAD agreed to implement the UNDP's CCAM model because these values were instilled in the PEI process; described in Chapter Two. In addition, both parties agreed on which activities should be allocated funding for implementation under the NAPA project. These adaptation priorities are described in the following chapter and were also the foundation of negotiations regarding the implementation phase of the NAPA (NAPA-2).

Unlike the World Bank and OB Office, MELAD believed that the mainstreaming process should be simultaneously driven from the top down and the bottom up. Staff felt that while leadership and direction from the OB Office was crucial for encouraging the uptake of mainstreaming amongst the ministries and allocating sufficient resources, it was equally important for staff in the ministries and local communities to play an active role in the mainstreaming process. The Climate Change Officer within MELAD explained<sup>47</sup>:

“The KAP is useful because it's useful to think about how to integrate climate change across the Government. We acknowledge that's an instrumental and important first step. However, it's also important to build resilience at a local level... The problem is that the KAP hasn't reached out to the community, civil society and individuals yet – not in a meaningful way”.

In MELAD's view, mainstreaming provided a vehicle for linking climate change adaptation activities at the local and ministerial level.

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<sup>46</sup> For example, Riibeta Abeta, the Climate Change Officer for the Environment and Conservation Division within MELAD shared this opinion during an interview on 17 February 2011 in the Environment and Conservation Division Office in Bikanibeu.

<sup>47</sup> During an interview on 17 February 2011 in the Environment and Conservation Division Office in Bikanibeu.

### *UNDP and MELAD coalition*

This coalition considers participation in UNFCCC processes crucial for implementing effective climate change adaptation activities. The Deputy Secretary for MELAD stated<sup>48</sup>, “It’s our responsibility to participate in UNFCCC processes and international negotiations. This requires applying for funding (from the LDC Fund and the Global Environment Facility)”. MELAD staff members have attended training overseas to learn about the best ways to access the climate change adaptation funding available via the Global Environment Facility<sup>49</sup>. Funding applications must be submitted, via MFED, to an implementation agency before going onto the funding body<sup>50</sup>. MELAD consistently chose to use the UNDP as their implementing agency, rather than the World Bank, because they felt that their values and priorities were more closely aligned<sup>51</sup>.

The strength of the relationship between MELAD and UNDP is further demonstrated by their approach to funding applications. MELAD staff members established a covert application process, outside of standard government processes, and submitted applications directly to the UNDP, without the OB Office’s awareness or approval<sup>52</sup>. Beraina Teirane, Sectoral Economist and Taare Uriam Akkitne, Project Economist from the Policy and Planning Unit within MFED explained<sup>53</sup>:

“MELAD bypass the normal process [for submitting funding applications]. We are not involved in their submissions. Only once the funding has been received do we find out about it. I think it’s because there is so much funding available, they deal directly with the donors [UNDP]. It’s only once funding arrives that we request project information. We are surprised that there’s an MOU [Memorandum of Understanding] between MELAD and the concerned donor because this process didn’t involve us”

MELAD and the UNDP worked together to achieve mutually beneficial outcomes throughout both the NAPA and the KAP.

Although one is an international development agency and the other is a ministry concerned with domestic environmental affairs in Kiribati, both share a similar approach to climate

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<sup>48</sup> During an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

<sup>49</sup> Tebdanga Tioti, Deputy Secretary for MELAD shared this information during an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

<sup>50</sup> Information was shared during an interview with the Timi Kaiekieki, Director of the National Economic Planning Office, MFED on 15 March 2011 in the ministry’s office, Bairiki.

<sup>51</sup> Tebdanga Tioti, Deputy Secretary for MELAD shared this information during an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

<sup>52</sup> Information shared during an interview with Beraina Teirane, Sectoral Economist and Taare Uriam Akkitne, Project Economist from the Policy and Planning Unit within MFED on 4 March 2011 in the MFED offices, Bairiki.

<sup>53</sup> During an interview on 4 March 2011 in the MFED offices, Bairiki.

change, climate change adaptation and CCAM. Their approach is characterised by an emphasis on implementing a combination of soft and hard adaptation measures that aim to build local capacities and improve environmental resilience via community adaptation. Both parties shared a similar approach to the CCAM process and adaptation activities flagged for implementation in Kiribati. In the following chapter we will see how shared values enabled this coalition to implement the NAPA.

## **World Bank and the Office of the President**

### **World Bank**

Driven by a neoliberal agenda since the 1970s, the Bank has encouraged member countries to integrate into the world economy via trade liberalisation, private state-owned enterprises, fostering foreign direct investment and deregulating labour markets (Woods, 2006: 1). The Bank's agenda is focused on opening countries up to global trade, investment and capital (Woods, 2006: 1). During the late 1990s, the Bank worked to address three different problems in the world economy, namely: "1) crisis management; 2) fostering state transition from centrally planned to market orientated economies; and 3) humanitarian assistance for previously war-torn countries" (Woods, 2006: 3). Climate change adaptation and mitigation strategies have become increasingly important to the Bank's operations since the early 2000s as the environmental damage associated with the era of the Washington consensus gained attention (Serra & Stiglitz, 2008).

### ***The World Bank's approach to climate change***

*Development and Climate Change: The World Bank Group at Work* (2009b) outlines the World Bank Group's strategic approach to incorporating an awareness of climate change into development policies and projects. The strategy is built on the 2008 framework for climate change and development (World Bank, 2008) and focuses on three key areas: knowledge and capacity, partnerships and finance. Strengthening the knowledge base for climate action is considered vital for informed decision-making (World Bank, 2009b: 9). Here we can see that policy-making is considered a rational, technocratic process that relies upon access to credible scientific data. Partnerships amongst the development community are considered important for developing countries because of the magnitude of climate impacts (World Bank, 2009b: 5). Access to a variety of finance instruments and the amount of available financing for climate risk management and adaptation programs are considered vital for developing countries looking to incorporate climate change into their development programs (World

Bank, 2009b: 7). The World Bank Group positions itself as the leading multilateral agency that is well placed to manage climate finance (World Bank, 2009b: 13).

More recently, the World Bank (Gitay *et al*, 2013) released *Building Resilience: Integrating Climate and Disaster Risk into Development*. The report argues for “closer collaboration between the climate resilience and disaster risk management communities, and the incorporation of climate change disaster resilience into broader development processes” (Gitay *et al*, 2013: vi). Early warning systems, improved safety codes, financial and social protection and resilient reconstruction are some of the discrete activities listed to illustrate risk reduction and climate change preparedness (Gitay *et al*, 2013: vii). Better information, timely financing, contingency funds and enabling policies and planning are risk management processes listed as potentially “more important than the actual achievement of discrete activities” because disaster resilient development is considered paramount (Gitay *et al*, 2013: ix). The authors emphasise that “climate and disaster resilient development, therefore, makes sense both from a poverty alleviation, as well as from an economic, perspective” (Gitay *et al*, 2013: vii).

This report focuses upon the practical measures required to incorporate climate change and disaster risk reduction strategies into development simultaneously. Again, we can see that climate change is understood as a scientific problem that requires a technical solution. The report does not explore how different ethnic groups understand climate change and what that may mean for designing culturally-appropriate adaptation activities. The possibility of political tension with government about climate change adaptation policy-making is overlooked. Instead, the importance of access to scientific information, sound management processes and incorporating new technologies is emphasised. Good practice is identified as “institutional frameworks and iterative feedback, as well as instruments and tools, including climate and disaster risk assessments, risk reduction, strengthened preparedness, social and financial protection, and resilient reconstruction” (Gitay *et al*, 2013: ix). The World Bank’s managerial approach to climate change adaptation policy-making and disregard for the role of politics and values is illustrated in this report and its approach to climate change adaptation initiatives in the South Pacific.

### *The World Bank's approach to climate change in the South Pacific*

The Bank released two strategic documents<sup>54</sup> regarding climate change adaptation in the South Pacific in 2006 that stress the importance of integrating “climate proof”<sup>55</sup> ideas into policy and development practice. Mainstreaming adaptation to climate risks became the core focus of the Bank’s work in 2007.

The World Bank’s strategy for the East Asia and Pacific network is “focused on supporting broad-based economic growth, promoting higher levels of trade and integration, enhancing the environment for governance, increasing social stability and achieving the 2015 MDGs” (World Bank, 2016). At the same time, the World Bank Group has a stated commitment to the *Cairns Compact*<sup>56</sup> as an agreed instrument to strengthen partnerships for development and effectively allocate resources across the Pacific. Engagement across the Pacific is focused around three key pillars (World Bank, 2011a: 6):

1. Strengthening regional/global interaction;
2. Building resilience to economic shocks, natural disasters and climate change; and
3. Encouraging economic reform and private sector development.

*Acting Today for Tomorrow* (2012) is a World Bank policy and practice note (PPN) that advocates for climate and disaster resilient development in the South Pacific. The PPN suggest that “a ‘business as usual’ approach focused on immediate disaster relief rather than long-term disaster risk reduction and climate change adaptation will increase economic and human losses, slow economic growth, and delay or even set back progress towards Millennium Development Goals” (World Bank, 2012: ix). The importance of mainstreaming disaster risk reduction and climate change adaptation across governments is emphasised. “Stronger political leadership, end-user-friendly information, and improved monitoring and evaluation” are identified as prerequisites for reducing vulnerability (World Bank, 2012: ix). In order to achieve this, the World Bank (2012: x) suggests:

Governments should anchor coordination of disaster risk reduction and climate change adaptation in a high-level central ministry/body both at national and regional levels and ensure that leaders are knowledgeable about disaster and climate risk management. They should build on existing

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<sup>54</sup> *Managing Climate Risk, Integrating Adaptation into World Bank Group Operations* (World Bank, 2006c) and *Not if but when, Adapting to Natural Hazards in the Pacific Island’s Region* (World Bank, 2006d).

<sup>55</sup> Climate proofing for development aims to integrate climate considerations into planning at national, sectoral, project and local levels. It facilitates climate change orientated analyses of policies, projects and programmes with the aim of highlighting the risks and opportunities climate change poses.

<sup>56</sup> Leaders of the Pacific Islands Forum met from 4-7 August 2009 in Cairns to strengthen development coordination across the region. The *Cairns Compact* outlines their renewed determination and “invigorated commitment to lift the economic and development performance of the region” (Pacific Islands Forum Secretariat, 2009:1).

mechanisms such as strategic and corporate planning and budgetary processes, as well as proactively include communities, provincial governments, and central governments in the design and implementation of disaster and climate-resilient investments.

The World Bank's (2012) assumption that leaders will unquestioningly support disaster risk reduction and climate change adaptation once they have access to reliable scientific data is illustrated in *Acting Today for Tomorrow*. Climate change adaptation is conceived as a non-political issue that should automatically attract parliamentary support. In the second part of the statement above, we can see the World Bank's inclusive approach to climate change adaptation and emphasis upon community participation. The World Bank believes that giving the community an opportunity to learn and provide feedback about climate change adaptation will create a sense of empowerment and subsequent support for the policy agenda. However, simply giving people access to scientific data and the opportunity to talk about the facts is not enough to foster political support and community action.

Similarly, the World Bank's 2013 report *Acting on Climate Change & Disaster Risk for the Pacific* suggests that the "costs of inaction will be substantial for Pacific Island countries and will increase over time" (World Bank, 2013b: 7). The report's key message for policy makers is, "acting today for tomorrow on climate change and disaster risk reduction will save lives and reduce economic losses" (World Bank, 2013b: 10). The Bank encourages policy makers in the region to consider risks from natural hazards in development planning (World Bank, 2013b: 10) and work towards integrating climate change adaptation and disaster risk reduction across the development agenda (World Bank, 2013b: 12). The Bank's two goals in the region are strengthening governments' ability to respond to climate and disaster risks via an integrated policy response and offering financial support that address these issues and knowledge transfer (World Bank, 2013b: 12).

#### ***The World Bank's approach to CCAM in Kiribati***

The same values inform the World Bank's approach to all climate change, climate change adaptation and CCAM activities on international, regional and national scales. Technological solutions, rational scientific data, capacity building and community consultation are considered important elements for work in this sector. These values drive *how* the World Bank proposes to achieve CCAM (their CCAM model specifically designed for Kiribati) and *what* adaptation activities the Bank thinks should be favoured during the mainstreaming

process. The World Bank's approach to *how* CCAM should be implemented is outlined in Chapter Two. How World Bank values dictated *what* adaptation activities were prioritised during CCAM is highlighted below.

The World Bank's approach to CCAM in Kiribati is driven by a push to achieve economic development outcomes, rather than environmental sustainability or human development objectives. The hard adaptation activities funded during phases two and three of the KAP were chosen to protect state assets and infrastructure (World Bank, 2006a: 9). Participants suggested that if hard adaptation activities were funded that did not directly protect state assets, it was because the site was earmarked for improvements; but the Government wished to use climate change funds (rather than tax payer's money), even if the site was not threatened by sea-level rise or extreme climatic events. A Professor from the Australian National University suggested that the World Bank "see(s) it as an economic solution to an environmental problem. Development assistance is never going to work because the institutions involved and market systems are incorrect...the donor community perceive climate change as a technical problem that requires a technical solution. The economic point of view always wins with the donors"<sup>57</sup>. While the World Bank did invest in community consultations and a number of community based adaptation activities, these initiatives did not enable World Bank personnel to question their taken for granted assumptions about how adaptation activities are prioritised and allocated funding during CCAM (Prance, 2015).

