Geographical Research

Mobile Adaptation and Sticky Experiments: Circulating Best Practices and Lessons Learned in Climate Change Adaptation

SOPHIE WEBBER
Department of Geography, University of British Columbia, 1984 West Mall, Vancouver, BC V6T1Z2, Canada. Email: sophie.webber@geog.ubc.ca

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Abstract
This article engages with the recent geographical literature on policy mobilities in order to examine how the World Bank mobilizes climate change adaptation 'best practices'. Drawing from the relational case study of the Kiribati Adaptation Project and the Community Resilience to Climate Change and Disaster Risk in Solomon Islands Project, the article explores the complex and intensive work required for mobilizing lessons and practices. The analytical work required in building the Kiribati Adaptation Project as a World Bank success story and policy model worthy of replication in new sites is demonstrated. However, heeding calls within the policy mobilities literature to avoid fetishizing mobility and attending to the contradictions between global flows and local institutional specificity, the article finds limited evidence of replication in noted sites of emulation. Instead, there is compulsive citation, publication, and circulation of experiences and successes within the World Bank, which operates to build internal and external legitimacy.

KEY WORDS *climate change adaptation; World Bank; policy mobilities; best practice*

The World Bank and best practices/lessons learned

The World Bank prides itself on its ability to share lessons across its investments and country-partners. It is, after all, the *World* Bank, and its prowess in development lies in its ability to draw 'successes' from across its global practices and expertise. When World Bank employees are asked what their institutional comparative advantages are in pursuing a climate change agenda, they reply: 'we have better information than anyone, we are very much aware of the threat to development from climate change, and I would argue that we understand it as well as anyone.'[1] Or:

> Our comparative advantage is . . . it is the knowledge, that's how to steer a boat. The fact that we have an anchor that focuses on knowledge services that goes into the operational [program]. The fact that we're a global bank: that we can bring in lessons from different regions, people working across regions.[2]

Again:

> I mean . . . there is the best technical expertise here, I think some of that's an issue of scale. I think, having that global experience so that you can pull the Caribbean people to help in the Pacific . . . I mean I think that's a real advantage.[3]

And simply: 'Knowledge. Global knowledge.'[4]

With most frequency employees suggest that the Bank's success derives from its enormous