#### **The Office of the President (OB Office)**

The role of the Office of the President (OB Office) is providing secretariat and protocol support to the president and cabinet. The portfolio is more flexible than the other ministries and can take on policy agendas items as required. The OB Office has taken a lead role in communications, disaster risk management and climate change policy during President Ante Tong's term because a whole of government response is considered important. Ministerial co-ordination and leading cross-ministry functions are key elements of the OB Office's work. Further responsibilities of the OB Office are outlined in of the Constitution<sup>58</sup> and include Head of State Functions, Head of Government Functions, Head of Civil Service Functions, Cabinet Secretariat, Constitutional and Political Affairs and Commission of Enquires and Tribunals<sup>59</sup>.

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<sup>57</sup> The interview was held on 30 September 2011 at the Australian National University campus, Canberra.

<sup>58</sup> Part 1, Chapter IV – Directions Assigning Ministerial Responsibility

<sup>59</sup> The full list of responsibilities held by the Office of the President can be found here:

<http://www.president.gov.ki/office-of-the-presidentberetitenti/> Accessed on November 5, 2014.



The Office of the President’s work plan is outlined in the *Government Policy Statement 2012-2015* (Government of Kiribati, 2012d) and *Kiribati Development Plan 2012–2015* (Government of Kiribati 2012b). The *Government Policy Statement* was released at the opening of the 10<sup>th</sup> House of Parliament<sup>60</sup> and details the government’s priorities for the current term. Top proprieties are good governance, human resources development, harnessing natural resources for economic growth and protecting food security, and economic growth (Government of Kiribati, 2012d: 1–4). According to President Tong, “Our ultimate goal is economic growth to improve the welfare of the country and its people” (Government of Kiribati, 2012d: 4). Restructuring the civil service, economic reforms and improving the performance of State Owned Enterprises are three strategies identified by the government to improve economic growth performance (Government of Kiribati, 2012d: 4).

Improving economic opportunities for the I-Kiribati is also the main development priority articulated in the *Kiribati Development Plan 2012–2015* (Department of Foreign Affairs and Trade, 2014: 21). The government’s ongoing vision is “a vibrant economy for the people of Kiribati” (Government of Kiribati, 2012b: 10). Human resource development, infrastructure, good governance and employment abroad are considered critical enablers for improving economic development outcomes and overcoming “slowed economic growth, worsening standards of living for all I-Kiribati and increasing household hardship” (Department of Foreign Affairs and Trade, 2014: 21 & 36). The World Bank’s “Kiribati Economic Reform Priorities Program” is identified as the best approach to implementing the structural and fiscal reforms required (Government of Kiribati, 2012b: 29).

#### ***The OB Office’s approach to climate change***

President Tong brings attention to the threats posed by climate change to development and economic growth in Kiribati. The president advocates for education and vocational programs to ensure that I-Kiribati have the opportunity to migrate with dignity and win competitive positions abroad based on merit (Lagan, 2013). At the same time, the president insists that developed nations have an obligation to financially assist Kiribati in addressing climate change and preparing the workforce for international opportunities (Government of Kiribati, 2012c; 5). During the 2009 Forum on the Human Impact of Climate Chang in Geneva, the president stated:

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<sup>60</sup> April 16<sup>th</sup>, 2012 in Ambo.

“We have also come to accept the inevitable reality that our longer term adaptation strategy must involve the movement of our people away from the islands before the oncoming rising seas. Such a strategy must be initiated now, based on the premise that if our people are to migrate to other countries they must be able to do so with confidence and dignity. We therefore propose to strengthen programs to prepare our people for this eventuality, by providing them with the education and skills to be able to access international labour markets on merit based relocation programs. Needless to say such a program could never succeed without the cooperation of the international community firstly, in the resourcing of such programs and secondly, in the loosening up of immigration restrictions” (Government of Kiribati, 2009b: 4).

Speaking on 21 April 2013 to Geraldine Coutts from ABC Radio Australia, President Tong reiterated (Radio Australia, 2016):

“We will endeavour as far as possible to ensure that the island of Kiribati does not disappear entirely. But our ability to do that will be limited by the resources we have. So this is where we’re challenging the international community to come forward”.

The president identifies climate change and sea-level rise as environmental threats in the statements above. He proposes that financial assistance to up-skill the workforce and relaxed migration policies are the best climate change adaptation solutions. The president does not mention environmental adaptation options. In fact, the president implies that the effects of climate change are so great that living on the islands is not possible in the future and therefore renders immediate environmental climate change adaptation projects redundant.

President Tong consistently uses “doomsday” rhetoric to suggest that environmental interventions are not the best solution. Financial assistance for improved education outcomes, open migration policies and fostering economic development in Kiribati are the pillars of the president’s approach to climate change adaptation (Government of Kiribati, 2012c). The president often suggests that Kiribati will be one of the first nations to disappear or become uninhabitable due to climate change. In 2008 President Tong used the United Nation’s World Environment Day to bring attention to Kiribati and the importance of urgent international help, stating, “We may be beyond redemption. We may be at the point of no return, where the emissions in the atmosphere will carry on contributing to climate change, to produce a sea-level change so in time our small nations will be submerged” (Global Mail, 2016). During a recent interview with CNN’s Fareed Zakaria GPS on 8 June 2014 the president again suggested:

“Let me make the point that whatever is agreed within the United States today, with China, it will not have a bearing on our future, because already, it’s too late for us. And so we are the canary. But hopefully, the experience will send a very strong message that we might be on the front line today, but others will be on the front line next – and the next and the next” (CNN, 2014).

President Tong spoke with Andrew O’Keefe and Monique Wright on Channel Seven’s “Weekend Sunrise” program 28 September 2014. The program reported that more than 40 houses have already been destroyed due to extreme weather events. The president stated:

“Climate change is already impacting on us. We have been calling on the international community to understand this and to make an appropriate response because otherwise we will be in serious trouble. I hope that the people who are doing this to us will understand how sacred our home is.”

The president’s emotive language is a tool to pressure international donors to contribute more funds quickly. He is an advocate for improving economic resilience and protecting hard infrastructure, rather than implementing environmental protection activities at the local level. Many informants agreed that the president was using climate change as a means to attract international financing for projects that do not aim to improve environmental resilience and increase adaptive capacity. Participants frequently suggested that the president was very concerned with attending international policy discussions regarding climate change and funding mechanisms for adaptation options, such as mainstreaming. For instance, the Deputy Secretary of MELAD noted<sup>61</sup>:

“Climate change is becoming a priority for the nation. The OB is becoming active in telling the world about the many risks resulting from climate change in our country. We need to stress the fact that we already feel the impacts of climate change. But the president is on top of this. He has taken on the responsibility of attending all the COP<sup>62</sup> meetings and politically representing our interests overseas.”

Informants also typically suggested that the president is primarily concerned with securing development funding through a fear and blame campaign on the international stage. For example, the Senior Water Engineer from the MPWU Water Unit stated<sup>63</sup>:

“The president constantly sends the message that we are victims of the larger industrialised nations and that we are dependent on external assistance. He is

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<sup>61</sup> During an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

<sup>62</sup> UNFCCC Conference of the Parties

<sup>63</sup> During an interview on 8 March 2011 in her office, Betio.

charismatic and captures the media’s attention. He constantly stresses the option of resettlement because it means that he doesn’t have to do anything! By threatening our neighbouring states with ‘environmental refugees’ he is pressuring them to throw money at us for adaptation.”

This sentiment was shared by an Emeritus Professor and Visiting Fellow at the University of NSW who explained<sup>64</sup>:

“They want to blame the international community and rely on their assistance. But the reality is that it’s easier for them to blame their current problems on climate change because it deflects the responsibility to implement effective solutions”.

Similarly, the Programme Coordinator for the Kiribati Urban Development Programme in the New Zealand High Commission hinted<sup>65</sup>:

“There is a level of concern about how climate change is run within the government. It’s really seen as a way to apply for cash”.

These comments and the president’s approach to climate change adaptation illustrate the underlying values of the president and his staff in the OB Office. The OB Office, and President Tong, are driven by the inherent assumption that access to international financing for hard adaptation initiatives will simultaneously improve the economic development prospects of Kiribati.

I do not claim that all staff in the OB Office unquestioningly perform the president’s will and have not considered the value of environmental climate change adaptation projects. Rather, the institutional structure of the government demands that OB Office staff support the president’s political agenda and motivations for pushing policy change in certain directions. Even if OB staff wished to challenge the president’s climate change adaptation policy agenda, defiant behaviours are uncommon, if not unheard of. The Constitution dictates that the president is both the Head of State and the Head of Government. As described earlier, the president and the OB Office by default, have the institutional power to appoint cabinet ministers and assign their ministerial portfolios. The KAP Communication Consultant explained<sup>66</sup>:

“Without the signature of the Project Secretary in the Office of the President, nothing would happen. There’s consequently a big effort to inform him and make sure he is across certain issues. At the end of the day, he is overseeing everything.

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<sup>64</sup> The Professor shared these comments during an interview on 30 September 2011 at the Australian Defence Force Academy UNSW, Canberra.

<sup>65</sup> Chris Mahoney made this statement during an interview 23 March 2011 at the New Zealand High Commission Office, Bairiki.

<sup>66</sup> During an interview 2 February 2011 in the Bairiki square café.

He has to co-sign all employment contracts and ultimately decides who is paid or fired.”

Examining the president’s involvement with international climate change adaptation policy forums illuminates the president’s climate change adaptation priorities. I use the president, as one example of a policy actor, who has taken-on the values and practices of the OB Office. I use the president’s behaviour to highlight the normative underpinnings of the OB Office, the leading government agency in the Government of Kiribati.

### ***The OB Office’s approach to CCAM***

The OB Office agreed to undertake the World Bank’s six step mainstreaming process as part of the KAP because it shared the underlying values and principles. This mainstreaming framework is geared towards attracting international financing (step three), assessing how the government should best allocate funds (step five) and technical and economic assessments to ensure that the adaptation activities selected will produce economic development outcomes (step six). Both parties agreed that the OB Office should be the lead government agency responsible for climate change policy-making and CCAM implementation because the OB Office’s mandate enables it to lead a “whole of government” initiative. The World Bank’s CCAM model increased the agency of the OB Office and gave them additional leverage and resources to dictate work undertaken by the line-ministries.

In addition to agreeing how CCAM should be implemented, the OB Office also agreed on which adaptation activities should be funded during phases one and two of the KAP. The adaptation activities funded under the KAP highlight the OB Office’s preference for hard adaptation measures designed to reduce the impact of climate change on coastline infrastructure and freshwater resources (World Bank, 2006a: 9). The OB Office supported the World Bank’s agenda to pilot adaptation activities during phase two and investments to improve the sea walls and causeways. Hard infrastructure activities during phase two received the most funding: almost US\$4.33 million (World Bank, 2006a: 9). However, the OB Office’s approach to which adaptation activities should be prioritised during CCAM became a point of contention with the World Bank during the priority setting stage for phase three.

### ***World Bank and Office of the President coalition***

The World Bank and the OB Office shared similar views about the threats posed by climate change, priority adaptation responses and the best way to implement CCAM. Their approach was informed by an early World Bank report (2000) that aimed to demonstrate the economic

costs of not responding to climate change via adaptation in the South Pacific. The Director of the National Economic Planning Office explained, “a World Bank study looking at climate change...made us aware of the impacts of climate change. After reading the report we had a meeting with them. They asked us to consider the report recommendations and consider asking for help (from the World Bank). After this, we agreed to the first phase of the KAP”<sup>67</sup>.

The World Bank and OB Office worked together, as an epistemic coalition, to navigate regional and international policy fora and lobby for mutually beneficial outcomes. The World Bank funds staff from the OB Office and MFED to attend the Board of Governors Meeting in Washington every year. The Minister for Finance attends discussions with the World Bank and the Secretary for Finance attends meetings with the IMF during the same trip. The Director of the National Economic Planning Office explained, “the purpose of these meetings is to review the [World Bank] annual report and budget. We have side meetings with management of the IMF and World Bank...to follow up on previous meetings”<sup>68</sup>. The OB Office also hosts a number of World Bank “mission trips” to discuss climate change adaptation activities in Kiribati and the best ways to access international finance<sup>69</sup>. In addition, the World Bank commissioned a piece of research into the economic impacts of climate change in Kiribati which was carried out by the Director of the National Economic Planning Office in Washington during 2007<sup>70</sup>.

Over the course of the KAP, the OB Office and the World Bank worked together as an epistemic coalition. The coalition is characterised by an emphasis on hard adaptation measures to protect state assets and create economic growth opportunities. The importance of access to finance, scientific information and human resources is emphasised. Shared values enabled these separate institutions to form an epistemic coalition and work together to achieve their common goals in Kiribati. In the following chapter we will see how these shared values and priorities enabled this coalition, and the individuals within, to act collectively to push the KAP agenda forward.

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<sup>67</sup> This information was shared by the Director of the National Economic Planning Office within MFED during an interview on 15 March 2011 in MFED offices, Bairiki.

<sup>68</sup> During an interview on 15 March 2011 in MFED offices, Bairiki.

<sup>69</sup> This information was shared by the Director of the National Economic Planning Office within MFED during an interview on 15 March 2011 in MFED offices, Bairiki.

<sup>70</sup> This information was shared by the Director of the National Economic Planning Office within MFED during an interview on 15 March 2011 in MFED offices, Bairiki.

## **Conclusion**

UNDP and MELAD have a similar approach to CCAM in Kiribati. Their approach is characterised by a preference for a combination of soft and hard adaptation activities that build capacity at the local level and improve environmental resilience. This development-driven approach to CCAM sits at the vulnerability focused end of the CCAM spectrum. At the same time, the OB Office and the World Bank formed a separate and competing coalition. Their approach to CCAM in Kiribati is situated at the impacts focused end of the CCAM spectrum and favours hard adaptation measures that aim to facilitate economic growth and protect state infrastructure. These different and competing perspectives on mainstreaming reflect these actors' embeddedness within different epistemic communities. In the following chapter I will describe the conflict that unfolded between these two epistemic coalitions because they disagreed about the best way to achieve CCAM.

## **Chapter Five - The Politics of Climate Change Adaptation Mainstreaming in Kiribati**

This chapter provides an overview of Kiribati's experience with CCAM between 2003 and 2011 and explains the way in which contestation between and within the competing coalitions identified in the previous chapter shaped the Government of Kiribati's response to the two major CCAM initiatives during this period, the NAPA and the KAP. The nature and direction of Kiribati's response to climate change adaptation was developed during this time.

The first section outlines the nature and evolution of the NAPA and KAP between 2003 and 2011. Both projects commenced in 2003 and were implemented concurrently during this time. However, a restructure in 2005 meant that the OB Office, instead of MELAD, became the lead government agency responsible for climate change and the KAP became the premier adaptation project. The NAPA was submitted to the UNFCCC in 2007 and members of this coalition started looking towards implementation. Tensions simmered between proponents of the NAPA and the KAP during this period because both coalitions were positioning for access to climate change adaptation implementation funding. The KAP was again restructured in 2009 and a number of activities were consequently dropped.

The second section describes the impact and results of both projects. It shows that while the KAP had more success implementing CCAM compared to the NAPA, both projects largely failed to encourage the line-ministries to incorporate an awareness of climate change in their Ministerial Operational Plans or work activities<sup>71</sup>. As noted earlier, a World Bank (2011c) review found that mainstreaming had not been taken up by the line-ministries and climate change adaptation was perceived as an environmental problem that should be solved by MELAD and the OB Office, rather than an initiative requiring "whole of government" support for implementation. Climate change adaptation is largely absent from key national policy frameworks, such as the *National Development Strategy* (Government of Kiribati, 2012c) and *Kiribati Development Plan 2012-2015* (Government of Kiribati, 2012b). Instead, the government has two separate "stand alone" climate change adaptation policy documents<sup>72</sup>. These documents oppose the aim of mainstreaming because CCAM strives to integrate climate change with existing policy documents, rather than develop new ones.

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<sup>71</sup> 60 per cent of all Ministerial Operational Plans demonstrated an awareness of climate change by 2011 (World Bank, 2011c: iv).

<sup>72</sup> *Climate Change Adaptation Strategy* (2005b) and *Climate Change Statement* (2005c).



The third section provides a political analysis of: a) why CCAM largely failed; and b) why the KAP got further in promoting CCAM than the NAPA. I propose that CCAM implementation was largely unsuccessful in Kiribati because neither the NAPA nor the KAP met all the crucial preconditions for successful reform identified by Olsen (1991)<sup>73</sup>. The NAPA initially succeeded because performance against three of the four preconditions was strong (see Table Two in Chapter One). The NAPA was initially more successful because its development-based approach to CCAM and emphasis on a combination of soft and hard adaptation initiatives was popular with government line-ministries and local communities alike. However the KAP gained more traction because the OB Office shifted attention towards attracting long term financial support and economic development opportunities afforded by adopting a technology-driven approach to CCAM. But it also ultimately failed because of fractures within its supporting coalition.

### **The nature and evolution of the NAPA and KAP**

This Section outlines the nature and evolution of the NAPA and KAP between 2003 and 2011. Key milestones and deliverables are outlined in Table Five below.

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<sup>73</sup> These are: 1) a high degree of normative matching between the reform agenda and the institution adopting and implementing it, 2) a high degree of normative matching between the reform and the society into which the reform is being introduced; 3) a low level of ambiguity about the reformers' intentions; and 4) strong administrative capacity of the part of the institution introducing the reform in order to ensure compliance with the reform agenda (Olsen, 1991).

Table Five: NAPA and KAP: A Chronology

Time Frame	NAPA	KAP
2003	NAPA commenced	Preparation Phase (Phase 1) commenced  Proponents of the KAP led the First and Second National Consultations
2004	While the NAPA and the KAP started as separate projects, a joint work programme was established to unify these work programmes between 2003 and 2005. It was hoped that community priorities and preferences identified during the National Consultations would inform both the NAPA and the KAP	
2005	Review and restructure. The NAPA team became the Technical Climate Change Study Team and all formal power was stripped. The National Adaptation Steering Committee became responsible for the NAPA work programme	Review and restructure. The KAP Steering Committee was renamed the National Adaptation Steering Committee and was moved from MFED to the OB Office
2006		Pilot Implementation Phase (Phase 2). This phase was initially designed to finish in 2008. However, it was extended until early 2010 after the review and restructure in 2008 because of “unsatisfactory” performance
2007	NAPA was submitted to the UNFCCC. This formally marks the completion of the NAPA; however the UNDP and MELAD lobbied against the KAP between 2007 and 2010 for resources to be put towards NAPA priorities	
2008		Independent evaluation and mid-term review
2009		Restructure in August
2010		Negotiations commenced for the final phase (Phase 3) of the KAP in May

### **National Adaptation Programmes of Action (NAPA)**

National Adaptation Programmes of Action (NAPA) form one of the UNFCCC’s adaptation workstreams that provides a process for LDCs to communicate their urgent and immediate adaptation priorities to the UNFCCC. The workstream is primarily supported by the Least Developed Countries Expert Group<sup>74</sup> and funding via the Least Developed Country Fund and Global Environment Facility. Once submitted to the UNFCCC secretariat, the LDC party is entitled to access funding for implementation of the NAPA under the Least Developed Country Fund (UNFCCC, 2011: 18).

The process aims to “take into account existing coping strategies at the grassroots level and build [upon them] to identify propriety adaptation activities” (UNFCCC, 2011: 17).

<sup>74</sup> The Least Developed Countries Expert Group provides technical support and advice to Least Developed Country parties as they prepare and implement their NAPA. Support is provided via workshops, the development of guidelines, tools publications and database, and by assisting countries with the preparation of their NAPA before submission.

Prominence is given to “community-level input as an important source of information, recognising that grass-roots communities are the main stakeholders” (UNFCCC, 2011: 17). Commissioning large volumes of additional research, such as scientific modelling or vulnerability assessments, is not encouraged (UNFCCC, 2011: 17). It is expected that NAPAs will be “action-orientated, country-driven, flexible and based on national circumstances...[and the] documents should be presented in a simple format which can be easily understood by policy-level decision-makers and the public” (UNFCCC, 2011: 17). The NAPA process seeks to understand and address the underlying drivers of vulnerability and suggests that vulnerability assessments should consider “local, social and ecological systems and needs, local culture, politics, values and knowledge systems” (UNFCCC, 2011: 16).

Kiribati’s NAPA process was supported by a Least Developed Country Fund grant<sup>75</sup> and established under MELAD in early 2003 (World Bank, 2006a: 53). NAPA priorities were informed by the Initial Communication<sup>76</sup> and priorities identified during the National Consultations<sup>77</sup> (Government of Kiribati, 1999b). A water resource adaptation project and simple well improvements were the first priority (Government of Kiribati, 2007b). The rationale for this priority was improving community capacity to “actively assess the status of their [community] water resources, improve and protect them and increase their quantity and storage” (Government of Kiribati, 2007b: 2). The ten priority adaptation activities listed below aim to improve adaptive capacity at the local level and implement environmental responses to address the vulnerabilities exacerbated by climate change.

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<sup>75</sup> Worth US\$200,000

<sup>76</sup> Submitted in September 1999

<sup>77</sup> The National Consultations are further described below.

Table Six: NAPA priority activities

Project	Priority Ranking	Rationale/Objectives	Total NAPA Cost (AU\$)
Water resource adaptation project	1	Communities need to actively assess the status of their water resources, improve and protect them, and increase their quantity and storage	3,168,405
Simple well improvement	1	500 ground water wells that are used by the communities for drinking and cooking water need upgrading to protect water supplies from storm surges and heavy rainfall	336,470
Coastal zone management for adaptation	2	Institutional arrangements to control development on coastal areas exists but they are ineffective and consequently need upgrading	1,937,280
Strengthening climate change information and monitoring	3	To strengthen the capability of the government to be able to keep abreast of, understand and interpret international scientific information relevant to Kiribati and enhance Kiribati capacity to implement its obligations under CC international agreements	317,410
Project management institutional strengthening for NAPA	4	The project management team needs support to achievement CCAM and provide guidance and leadership for ministries trying to integrate CC into their operational planning systems	319,440
Upgrading of meteorological services	5	Accurate weather reports form the basis of climate data that is used for research purposes and to help communities prepare for extreme weather events	492,310
Agricultural food crops development	6	The consumption and production of food crops have declined in recent years. Work needs to be undertaken to maintain existing gene banks, increase and diversity food crop production and encourage uptake of traditional agricultural practices at the local level	1,555,230
Coral monitoring, restoration and stock enhancement	7	It is important to monitor the conditions of the coral reefs and coral patches in order to have up-to-date information on the extent and trends of any observed bleaching	586,750
Upgrading of coastal defences and causeways	8	Seawalls and causeways require regular maintenance against the natural deterioration and upgrading to prepare for future climatic scenarios	5,670,750
Enabling Kiribati effective participation at regional and international forums on climate change	9	It is important that staff from the Foreign Affairs Ministry have the opportunity to attend regional and international forums to ensure effective voicing of information about national circumstances to assist with planning global responses to CC	105,000
<b>Total (including 10% contingency)</b>			<b>14,489,045 and 4,090,145 Local Annual Budget Contribution</b>

Source: Government of Kiribati, 2007b: 2

### **Kiribati Adaptation Program (KAP)**

The “Preparation Phase” of the KAP, which ran from 2003 to 2005, aimed to promote climate change adaptation mainstreaming and improve community awareness of the predicted impacts of climate change (World Bank, 2003: 3–4). The World Bank was the implementing agency and this phase was housed in MFED. The International Bank for Reconstruction and Development, International Development Association (both parts of the World Bank) and the Government of Kiribati jointly funded this phase, worth US\$3.75 million (World Bank, 2003: 7). The KAP Steering Committee, with members representing the KANGO, Chamber of Commerce and government officials from key line-ministries, was established during this period to facilitate community participation in the national conversation about climate change adaptation priorities however, as detailed below, their role changed significantly over time (World Bank, 2005b: 6).

### **NAPA and KAP joint work program**

The government attempted to simultaneously implement the NAPA and KAP between 2003 and 2005. Possible synergies between the two projects were identified during the National Consultations in July 2003 and Cabinet approved the merging of the two projects (World Bank, 2006a: 54). It was hoped that merging the two adaptation projects would result in a joint national adaptation strategy covering a full range of responses at government, community and household levels (Global Environment Facility, 2004: 4).

The National Consultations were designed and led by the World Bank team; however it was hoped that community preferences would be used to inform both the KAP and the NAPA (World Bank, 2004: 3). During the first round of consultations, participants were asked to identify the key changes or hazards experienced over the past 20 to 40 years and the coping mechanisms proposed to deal with them (World Bank, 2006a: 18). The second round of consultations focused on prioritising adaptation activities and assessing the urgency of actions required (World Bank, 2006a: 18). While the World Bank used the National Consultations to satisfy their community engagement requirements, the NAPA team used supplementary activities to garner community sentiments regarding climate change adaptation priorities<sup>78</sup>.

### **Review**

A review of the KAP was undertaken at the end of 2005 by the World Bank (2006a). Despite early success implementing CCAM (World Bank, 2006a: 30), concerns were raised about the

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<sup>78</sup> For example, Riibeta Abeta, the Climate Change Officer for the Environment and Conservation Division within MELAD shared this opinion during an interview on 17 February 2011 in the Environment and Conservation Division Office in Bikanibeu.

capacity of the government to implement both the NAPA and the KAP simultaneously. The review recommended that the KAP should be the premier climate change adaptation mainstreaming project in Kiribati and led by the OB Office (World Bank, 2006a: 9). The Bank felt that MELAD “lacked the institutional leverage to influence the programs of other vital sectoral ministries” (World Bank, 2006a: 54). The KAP was more attractive because the Bank felt that there were more finances available for implementation<sup>79</sup>. As a result, the government allocated resources towards the KAP and away from the NAPA<sup>80</sup>.

At the same time, World Bank representatives met with MELAD staff and advised them to re-prioritise NAPA goals so that they were more in line with KAP priorities and work programming<sup>81</sup>. World Bank staff promised that funds for phase two of the KAP would be fairly allocated to NAPA priorities moving forward<sup>82</sup>.

### **Restructuring**

The NAPA and KAP were both restructured as a result of the review findings and in order to fulfil the Cabinet direction to deliver a combined climate change adaptation response (mentioned earlier). The OB Office, rather than MELAD, became the lead agency responsible for climate change and implementing CCAM. The placement of the KAP under the umbrella of the OB Office was “expected to give it a permanent institutional ‘home’ with direct access to the Development Coordination Committee (composed of Secretaries of all government ministries) and with direct responsibility for risk management” (World Bank, 2006a: 13). The World Bank hoped that the restructuring would provide direct access to the line-ministries and consequently facilitate the mainstreaming of adaptation into economic planning (World Bank, 2006a: 54).

The KAP Steering Committee was renamed the National Adaptation Steering Committee (NASC) and moved from MFED into the OB Office (Global Environment Facility, 2004: 16). The NASC was charged with overseeing the joint work program for the NAPA and KAP and assisting the OB Office to supervise a unified climate change program for the entire country.

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<sup>79</sup> This perspective was shared by many participants during my field work. In particular, the Deputy Secretary of MELAD, Ms Tebdranga Tioti emphasised this point during an interview on 16 February 2011.

<sup>80</sup> Interview with the Strategic Policy Mentor, Anna Percy and Acting Policy Officer, Michael Foon, both from the Strategic National Policy and Risk Assessment SNPRA Unit housed in the Office of the President, 23 February 2011.

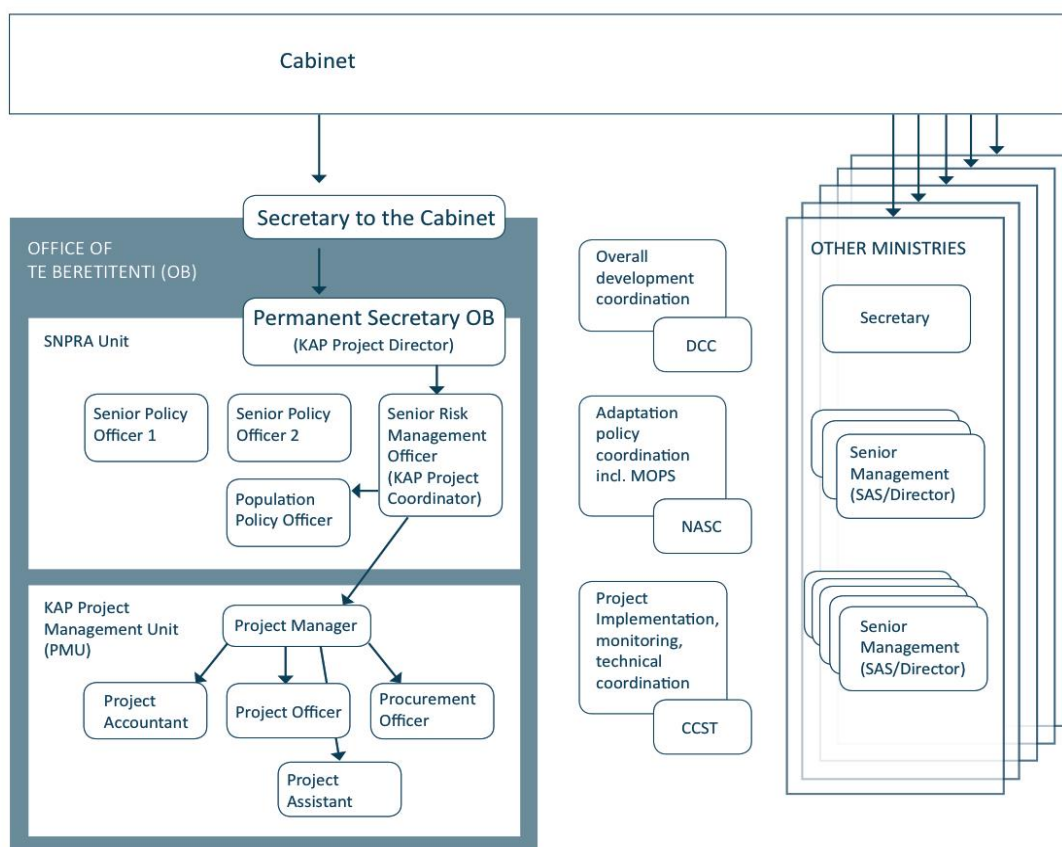
<sup>81</sup> Marella Rebgetz, Senior Water Engineer in the Water Unit, Ministry of Public Works and Utilities shared this during an interview on Tuesday 8 March 2011 in her office, Betio.

<sup>82</sup> Interview with Momoe Kaam, UNDP Programme Field Office for Kiribati, UN Joint Presence Office, Monday 14 March 2011.

The existing NAPA team became the technical Climate Change Study Team (CCST). Membership of the CCST included officials and stakeholders involved in fresh water management, coastal planning, fisheries and agriculture. The CCST provided technical support and policy analysis for interdepartmental climate change issues and was responsible for coordinating scientific activities relevant to the planning and execution of the NAPA and the KAP. The institutional relationship between the NASC and the CCST is illustrated in Figure Six below (World Bank, 2006a: 11).

The Environment Conservation Division within MELAD became responsible for implementing all Multilateral Environment Agreements and managing KAP activities that involved environmental regulations, enforcement and monitoring. The Division's work typically related to analysis, awareness campaigns and policy development (Global Environment Facility, 2004: 16).

Figure Six: The institutional relationship between the NASC and the CCST



Source: World Bank, 2006a: 11

### **The pilot implementation phase of the KAP**

The “pilot implementation phase” sought to “develop and demonstrate the systematic diagnosis of climate related problems and the design of cost effective adaptation measures, while continuing the integration of climate risk awareness and responsiveness into economic and operation planning” (World Bank, 2011a: 4). It was initially designed to span three years between 2005 and 2008 (World Bank, 2006a: 5). Total investment for this phase was US\$10.8million financed through grants from the Government of Australia (AU\$4.85 million), Global Environment Facility Least Developed Country Fund (US\$3.0 million), Japan Policy and Human Resources Development (US\$1.8 million) and in-kind contributions from the Government of Kiribati (US\$0.25 million) (World Bank, 2011a: 4).

This phase originally consisted of five components and a list of activities within each component. The five components were: 1) policy, planning and information; 2) land use, physical structures and ecosystems; 3) freshwater resources; 4) capacity at island and community level; and 5) project management. The activities in each component changed significantly between 2005 and 2010.

Establishing a Strategic National Policy and Risk Assessment (SNPRA) unit within the OB Office during the first year was a key priority for this phase (World Bank, 2011c: 2). The government agreed to allocate staff resources, and especially a Project Director, after Cabinet approval was granted in 2005 (World Bank, 2009a: 4). It was hoped that the unit would provide high level leadership for coordinating climate change adaptation and related strategic issues across the government (World Bank, 2009a: 4). The SNPRA unit was designed to be the lead agency responsible for implementing CCAM and building commitment to climate change adaptation amongst the line-ministries.

### **Completion of the NAPA**

Kiribati’s final NAPA report<sup>83</sup> was approved by Cabinet on 10 January 2007 and submitted to the UNFCCC later that month (UNDP, 2011: 1). Between 2007 and 2010, MELAD staff lobbied the OB Office to have KAP funds allocated to NAPA priorities during the second phase of the KAP. MELAD and UNDP staff expressed resentment and distrust towards proponents of the KAP because they had agreed to restructure (after the 2005 review), on the

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<sup>83</sup> The NAPA report is separate to both the Initial and Second National Communications, although all three are submissions to the UNFCCC.



condition that KAP funding was allocated to implementing NAPA activities<sup>84</sup>. Conflict simmered between “MELAD and everybody” during this time<sup>85</sup> because proponents of the NAPA felt that key actors within the KAP coalition were pursuing their own agenda and disregarding promises made to MELAD. The Deputy Secretary for MELAD explained<sup>86</sup>:

“We have a problem with the World Bank. When they come to do their reviews they have their own project plans, schedules and agendas. They try and impose their priorities on us. When we discuss a number of things with them, they know how to avoid particular issues and topics. If our ideas and priorities don’t fit within their framework it doesn’t happen. Even if we agree on a particular set of priorities (in a meeting between MELAD and the Bank), they will sit down with the OB and cabinet and change everything. They know how to convince the cabinet of their point of view. When we attend the final meeting we find that the Bank has changed the parameters of the final project and we are always so surprised!”.

Ongoing tensions between proponents of the KAP and the NAPA simmered throughout the KAP.

#### **Mid-term review of the KAP**

The government commissioned an independent evaluation (carried out by Tony Hughes) of the KAP in 2008 because project implementation was facing a number of challenges (World Bank, 2009a: 3). Inconsistent leadership, an overly ambitious project design and weaknesses in project management were identified as the three main difficulties faced (World Bank, 2009a: 3-4).

These findings were validated by the mid-term review conducted by the World Bank (World Bank, 2009a: 4). Implementation performance was deemed “unsatisfactory” because insufficient progress had been made against the three main outcomes (World Bank, 2011c: 6): 1) the establishment of the SNPRA Unit as the lead agency coordinating climate change adaptation during the first year of implementation; 2) the percentage of climate affected programs in Ministerial Operational Plans that reflect systematic climate risk assessment; and 3) consistent use of best practice in the application of risk management, environmental assessment and options analysis to public infrastructure and vulnerability reduction measures (World Bank, 2011c: 2).

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<sup>84</sup> Interview with Momoe Kaam, UNDP Programme Field Officer, UN Joint Presence Office, Monday 14 March 2011.

<sup>85</sup> Marella Rebgetz, Senior Water Engineer in the Water Unit, Ministry of Public Works and Utilities, Betio, 8 March 2011.

<sup>86</sup> Interview in the Environment and Conservation Division Office, Bikanibeu, Wednesday 16 February 2011.

The government failed to establish the SNPRA unit inside the OB Office during the first two years of implementation because support for a full unit decreased as questions were raised regarding staffing limitations within the government (World Bank, 2009a: 4). The government did not appoint a Project Director and the unit remained unstaffed for 18 months (World Bank, 2011c: 6). 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 (World Bank, 2011c: 6).

There was little evidence of ministries demonstrating an awareness of climate change adaptation in their Ministerial Operational Plans at this time. Lack of government leadership and frequent staff changes within the OB Office were identified as the main reasons for little progress mainstreaming:

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 (World Bank, 2011c: 6).

### **Re-design of the KAP**

The mid-term review findings triggered a restructuring of the KAP in August 2009. Project managers from across the ministries were requested to produce a list of activities they would drop from within their respective components. As noted above, the “pilot implementation phase” of the KAP consisted of five components and briefly explain why they would drop them. This list was reviewed by World Bank staff without further consultation with the government. Bank staff exercised a veto over which activities were carried forward and gave a verbal report of their decisions regarding each activity within a particular component.<sup>87</sup>

The activities under each component and the distribution of resources between the components, rather than the components themselves, were modified during the restructure (World Bank, 2011c: 4). Overall, the activities were adjusted to focus on water and coastal sectors and on activities that would demonstrate “visible results on the ground” (World Bank, 2011c: 4). All resources and financial investments were reallocated to physical infrastructure projects consistent with the WB and OB Office preference for a focus on hard adaptation projects. An international management advisor and procurement advisor were recruited for the KAP Project Management Unit and senior technical advisers were recruited to the water and civil engineering units of MPWU because it was felt that the government lacked the

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<sup>87</sup> This information was shared during an interview with a Senior Water Engineer, Marella Rebgetz from the Ministry of Public Works and Utilities in 8 March 2011.

required management and technical capacity (World Bank, 2011c: 7). The project was extended until December 2010 and the number of associated line-ministries was decreased.

Policy and regulatory activities on land use planning under component two, the outer island assessments and upgrades under component three, and all remaining activities under component four that had not started were completely cancelled<sup>88</sup> (World Bank, 2009a: 6). The remaining water and coastal management projects were restructured<sup>89</sup>. “Risk Analysis and Design Capacity for Coastal Hazard Management” was renamed “Improving Protection of Public Assets” and focused on coastal zone assessments, improved coastal zone management and pilot investment projects at four sites. The numerous water projects were compiled under “Kiribati Improving the Supply and Sustainability of Freshwater” and focused on ground water assessments, improved rainwater harvesting and pilot investments at thirty sites. These changes illustrate the World Bank’s shift towards hard adaptation and resourcing physical infrastructure projects. Implementing these contracts was awarded to two large international consulting firms<sup>90</sup>, rather than local businesses, because the Bank felt that the government did not have sufficient experience with procurement at an international standard (World Bank, 2011c: 7). The final list of projects that were implemented or dropped are detailed in Table Seven below.

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<sup>88</sup> Subcomponents 4.1, 4.2 and 4.4 focused on building capacity at the island and community level and involved providing technical assistance to the Ministry of Internal and Social Affairs to include adaptation in the Outer Island Profiles, train local governments on climate-risk management and finance a pilot program of small scale adaptation investments in two selected outer islands (World Bank, 2009a: 2-3 and 6).

<sup>89</sup> The KAP Project Manager, Kaiarake Taburuea described this process during an interview on 25 February 2011 in the Project Management Office.

<sup>90</sup> The first project, worth AU\$1million, was awarded to Beca International Consultants and the second contract, worth AU\$1.6million, was awarded to GWP Consultants Ltd.

Table Seven: Outputs and dropped/discontinued activities by component for the second phase of the KAP

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. 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 consultations, participation and awareness	One National Consultation regarding building awareness of climate change adaptation across stakeholders	Discontinued. National consultations to inform the ongoing design of KAPII 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. Radio, newsletters and education material produced up to the review	Discontinued. Participatory events and media material (below) were discontinued at themed term review 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 KAPIII
	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 out put 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 KAPIII
	Focused behaviour change campaign on coastal resilience and water resource management	Dropped since it was not linked to specific investments. Funds were refocused to community

		consultation 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 the mid-term review. This has laid the groundwork required for installation of galleries in two of the three villages in KAPIII. Although galleries were intended to be stalled under KAPII, valuable lessons about community perspectives on water resource management, livelihood impacts and the features and structures of successful community consultation were learned
1.3 Policy coordination and planning	OB established s lead agency for 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 by Government of Kiribati FY 2007, 2008, 2009 and 2010 included KAPII activities	Direct contribution to achieving CCA mainstreaming objectives. This provided the institutional planning basis for mainstreaming CCA, linking KAPII 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	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 outputs from 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 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	Direction contribution to capacity building objectives. Members of the Foreshore Management Committee were successfully trained in the use

	projections	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 of KAPII 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	Rain gauges installed in Outer Islands (installation costs covered by KAPII 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

Source: World Bank, 2011c: 25-31

During the mid-term review the government decided not to establish the SNPRA Unit. This was a significant decision because it demonstrates the growing tensions between the OB Office and the World Bank. In refusing to establish the SNPRA Unit, the government was rejecting World Bank advice. Instead, the government proposed to appoint a Deputy Secretary within the OB Office (World Bank, 2009a: 4). The government suggested that the Deputy Secretary would be responsible for leading national dialogue and coordinating climate change adaptation activities across the line-ministries (World Bank, 2009a: 4). It was agreed that “the Deputy Secretary in the OB should play a greater role to ensure that government is regularly informed about KAP outputs and outcomes and that high-level decision makers understand the approach of the program and the nature of its contribution to development plans” (World Bank, 2009a: 10). The National Adaptation Steering Committee and Technical Climate Change Study Team were identified as important mechanisms to ensure high level support from the ministries for CCAM and technical coordination amongst the project activities (World Bank, 2009a: 10).

#### **Negotiations for the final phase of the KAP**

The policy-making process for designing the final phase of the KAP involved a number of steps. The process started when the World Bank undertook a supervision mission to South Tarawa between 11 and 20 May 2010. A World Bank *Project Conception Note* was developed during this mission and submitted for internal approval. Once granted, World Bank staff drafted the first *Project Information Document (PID)* to outline the “concept stage” without input from the Government of Kiribati (World Bank, 2010a). During this stage, the

National Adaptation Steering Committee held several special meetings separately to identify, discuss and prepare preliminary cost estimates for the proposed activities.

Throughout the entire policy-making cycle, the aims, objectives and components<sup>91</sup> remained the same. All development partners, funding agencies and the government agreed on the basic structure of the final phase of the KAP. However, the priority sub-activities and proposed funding allocations differed significantly. These differences ultimately stalled KAP progress. Disagreement about how the activities were prioritised and funded under the first component<sup>92</sup> ultimately caused the negotiations to break down.

The second step in the policy-making process for designing the final phase of the KAP occurred when Bank staff returned to South Tarawa for a second supervision mission between 26 October and 9 November 2010. During this stint, the World Bank prepared a *Draft Aide-Memoire* for assessing the second phase of the KAP and starting preparations for the third (World Bank, 2010b). The *Draft Aide-Memoire* asserts that the sub-activities were identified through negotiations between the World Bank mission team and NASC and suggests that moving forward, the policy process should involve the World Bank and OB Office working together to achieve the following steps (World Bank, 2010b: 9):

1. Prioritise the sub-components taking the list of priorities as a whole;
2. Identify funding gaps;
3. Prepare more detailed activity descriptions to assist in defining and rationalising the scope of works;
4. Finalise budgets and timeframes; and
5. Draft the *Project Appraisal Document* after agreeing on a final scope of activities and implementation arrangements and carrying out social, environmental procurement and financial assessments.

In order to address the tasks allocated in the PID, the government Working Group<sup>93</sup> first met in December 2010 and considered the draft Terms of Reference. The Working Group then held a series of four meetings in January 2011 to: 1) agree prioritization criteria; 2) discuss and clarify the detail of each sub-component; 3) prioritise activities and sub-components by

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<sup>91</sup> The four components focused on 1 - Improve water resource use and management, 2 - Increase coastal resilience, 3 - Strengthen capacity to manage the effects of climate change and natural hazards and 4 - Project management, monitoring and evaluation.

<sup>92</sup> Component 1 - Improve water resources use and management

<sup>93</sup> The Working Group was set up under the leadership of the OB Office and membership included representatives from the OB Office, MPWU, MELAD, Ministry of Health, MFED and the KAP Project Office (Government of Kiribati, 2011: 1-2).

applying the agreed criteria; and 4) review overall results and prepare prioritisation recommendations (Government of Kiribati, 2011: 3). Senior staff from the OB office highlighted the difficulties associated with including the priorities of line-ministries and the government in final project design, stating<sup>94</sup>:

“We try and cover our bases (regarding country ownership of development processes). We try and anticipate the questions and do whatever we can to manage the process successfully. This involves following an internal process. 1) We ask the line-ministries to submit their priority activities, 2) we try and convince the World Bank that these are our main concerns and 3) they are meant to take these into consideration when designing the *Project Appraisal Document*”.

The National Adaptation Steering Committee adopted a list prioritising KAP activities at the conclusion of these meetings. The table below documents the priority activities under Component One for illustrative purposes (Government of Kiribati, 2011).

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<sup>94</sup> Interview with Strategic Policy Mentor, Anna Percy and Acting Policy Officer for Disaster Risk Management, Michael Foon, in the Office of the President in Bairiki, Wednesday 23 February 2011.



Table Eight: Government of Kiribati priority ordering for component one.

	Activity	Ranking - Risk to life and health	Ranking - Risk to property	Ranking - Urgency	Ranking - Effectiveness	Aggregate value - Activity
C1.1.1	Develop a leak investigation and repair program (including defining isolation zones, flow measurement programs, repair strategies, and community communication & education planning).	7.9	7.1	7.9	7.4	7.6
C1.2.1	Implement the recommendations of the leak investigation and repair program	7.5	7.0	8.0	7.1	7.4
C1.2.2	Implement widespread community campaigns on water conservation and public health.	7.8	7.7	7.4	6.6	7.4
C1.2.3	Develop a framework to support community management of existing or new water reserves. Reflect changes in approach to compensation, livelihood reinstatement and social-economic profiling.	7.1	7.3	7.8	7.2	7.4
C1.3.1	Tungaru Hospital well upgrades and any additional water pumps not covered under KAP II	7.6	6.7	7.6	7.0	7.2
C1.3.2	Implement the framework to support community management of Bonriki and Buota water reserves.	7.1	7.2	7.7	6.6	7.1
C1.3.3	Implement a systematic programme of water quality monitoring, reporting and analysis using existing monitoring infrastructure on North and South Tarawa.	6.8	7.0	7.2	7.3	7.1
C1.4.1	Develop a maintenance and forward works plan for the South Tarawa water supply system and extensions	7.2	6.9	7.4	6.3	7.0
C1.5.1	Tungaru Hospital toilet blocks / sanitation upgrade	7.4	6.6	7.1	6.8	7.0
C1.5.2	Expanded roof rainwater harvesting investments (public buildings) in South Tarawa.	7.3	6.3	6.8	6.9	6.8
C1.6.1	Implement a loan system and/or subsidy for rainwater roof collection tanks for households.	6.6	7.0	6.8	6.9	6.8
C1.8.1	Coaching and technical support to MPWU for water activities.	6.9	6.2	6.9	6.7	6.7
C1.8.2	Develop a financial plan for the water supply system based on forward works plan and Asset Management methodologies	6.2	6.3	7.1	6.2	6.5
C1.9.1	Investigate the technical (including yields and water quality), and financial option of sustainable groundwater water supply in Betio, Bairiki, and Bikenibeu.	7.4	5.9	6.3	6.0	6.4
C1.9.2	Purchase of equipment, installation and operational training for KMS.	6.1	6.0	6.2	7.2	6.4
C1.10.1	Completion of the groundwater abstraction system investments in Notube and Taponibara, North Tarawa. Includes community consultations and land lease/ compensation negotiations.	5.2	5.3	7.1	6.4	6.0
C1.11.1	Continue/expand KAPII leak detection and repair pilot	3.9	4.6	7.1	4.3	5.0

Source: Government of Kiribati, 2011: 5.

Table Eight shows the NASC's lowest priority was the continuation of the leak detection and repair pilot started in the previous phase of the KAP. The second lowest priority of the Working Group was completion of the groundwater abstraction system investments in North Tarawa, including the communication consultations and land lease/compensation negotiation sub-components. These rankings directly contradict the priorities outlined in the World Bank's draft PID. The World Bank's PID ranks the government's last priority (leakage detection and repair) second, and second to last priority first (groundwater abstraction systems). Further, the World Bank's third priority, capacity building in the Ministry of Public Works and Utilities, Public Utilities Board and Ministry of Health, was the government's twelfth priority. The only priority match between the World Bank PID and the government's priorities list concerns community education regarding water conservation and public health.

The PID identifies this as the World Bank's fourth priority, whereas the government had ranked this as their third priority.

During this stage of the policy-making process, discussions also focused upon a number of activities that were not completed during the earlier phase and how these could be transferred into the third phase of the KAP. Upgrading the wells at Tungaru Hospital and installing additional water pumps were agreed priority activities for KAP Pilot Implementation Phase. However, significant project delays and ongoing implementation difficulties prohibited these activities occurring. The NASC Working Group consequently listed these activities as their fifth priority for the third phase of the KAP, and added the upgrade of the toilet blocks and sanitation facilities at the Tungaru Hospital as their ninth priority (World Bank, 2011a: 5). The Tungaru Hospital well upgrades and any additional water pumps not covered during the second phase was a priority for the OB Office that they were not prepared to drop. The rationale for this priority is explained below (Government of Kiribati, 2011b: 16):

Tungaru hospital was designed to have three water systems including rainwater and well water (for toilet flushing) as well as a connection to PUB<sup>95</sup> water supply. Both the rainwater and the well water systems have fallen into disrepair and the hospital now mainly depends on the PUB water supply (**this means that the toilets are not functional. As a result, patients, staff and visitors are forced to practice traditional sanitation practices and service the lagoon or beach**). As part of the KAP-II, the header tank for the rainwater system was replaced and tenders were let for the replacement of the associated pumps. Tender prices were higher than anticipated, not only for these pumps but for other key projects, and as a result no pumps have been replaced in KAP-II. The well water also requires upgrading.

Similarly, the toilet blocks and sanitation upgrade at Tungaru Hospital was ranked "high" by government staff during the priority setting stage. The rationale for financing this climate change adaptation activity during the third phase of the KAP is explained below (Government of Kiribati, 2011b: 17):

Along with the water supply issues, Tungaru Hospital has serious problems with its sanitation system and toilet blocks. The poor quality of water supplies in Kiribati leads to a high incidence of waterborne diseases, and serious cases including cholera and typhoid are treated at Tungaru Hospital. **Because of the poor state of the hospital sanitation system, there is transmission of disease within the**

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<sup>95</sup> PUB stands for Public Utilities Board. This is a Kiribati Government, State Owned Entity that is responsible for providing electricity, water and sewerage disposal services to residents on South and North Tarawa.

**hospital.** Hence upgrading of the hospital sanitation system is an important component of overall plans to reduce the incidence of waterborne disease in Kiribati.

Yet the World Bank (2010a: 4) lists the upgrade of water supply at Tungarau Hospital as their sixth priority.

Following extensive negotiations and reflecting upon NASC Working Group priorities, Bank staff prepared another *Project Information Document (PID)* in the appraisal stage of project design. Prepared in April 2011, this document allocates funding to the agreed components and identifies the associated sub-components. Component one (improve water resource use and management) is assigned US\$4.4million and includes the following sub-activities (World Bank, 2011b: 4):

1. Groundwater abstraction systems;
2. Water reticulation management;
3. Roof rainwater harvesting; and
4. Improved water management governance.

The NASC Working Group's lowest priorities, groundwater abstraction systems and water reticulation management (leakage detection and repair of real loses), remain the first two priorities in the Bank's new PID. Despite the Government of Kiribati's insistence, the improvement of water and sanitation facilities at Tungaru Hospital are not identified as World Bank priorities or listed as future projects. All improvements to hospital facilities were dropped by the World Bank. Here we can see the emerging tensions between the World Bank's priorities on the one hand, and the priorities of the OB Office on the other.

As a result of these tensions and disagreement about the priorities for the third phase of the KAP, the OB Office delayed the start of the final stage of the KAP by refusing to submit the PID to Parliamentary Cabinet for approval and threatening to reject KAP funding entirely. OB Office staff looked to the experiences of Bangladesh, which had recently received significant media attention for declining World Bank funds because of conditionality and lack of country-ownership, and were discussing the possibility of doing the same thing. Staff were outraged by the World Bank's disregard for their priorities and the Bank's refusal to fund the upgrade of sanitation facilities at Tangaru Hospital<sup>96</sup>. The toilet blocks and water tanks at the national hospital were a sticking issue for the OB Office because they felt many of their

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<sup>96</sup> Interview with Strategic Policy Mentor, Anna Percy and Acting Policy Officer for Disaster Risk Management, Michael Foon, in the Office of the President in Bairiki, Wednesday 23 February 2011.

earlier priorities had been dropped by the World Bank without adequate consultation. Senior staff<sup>97</sup> from the OB Office stated during an interview:

“Although the government worked in consultation with the Bank to create the list of priorities [for the KAP], there isn’t any agreed process about what projects are dropped during the lifespan of the project. It would be interesting to investigate whether it’s KAP or World Bank projects that are dropped by the Bank due to unforeseen circumstances the project.”

This tension between the OB Office and the World Bank caused negotiations for the final phase of the KAP to come to an abrupt halt. Members of this coalition expressed dissatisfaction with KAP performance and how little CCAM had been achieved.

### **Negotiations for the NAPA-2**

While proponents of the KAP were caught up negotiating the third phase of the KAP, proponents of the NAPA were working towards a second iteration of the project (NAPA-2). The NAPA-2 was designed to be the “implementing phase of the NAPA and implement proprieties identified in the NAPA that the KAP isn’t involved in”<sup>98</sup>. UNDP staff assisted the Environment and Conservation Department within MELAD to develop a concept paper<sup>99</sup>, address new priority areas and access funding through the Global Environment Facility to implement new projects. The costing of the NAPA-2 was directly linked back to the third phase of the KAP. The UNDP Programme Field Officer explained<sup>100</sup>:

“The total budget available from the Global Environment Facility is \$10million. This figure has recently increased. KAP Phase 3 is submitting a separate proposal worth \$3.5million through the World Bank. We are assuming that we can access the remaining balance of \$6.5million. We want to do our project costing accurately and ensure we can access the full amount available through the LCD Fund in the Global Environment Facility. This requires readdressing the costing outlined in NAPA-1.”

The proponents of the KAP appear to have been completely unaware that proponents of the NAPA were working to access the Global Environment Facility funding and initiate NAPA-2. MELAD and UNDP staff implied that a healthy relationship did not exist with the KAP cohort and it was best to keep their activities “under the radar”. The Deputy Secretary for

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<sup>97</sup> Interview with Strategic Policy Mentor, Anna Percy and Acting Policy Officer for Disaster Risk Management, Michael Foon, in the Office of the President in Bairiki, Wednesday 23 February 2011.

<sup>98</sup> Interview with Momoe Kaam, UNDP Programme Field Officer in Kiribati, in the UN Joint Presence Office, on Monday 14 March 2011.

<sup>99</sup> According to the UNDP Programme Field Officer, the concept paper is referred to as a Project Identification Framework (PIF) and was based on the priorities and template outlined in the NAPA-1.

<sup>100</sup> During an interview on 14 March 2011 at the UN Joint Presence Office.

MELAD explained, “If we have different perspectives about the project or priorities, the funds are delayed (by proponents of the KAP). They (the World Bank and OB Office) hold onto our funding applications and try to delay the application process. They have their own thinking about certain strategic objectives and priorities. But the delay in funding means that we can’t implement urgent projects”<sup>101</sup>. Separate coalitions within the government were working to submit separate applications for competing climate change adaptation programs of work in Kiribati.

### **The outcome of the NAPA and the KAP**

A World Bank review (2011c: iv) of the KAP found that 60 per cent of Ministerial Operational Plans integrated climate change and disaster risk reduction strategies between 2007 and 2010. However, the review also went on to report that evidence of climate change in the Ministerial Operational Plans was not indicative of CCAM informing staff practices or behaviours. The review concludes that mainstreaming was largely unsuccessful and the line-ministries still consider climate change adaptation MELAD’s responsibility (World Bank, 2011c: 12). Staff from across the line-ministries agreed that CCAM had been largely unsuccessful because an awareness of climate change was only evident in a small number of Ministerial Operational Plans<sup>102</sup>. Interview participants went on to suggest that even when climate change was mentioned, it did not indicate that CCAM was shaping decision-making, ministerial activities or budget cycles. Participants felt that the NAPA and the KAP had achieved very little impact because the ministries had not taken up CCAM.

The comments below illustrate the problems associated with incorporating CCAM in the Ministerial Operational Plans and allude to a general disenchantment with the NAPA and the KAP. The Senior Policy Mentor, Anna Percy and Acting Policy Officer, Michael Foon from the Strategic National Policy and Risk Assessment Unit stated during an interview<sup>103</sup>:

“Phase I [of the KAP] was set up to mainstream climate change throughout the government. But I guess it has largely failed. Although they did produce the climate change framework, climate change is barely mentioned in the National Development Plan”.

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<sup>101</sup> During an interview 16 February 2011 in the Environment and Conservation Division Office, Bikanibeu.

<sup>102</sup> For example, Riibeta Abeta, the Climate Change Officer for the Environment and Conservation Division within MELAD shared this opinion during an interview on 17 February 2011 in the Environment and Conservation Division Office in Bikanibeu.

<sup>103</sup> In Office of the President in Bairiki, Wednesday 23 February 2011.

Riibeta Abeta, the Climate Change Officer for the Environment and Conservation Division within MELAD agreed<sup>104</sup>:

“Everyone in government realises that integrating climate change is important. Actually “doing it” remains elusive. Despite the fact we know what it means – we don’t know what it practically involves. We need to integrate climate change into everything. But most ministries are still working in isolation. They have their own goals, strategic plans and priorities. They need to align climate change with their current policies and objectives. Most ministries still think that it’s not their responsibility to think about climate change”.

Tebufonga Ereata, as Director of Lands within the Land Management Division for MELAD reiterated this point during an interview on 15 February 2011<sup>105</sup>:

“They [the KAP and NAPA teams] have faced significant problems associated with mainstreaming adaptation policies throughout government. The setup is the problem. The commitment of the ministries is lacking. Involving the Office of the President is tricky. The OB essentially oversees the other ministries. The ministries are reluctant because it’s really to do with the benefits. It’s just more work for them. All ministries and divisions already have management plans and strategic goals. Incorporating adaptation policies just creates more work – with little direct benefits for them.”

Carlo Iacouino, Communications Office for the KAP explained the failure of mainstreaming saying<sup>106</sup>:

“From the beginning, the Environment and Conservation Division [within MELAD] has always had the best trained staff regarding climate change. From the start, it was assumed that the division that they would direct the entire project. But it was understood within the President’s Office that climate change affects all aspects of life and required a whole of government approach. This would also allow the government to draw upon particular expertise in various ministries. Consequently, the Office of the President has control of project management [for the KAP]. The friction between these two government bodies [OB Office and MELAD] has never really been overcome. This has been the main obstacle to implementing climate change policies across government”.

In summary, both the World Bank (2011) review of the KAP and these comments suggest that neither the NAPA, nor the KAP, had managed to embed an awareness of climate change in the Ministerial Operational Plans and daily practices.

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<sup>104</sup> Interview in the Environment and Conservation Division Office in Bikanibeu, Thursday 17 February 2011.

<sup>105</sup> The interview was held in the Lands Management division office, Bairiki.

<sup>106</sup> Interview was 2 February 2011 in the Bairiki square café.

## **Political analysis**

Why did these efforts to promote CCAM ultimately fail? And why did the KAP progress further than the NAPA? In this section, I provide an answer drawing on Olsen's four pre-conditions for successful reform and the notion of epistemic communities.

As explained earlier, Olsen (1991) suggests scholars should focus upon four factors when trying to understand how institutions shape policy outcomes: 1) the normative match between reforms and institutions; 2) the normative match between reforms and society; 3) the ambiguity of the reformers' intentions; and 4) the organisation of reform. I apply these criteria to understand the NAPA and the KAP in the following section. I extend Olsen's (1991) concept of normative matching by suggesting that it is useful to consider the degree of normative matching for each pre-condition. Table Two demonstrates that it is possible to have strong, intermediate and weak degrees of normative matching and that performance against each pre-condition can change over time. It suggests that strong performance against the first and fourth pre-conditions is required for effective reform implementation. Applying these criteria helps us to identify the role of politics and values during climate change adaptation policy-making in Kiribati and explain why CCAM implementation was largely unsuccessful.

### **Pre-condition one: The normative match between reform and institution**

#### ***The NAPA***

The Government of Kiribati initially demonstrated strong support for the NAPA. The government was led by MELAD staff members who understood climate change as an environmental problem that should be addressed through sustainable development projects, community participation and education campaigns. MELAD staff were recognised for their technical expertise and responsibility for overseeing the government's execution of all Multilateral Environment Agreements. The government also relied on advice from MELAD staff for the design and implementation of the NAPA and the KAP.

During the early stages of the NAPA, the government's normative position was strongly aligned with MELAD and the UNDP. The government supported the NAPA's development-driven approach to climate change adaptation that focused upon a combination of soft and hard adaptation activities and the aim to build adaptive capacity at the local level.

However, the normative match between the government and proponents of the NAPA decreased over time as the KAP gained momentum. The World Bank, in partnership with the OB Office, started jostling for changes during the review of the NAPA and the KAP at the end of 2005 as discussed above. World Bank staff suggested that the government was incapable of implementing the NAPA and KAP projects simultaneously because of limited resources and institutional capacity. The World Bank put pressure on the government to change the ministerial agency responsible for leading climate change adaptation initiatives and shift power away from MELAD and towards the OB Office.

Government favour shifted away from the NAPA and towards the KAP because the government became caught up in the Bank's technology-based view of mainstreaming and the opportunities to protect state assets and pursue economic development opportunities. During phase two of the KAP, in particular, the government turned away from its values base and preference for community-based adaptation activities and shifted attention towards the KAP. OB Office staff let themselves be influenced by World Bank staff and the influence of the epistemic coalition increased during this time. However as we will see in the next section, the normative match between the government and proponents of the KAP decreased at the end of the second phase of the KAP.

### *The KAP*

Government support for the NAPA between 2003 and 2005 was initially stronger than the KAP. However, government support swung towards the KAP after a review of both projects in 2005 and the consequent restructuring (described above). The KAP enjoyed strong support from the government during a majority of its second phase – between 2005 and early 2010. Evidence of the KAP's favour with the government includes the establishment of the National Adaptation Steering Committee and the increasing role of the OB Office. The normative match between the government and the KAP was strong (during phase two of the KAP) and the government backed the coalition's efforts to implement technology-driven mainstreaming and hard adaptation initiatives.

Despite this coalition's favour with the government during phase two of the KAP, tensions emerged during the negotiations for phase three in 2010. The government started to question and pull back from the KAP because of concerns around country ownership and conditionality. Conflict emerged between the World Bank and OB Office because competing values became apparent. During earlier phases of the KAP, the Government felt that both the



OB Office and World Bank favoured hard adaptation projects because that was the best use of climate change financing in Kiribati. Shared values and an approach to climate change adaptation enabled these groups to behave like an epistemic community during policy-making in Kiribati. However, during the negotiations for the third phase of the KAP, the OB Office began to feel that the World Bank was pushing for hard adaptation priorities because that suited World Bank preferences, rather than it being the best suite of outcomes for Kiribati. The Government, and the OB Office, started to doubt the sincerity of the World Bank's values base and positioning during CCAM.

### **Pre-condition two: The normative match between reform and society**

#### ***The NAPA***

The First and Second National Consultations provided an opportunity for community leaders and the general population to participate in climate change adaptation discussions, and identify vulnerabilities and traditional coping mechanisms. Participants outlined the importance of funding activities that might directly affect local peoples' everyday lives and help people to improve their adaptive capacity. Environmental vulnerabilities identified included "water supplies; coastal erosion; declining marine and terrestrial resources; climate-related diseases such as diarrhoea, sore eyes, dry cough and heat stroke" (Government of Kiribati, 2007a: 3). Participants stressed the urgent need for "improvement on existing sea walls and causeways [and]...the making of channels along the solid structures to allow water exchange and other biological processes to function" (Government of Kiribati, 2007a: 73). Participants suggested that "mangrove planting and seawall construction along vulnerable coastlines coupled with planting trees and bushes that will keep the shorelines from bad weather and rising sea level" should be implemented to address these physical and environmental vulnerabilities (Government of Kiribati, 2007a: 3). A combination of soft and hard adaptation activities was considered favourable during the National Consultations. While these preferences were designed to inform project priorities for both the NAPA and the KAP, participants felt that members of the NAPA coalition incorporated their views to the greatest extent.

The vulnerabilities and adaptation strategies identified by community representatives directly match the proprieties identified by MELAD and included in the NAPA. In addition, as outlined in Chapter Four, the aspirations of MELAD staff were for environmentally-focused climate change adaptation projects in the future, such as protecting sea cucumber stocks, creating a coastal management plan and the reintroduction of traditional agricultural practices

to villages on the outer islands. The correlation between community priorities, outlined during the National Consultations, and goals of the NAPA, indicate a similar values base. Community representatives and proponents of the NAPA perceived climate change as an environmental problem that required improved adaptive capacity at the local level and adaptation strategies that aimed to strengthen environmental resilience to extreme weather events and rising sea-level. The normative match between the community and the NAPA was relatively strong.

### ***The KAP***

Unlike the NAPA, there was great dissatisfaction amongst the community about the policy-making processes associated with the KAP. In particular, many agreed that the World Bank used the National Consultations as a token to “tick the box” of community participation and did not adequately incorporate the views and priorities of the community and government. For instance, a Professor from the Australian National University and Technical Expert in Kiribati lamented<sup>107</sup>:

“Priorities of the KAP Phase 1 resulted from the National Consultations. However, we couldn’t get the World Bank to focus on these priorities. Even if they were initially incorporated in the original design, they were dropped by the World Bank during the projects. They feel much more comfortable building sea walls [rather than implementing the priorities identified by the I-Kiribati]. They didn’t use the National Consultations to guide their priorities in reality.”

The Professor also suggested that the Bank was determined to achieve certain outcomes, even if it meant ignoring the wishes and priorities of the government. This sentiment was shared by staff from the OB Office who stated that<sup>108</sup>:

“There are criticisms regarding the World Bank’s decision-making processes. Although the government worked in consultation with the Bank to create the list of priorities, there isn’t any agreed process about what projects are dropped during the lifespan of the project. It would be interesting to investigate whether it’s KAP/OB Office or World Bank projects that are dropped by the Bank due to “unforeseen circumstances” during the project.”

These comments suggest that the normative match between the World Bank’s reform agenda and society in Kiribati was not as strong as the NAPA. The community expressed concerns about the Bank’s power to steer policy change in certain directions and dismiss priorities of the government and participants during the National Consultations.

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<sup>107</sup> During an interview on 30 September 2011 at the Australian National University campus, Canberra.

<sup>108</sup> Interview with the Strategic Policy Mentor, Anna Percy and Acting Policy Officer, Michael Foon, both from the Strategic National Policy and Risk Assessment SNPRA Unit housed in the Office of the President, 23 February 2011.

The community was equally dissatisfied about the KAP's failures to implement climate change adaptation activities at the local level. Locals felt that the priorities identified during the National Consultations were not adequately incorporated into the KAP project design and that the KAP did not allocate enough resources for improving adaptive capacity at the local level. The Officer in Charge of the Kiribati Association of Non-Government Organisations, for instance, stated, "The KAP isn't affecting people's lives. They are more focused on protecting state assets and working within Ministries"<sup>109</sup>. Similarly, a New Zealand PhD candidate from the University of Waikato stressed that "The KAP needs to work more closely with the local people"<sup>110</sup>. The President of Kiribati Climate Change Connections (a climate change advocacy group) agreed with the concerns that the KAP did not fairly incorporate the views and priorities of the I-Kiribati questioning, "I'm not sure whether the KAP has consulted I-Kiribati people. We need to know what these people [the I-Kiribati] think and whether they can do the project themselves"<sup>111</sup>. These examples demonstrate that the priorities of the KAP and the community did not align to a large extent. The normative match between the KAP and I-Kiribati society was weak throughout the project.

### **Pre-condition three: The ambiguity of reformers' intentions**

#### ***The NAPA***

The NAPA process was informed by UNFCCC guidelines and procedures. While the international community is still discussing the merits of various climate change adaptation policy options, the priorities for the first phase of the NAPA were clearly identified and articulated from the project's outset. All parties to the Convention and the UNDP had a clear understanding of project goals, financing and objectives. MELAD and the government were well informed regarding the NAPA project. The I-Kiribati understood that the NAPA was trying to help local people learn sustainable development practices, improve communication pathways and implement climate change adaptation strategies that were designed to decrease their vulnerability to extreme weather events and natural hazards. The level of ambiguity about the reformers' intentions was low.

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<sup>109</sup> Tiaon Bauntaai, Officer in Charge at the KANGO shared this view during an interview on 2 March 2011 in the KANGO office, Bairiki.

<sup>110</sup> This opinion was shared during an interview on 8 March 2011 at the café in the Bairiki town square.

<sup>111</sup> Pelenise Alofa, as President of Kiribati Climate Change Connections made these comments during an interview on 28 February 2011 in Tabonga village, South Tarawa.

### *The KAP*

The World Bank conducted routine monitoring and evaluation procedures throughout the KAP and each phase was consequently modified, because Bank staff felt that government ministries did not have the internal capacity or political will to achieve CCAM within the prescribed timeframes. Poor uptake of the policy reforms and dissatisfaction amongst the wider community signalled to the Bank that the necessary normative matches were not strong enough to enable effective policy change. The World Bank became increasingly vague about project priorities and unclear about the project's rationale during negotiations for the final phase of the KAP because the coalition sensed growing opposition within the government and local communities. This only further exacerbated discontent within the government and general population. There was a common sentiment that the Bank was too ambiguous and when the donor did say what it was intending to do next, the Bank often changed its mind anyway<sup>112</sup>. The ambiguity of the World Bank's reform intentions and shifting priorities further decreased support for the KAP. The high level of uncertainty surrounding the Banks' intentions for the last phase caused the OB Office to stall the policy-making process.

### **Pre-condition four: Institutional capacity to organise the reform process**

#### *The NAPA*

MELAD and the UNDP's leverage to manage the reform process and resources to support mainstreaming were intermediate. As a line-ministry, MELAD has less institutional power compared with the OB Office. MELAD does not have the same authority to influence the other line-ministries, alter their Ministerial Operational Plans and encourage the uptake of mainstreaming. MELAD's ability to generate a whole of government response to climate change and persuade the line-ministries to practice CCAM was limited.

The NAPA was worth less financially compared to the KAP. The project had less international prestige and significance because it was solely funded by the Least Developed Country Fund rather than the Global Environment Facility. The LDC Fund is a mechanism specifically designed for LDCs, rather than all countries that are recognised as being at risk of anthropogenic climate change. The KAP was considered more important because funding was won on the grounds of the project's merit and the special circumstances of Kiribati, rather than the country's status as a LDC. The financial security of the NAPA was also less than the

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<sup>112</sup> Interview with the Strategic Policy Mentor, Anna Percy and Acting Policy Officer, Michael Foon, both from the Strategic National Policy and Risk Assessment SNPRA Unit housed in the Office of the President, 23 February 2011.

KAP. Initially, funds were only allocated for Kiribati to develop and submit the NAPA. No funds were initially promised for implementing the adaptation activities identified.

However, during the negotiations for the third phase of the KAP, proponents of the NAPA were moving to apply for funding to implement the activities that were prioritised for the first phase of the NAPA. NAPA-2 would be worth significantly more than the third phase of the KAP<sup>113</sup> and essentially install MELAD as the lead climate change adaptation ministry, rather than the OB Office. Yet access to funding, and the control of that funding, is not the most important aspect of pre-condition four. Performance against this pre-condition is influenced, to a greater extent, by the capacity of the coalition to influence the policy-making process and values of others. The position of the coalition, within the structure of the institution, helps to shape performance against this pre-condition.

Technical assistants were not heavily involved with the NAPA. MELAD staff developed the project themselves to a large extent. To my knowledge (informed by research and fieldwork), MELAD did not have any expats or foreign experts working in the Technical Climate Change Study Team. Similarly, the UN Joint Presence Office on South Tarawa was staffed entirely by nationals at the time of my fieldwork. I am not suggesting that staff working on the NAPA were less highly qualified or well equipped to implement CCAM. Simply, I submit that they did not bring to the NAPA international experiences or lessons learned from similar projects elsewhere. Rather than having an impact upon the quality of the ideas presented in the NAPA, I suggest that lack of technical assistance decreased the status of the NAPA. From my research, I have found that the I-Kiribati often hold foreigners in high esteem because it is believed that they are more informed or better educated. As a result, the status of NAPA within the community was significantly less than the KAPA.

The NAPA's performance against this pre-condition was intermediate because MELAD had limited access to persuasive strategies, fewer financial resources and limited input from technical assistants.

### ***The KAP***

The KAP's performance against this pre-condition changed over time. The OB Office initially had a high level of institutional capacity to organise the reform agenda and build political

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<sup>113</sup> The NAPA-2 was worth \$6.5million whereas the third phase of the KAP was only applying for \$3.5million from the LDC Fund. Momoe Kaam, UNDP Programme Field Office for Kiribati shared this information during an interview in the UN Joint Presence Office, Monday 14 March 2011.

support for mainstreaming amongst the line-ministries. However, between phases two and three of the KAP, tensions between the OB Office and the World Bank escalated and their ability to work collectively to promote mainstreaming across the government diminished. Internal conflict within this epistemic coalition meant that their institutional capacity to introduce mainstreaming amongst the line-ministries dropped from high to weak.

This coalition had a high degree of institutional capacity to organise the reform process and introduce mainstreaming across the government during phases one and two of the KAP. Performance against the fourth pre-condition was strong because this coalition had a number of strategies to overcome resistance and the resources to back these strategies. The OB Office is the lead government agency in Kiribati and has the discretionary powers to make domestic appointments, sign off on international development projects, manage the *National Development Strategy* process and control discourse in the House of Parliament. The magnitude of the OB Office's powers had a significant impact upon the coalition's ability to ensure compliance with mainstreaming during phases one and two.

The volume of financing attached to the KAP gave this coalition considerable leverage during the policy-making process. The first two phases of the KAP were worth US\$14.55 million collectively. This volume of financing is significantly more than the NAPA, which was worth US\$200,000. The primary donor was the Global Environment Facility, an international financing mechanism designed specifically to address climate change adaptation concerns. This connection with the Global Environment Facility instilled this coalition with a sense of international influence and importance. For example, the coalition stressed that the "KAP was the first Bank investment in Kiribati and first adaptation project of this scale in the region, with no possibility to compare or gain any insights from previous or similar efforts. 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" (World Bank (2011c: 17)). The volume of financing and the KAP's significance as the first project to implement adaptation activities in an SIDS context increased this coalition's influence.

Strong performance against the fourth pre-condition is also owed to the input of technical assistants. Technical assistants were flown in to design, manage and provide specialist advice to the Project Management Unit throughout the KAP. The KAP bi-lateral funding partners, Australia and New Zealand, each funded a full time expatriate to live in country and undertake extensive capacity building and skills transfer exercises. The Communications

Officer for the KAP was a highly qualified Australian funded by the Australian Government through the Australian Youth Ambassador Development scheme. Similarly, the Strategic Policy Mentor position in the Disaster Risk Management Unit within the OB Office was filled by a senior consultant from New Zealand. These senior experts significantly contributed to the success of mainstreaming during the first two phases.

The above factors significantly contributed to strong performance against this pre-condition during phases one and two of the KAP. These factors did not change during the third phase. Instead, internal conflict and shifting normative values broke down relations within the coalition. The World Bank's increasing ambiguity about their intentions for the final phase of the project caused tensions to increase with the OB Office. The coalition became so focused on reaching agreement about priority adaptation activities and overcoming internal feuds, it did not spend enough time and resources maintaining compliance with the mainstreaming process amongst the line-ministries. Performance against this pre-condition consequently dropped to poor, and hence mainstreaming became ineffective.

## **Conclusion**

I have used Olsen's notion of normative matching in this chapter to explain: a) why CCAM was largely unsuccessful; and b) why the KAP had more success than the NAPA. With regards to point a), I have argued that the step-by-step models for implementing CCAM espoused by the UNDP and the World Bank both failed to account for the role of politics and values during mainstreaming. With regards to point b), I have argued that the KAP had more success long term, despite poor performance against three of the four preconditions, because this coalition had greater capacity and resources to push their technology-based approach to CCAM.

## Chapter Six - Conclusion

Policy-making, and climate change adaptation mainstreaming (CCAM) in particular, is political (see, for example, Grindle & Thomas, 1991; Rodan, Robison & Hewison, 2006). Competing values and interests mean that stakeholders approach mainstreaming from different perspectives. People typically disagree about the definition of the problem and the corresponding priorities, rather than the process of mainstreaming itself. Those holding a technology-based view of mainstreaming aim to ensure that technologies and physical infrastructure investments are suitable to withstand future climatic conditions and the predicted impacts of climatic change. Hard adaptation activities are favoured, such as building sea walls and installing rainwater tanks. In contrast, proponents of a development-based view believe that mainstreaming should reduce vulnerability by integrating adaptation and sustainable development priorities. This group favours a combination of soft and hard adaptation activities. Examples of soft adaptation initiatives include community education campaigns and improving the national government emergency response strategy. I have used a CCAM spectrum to critique four CCAM models widely used in a developing country context, namely, those developed by the UNDP/UNEP, IIED, OECD and the World Bank.

In order to improve our understanding of mainstreaming and mainstreaming implementation in a developing country context, I have provided a case study from the Republic of Kiribati. Kiribati is an important case study because it represents the first application of UNFCCC financing for the implementation of pilot climate change adaptation projects in the world (Global Environment Facility, 2004: 15). The KAP represents the World Bank's first operation to focus exclusively on climate change adaptation in the East Asia and South Pacific region (World Bank, 2003, World Bank, 2005a: 2) and one of their first attempts to implement CCAM in the South Pacific (World Bank, 2003: 2). Similarly, important lessons learned have resulted from the UNDP's approach to the NAPA process in Kiribati<sup>114</sup>.

### **Research question one: Why has the Government of Kiribati failed to effectively implement climate change adaptation mainstreaming?**

The Government of Kiribati has failed to effectively implement CCAM because the politics of mainstreaming was not taken into account and built into the step-by-step guides used by the UNDP and World Bank.

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<sup>114</sup> This view was shared by many, but in particular, Momoe Kaam, the UNDP Programme Field Officer on 14 March 2011 in the UN Joint Presence Office, Teoraereke.



In Kiribati, the NAPA initially experienced more success than the KAP because performance against pre-conditions one, two and three was strong and intermediate against the fourth. The NAPA was supported by the government and society and there was a low level of ambiguity about the project's scope. The NAPA achieved more than the KAP, despite fewer resources and institutional capacity during this time. However government favour shifted towards the KAP at the end of 2005 and the NAPA quickly lost momentum because key proponents of this coalition fell out of favour with the government. The KAP was relatively successful between 2005 and 2010 because of strong performance against pre-conditions one and four. The KAP coalition enjoyed strong support from the government and had a high level of capacity and resources to manage the mainstreaming process. However, tensions emerged during the negotiations for phase three of the KAP in 2010 and the government started to pull back from the KAP because of concerns around country ownership and conditionality. Conflict within this coalition, between the World Bank and the OB Office, caused performance to drop against the first pre-condition and consequently stall the policy-making process. This coalition could not circumnavigate nor adequately respond to these pressures because the political nature of mainstreaming was not considered in the World Bank's step-by-step model for CCAM implementation.

**Research question two: What does this case suggest about the conditions under which developing country governments successfully adopt and implement CCAM?**

The case study I have presented here helps us to understand the conditions under which developing country governments can successfully adopt and implement mainstreaming. At the most general level, CCAM implementation is more likely to be successful if there is a high degree of political support for the mainstreaming agenda (pre-condition one). In order to achieve this, the politics and values of all stakeholders need to be taken into consideration. Participatory development techniques, such as community-based adaptation, provide an effective mechanism for being responsive to traditional ecological knowledge and different ontological perspectives.

Further to this, institutional capacity and resources are equally important for ensuring that communication about the mainstreaming process is clear and inclusive (pre-condition four). Change management techniques should be employed to share with stakeholders what

mainstreaming will mean for them and why it is important. A low degree of ambiguity about mainstreaming is important for encouraging people to support implementation because people are more likely to incorporate an awareness of climate change into their day-to-day practices if they can understand why it is important (pre-condition three).

Finally, CCAM implementation is more likely to be successful if there is a high degree of donor harmonisation. Donor harmonisation involves donor countries and implementation agencies coordinating, simplifying their procedures and sharing information with other stakeholders in order to avoid duplication<sup>115</sup> (OECD, 2005). Harmonisation is especially important in a SIDS context because many recipient governments do not have the capacity to effectively absorb and deliver the quantity of aid funding and projects available. The case study presented here has illustrated the damage that can result from poor donor harmonisation and two implementation agencies running separate and parallel mainstreaming initiatives.

Adopting a sector-wide approach (SWAP) is one option for increasing donor harmonisation and ownership of the mainstreaming process. Under government leadership, SWAPs aim to adopt a common approach and procedures under a single sector policy and expenditure program. It is hoped that over time, recipient governments will develop procedures to disburse and account for all funds and consequently increase their ownership of the process (Brown *et al*, 2001: 7). The approach can be characterised “as one in which sector strategy is formulated and costed, matched to available finance through an iterative process, converted to a work plan, and formalised in agreements between the implementation agency and the sources of finance” (Brown *et al*, 2001: 8). SWAP operating principles share many similarities with the programme-based approaches common under the *Paris Declaration on Aid Effectiveness* (OECD, 2005) and the *Accra Agenda for Action* (OECD, 2008). A renewed focus on increasing donor harmonisation and country ownership during the mainstreaming process would unquestionably help to create favourable conditions for CCAM implementation.

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<sup>115</sup> Harmonisation is one of five principles for making aid more effective and is outlined in the *Paris Declaration* (OECD, 2005). The other principles are ownership, alignment, results and mutual accountability.

### **Research question three: What are the implications vis-à-vis the development of effective strategies for implementing CCAM in SIDS?**

The simple answer is CCAM strategies, and the step-by-step guides designed to inform implementation, should take politics and values into account. Politics and values are the two conditions that have the greatest bearing on the success of mainstreaming implementation in a developing country context.

But how can we take politics and values into account during CCAM? I make three recommendations about how the mainstreaming process could address this issue and consequently be more effective in a SIDS context. Firstly, step-by-step guides for CCAM implementation should be country-specific and place a greater emphasis on being responsive to social and political factors. Secondly, participatory approaches at the local level would enable the development of multidimensional and multiscale adaptation approaches that take sustainable development initiatives into account. Thirdly, collaboration and partnerships amongst public, civic, and private sectors are crucial for CCAM success.

#### **Country-specific step-by-step guides for mainstreaming implementation**

It is crucial that the government and implementation agency agree on the approach taken and mainstreaming priorities. This means clarifying if mainstreaming will be informed by a technology or development driven approach and focus on hard or a combination of soft and hard adaptation activities. In principle, the implementation agency should support the governments' wishes and priorities. However, this does not always occur in practice. Implementation agencies, including the UNDP, IIED, OECD and World Bank, typically have strong views about the approach taken, which are manifested in the step-by-step guides they espouse for CCAM implementation. In most instances, each implementation agency pushes developing countries to use their generic step-by-step guide to inform the mainstreaming process.

The step-by-step model used for CCAM implementation is an important factor typically determined by the implementation agency involved. The most holistic models consider: 1) communication; 2) accessible, quality and useful climate science information; 3) equal participation of stakeholders; 4) trade-offs with other policy items; 5) opportunities for capacity building; 6) the degree of country ownership; 7) early planning; 8) implementation support; 9) evaluation and review; and 10) consideration of social and political factors.

However as we learned in Chapter Two, a majority of step-by-step guides do not give due consideration to all ten factors, and in particular, the role of social and political dynamics. The four step-by-step guides critiqued in Chapter Two all fail to give due consideration to the role of social and political factors during CCAM implementation and helps to explain why CCAM implementation in Kiribati was largely unsuccessful.

In order to overcome this inherent weakness, and give due consideration to the role of politics and values in the step-by-step guide used for CCAM implementation, I recommend designing or modifying a step-by-step guide for each country or context. We know that “climate change is context dependent and it is uniquely linked to location” (Mimura *et al*, 2014: 875). Experiences of climate change are highly localised and affect different groups within, and between, communities differently. Social context, including cultural values, psychology, language and ethics, plus institutions and governance all shape the impacts of climate change and adaptation needs (Jones *et al*, 2014: 203). These determinants need to be built into the decision-making framework and corresponding CCAM guide. Mainstreaming implementation is more likely to be effective if the CCAM model used is specifically designed for each unique context.

Building on this, development-based approaches to CCAM models that are positioned at the “mainstreaming plus” end of the CCAM spectrum are more likely to be successful in a SIDS context. Development-based approaches to CCAM take into consideration the underlying drivers of vulnerability and holistically consider climate change adaptation, disaster-risk-reduction and development agendas (Ayers *et al*, 2014: 40; Klein, 2008; Klein *et al*, 2007). An integrated response is important as SIDS governments typically have fewer resources and capacity to implement a large number of activities simultaneously, as evidenced by the case study presented here. The emphasis on hard and soft adaptation initiatives is also important in a SIDS context as technological solutions are not always suitable at a local scale (Klein, 2008: 40). There is growing consensus of the need for ecosystem-based, institutional and social measures (Mimura *et al*, 2014: 877).

### **Participation**

Enhancing stakeholder participation during the mainstreaming process is essential for effective implementation. CCAM step-by-step guides should place a greater emphasis upon reaching out to all stakeholder groups, including local, regional and national governments, private sector businesses, the not-for-profit sector, community groups, households and local

individuals. Community participation should be built into each step in the mainstreaming process, rather than one discrete activity that is “ticked off” by implementation agencies at the beginning. Building reflexivity into community engagement is one way to uncover developmentalist assumptions inherent to participatory activities (Prance, 2015). Implementation agencies too often fail to develop a nuanced understanding of different ontological perspectives and the people with whom they are working (Barnett & Campbell, 2010: 2). In order for community development to be effective and enable CCAM implementation, an emphasis on reflexive practice would encourage stakeholders to improve their understanding of their own ontological biases and become more aware of, and responsive to, the interplay between different ontologies during mainstreaming (Prance, 2015).

### **Collaboration**

This dissertation has brought to life the partnerships and coalitions that formed between different institutions in order to achieve mainstreaming. On the one hand, the UNDP joined forces with MELAD to implement CCAM via the NAPA, and on the other, the World Bank worked with the OB Office to achieve mainstreaming via the KAP. However as we have seen, both approaches were largely unsuccessful. Competing values and priorities prevented these coalitions from working together. Adopting a sector-wide approach to improve donor harmonisation and incorporating reflexivity into community engagement activities are two recommendations for overcoming these inherent weaknesses. At the same time, it is important to focus on increasing collaboration amongst stakeholders.

Effective CCAM implementation demands partnerships amongst public, civic and private sectors. A combination of top-down<sup>116</sup> and bottom-up<sup>117</sup> approaches is required for grappling with the complex, diverse and context-dependent nature of adaptation to climate change (Mimura *et al*, 2014: 871). National level actors play an important role in setting the agenda for climate adaptation and coordinating activities at the regional and local levels of government (Mimura *et al*, 2014: 871). However, authors (for example, Connell, 2010; Iati, 2008; Nunn *et al*, 2014; Nunn, 2010, 2009) have cautioned against “a too heavy emphasis on national guidance, suggesting that centralised approaches may in some cases constrain local

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<sup>116</sup> Top-down tools “often include downscaled simulated climate scenarios for regional level projections, accompanied by expert opinions. These are applied using multi-criteria optimisation methods, evaluation of feasibility that may include cost effectiveness such as cost-benefit analyses, and assessment of potential impact severity” (Mimura *et al*, 2014: 883).

<sup>117</sup> Bottom up approaches encourage “those affected or at risk to examine their own impacts and vulnerability and incorporate adaptive options for the appropriate sector or community” and relies heavily upon the use of stakeholder participatory methods (Mimura *et al*, 2014: 883).

initiatives and create unfortunate dependencies” (Mimura *et al*, 2014: 887). A collaborative approach needs to place equal importance on the input provided by national and local stakeholders. Improving collaboration between different stakeholders will also help to bridge the divide between climate change adaptation, disaster risk management and sustainable development initiatives, and consequently improve the effectiveness of CCAM implementation (Nunn *et al*, 2014: 234). Collaborating with key stakeholders will help to shed light on the political and social factors that shape mainstreaming and consequently improve the effectiveness of CCAM implementation in a SIDS context.

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## Appendix one: Interview participants

February 2011			
Participant	Role and position	Date and time	Location
Tebufonga Ereata	Director of Lands, Lands Management Division, Ministry of Environment, Lands and Agriculture Development	9am Tuesday 15 February 2011	Lands Management Division office, Bairiki
Tebdranga Tioti	Deputy Secretary, Ministry of Environment, Lands and Agriculture Development	11am Wednesday 16 February 2011	Environment and Conservation Division Office, Bikanibeu
Riibeta Abeta	Climate Change Officer, Environment and Conservation Division, Ministry of Environment, Lands and Agriculture Development	11am Thursday 17 February 2011	Environment and Conservation Division Office, Bikanibeu
Carlo Iacouino	Communications Officer, Kiribati Adaptation Project	1pm 22 February 2011	Café, Bairiki
Ms Anna Percy and Mr Michael Foon	Strategic Policy Mentor and Acting Policy Officer, Disaster Risk Management, Office of the President	11am Wednesday 23 February 2011	Office of the President, Bairiki
Karibanang Tamuera and Taratau Kirata	Officer in Charge and Senior Fisheries Officer, Fisheries Division, Ministry of Fisheries and Marine Resources Development	10am Thursday 24 February 2011	Fisheries Division Office, Taneae
Kaiarake Taburuea	Project Manager, Kiribati Adaptation Project, Office of the President	2pm Friday 25 February 2011	KAP Office, Bairiki
Pelenise Alofa	President, Kiribati Climate	10am Monday 28 February 2011	Tabonga Village

	Change Connections		
March 2011			
Tianeti Beenna	Deputy Secretary, Agriculture Division, Ministry of Environment, Lands and Agricultural Development	9am Tuesday 1 March 2011	Division of Agriculture, Taneae
Moia Tetoa	President, Aia Maea Ainen Kiribati (AMAK)	5pm Tuesday 1 March 2011	AMAK office, Bikenioubou
Tiaon Bauntaai	Officer in Charge, Kiribati Association of NGOs	9am Wednesday 2 March 2011	KANGO Office, Bariki
Reni Teroroko	Chairman, Kiribati Council of Churches	11am Wednesday 2 March 2011	Head office for the Protestant Churches
Beraina Teirane and Taare Uriam Akkitne	Sectoral Economist and Project Economist, Planning and Policy Unit, Ministry of Finance	10am Friday 4 March 2011	Finance Office, Bairiki
Marella Rebgetz	Senior Water Engineer, Water Unit, Ministry of Public Works and Utilities	3pm Tuesday 8 March 2011	Ministry of Public Works and Utilities Office, Betio
Aren	Director, UNICEF Kiribati	11am Friday 11 March 2011	UN Joint Presence Office, Bairiki
Kan	Liaison Officer, UN Joint Presence	11am Friday 11 March 2011	UN Joint Presence Office, Bairiki
Momoe Kaam	Programme Field Officer, UNDP Kiribati	11am Monday 14 March 2011	UN Joint Presence Office, Bairiki
Kibrom Woldai Teweldemedfiun	Water and Sanitation Project Officer, UNICEF Kiribati	12pm Monday 14 March 2011	UN Joint Presence Office, Bairiki
Timi Kaiekieki	Director, National Economic Planning Office, Ministry of Finance	Tuesday 15 March 2011	Ministry of Finance, Bairiki
Phoebe Mack	Water and Sanitation Engineer, Water Division, Ministry of Public Works and Utilities	9am Friday 16 March 2011	Ministry of Public Works and Utilities, Betio
Tony Hughes	Consultant	12noon Tuesday 22	KAP offices,

	Kiribati Adaptation Project	March 2011	Bariki
Andy	Officer, Office of the President	2pm Tuesday 22 March 2011	Office of the Present, Bairiki
Chris Mahoney	Programme Coordinator, Kiribati Urban Development Programme, NZ High Commission	4pm Wednesday 23 March 2011	NZ High Commission Offices, Bairiki
September 2011			
Tony Falkland	Consultant ACT Electricity and Water	2pm Friday 23 September 2011	ANU campus, Canberra
Professor Roger McLean	Emeritus Professor, School of Physical, Environmental and Mathematical Studies, University of New South Wales	3pm Friday 30 September 2011	University of New South Wales campus, Canberra
Dr Ian White	Professor and Associate Director (Research), Fenner School of Environment and Society, Australian National University	1030am Friday 30 September 2011	ANU campus



## **Appendix two: Interview questions**

1. What do you think are the biggest environmental threats facing South Tarawa?
2. How is your (Ministry / Organisation) trying to address the problems associated with climate change?
3. What do you think are the strengths and weaknesses of the KAP?
4. Why do you think the KAP chose to focus on coastal protection and access to safe drinking water, instead of other priorities?
5. What have been the main challenges associated with attempting to “mainstream” climate change across the government?
6. Community consultation and awareness campaigns are a significant aspect of the KAP. What do you think are the strengths and weaknesses of these community initiatives?
7. Implementing adaptation projects requires juggling the priorities of the aid donors, the government and the community. Can you think of any instances where this has proven challenging and elaborate?
8. To what extent do you think that the adaptation projects currently being implemented focus on improving community resilience and adaptive capacity?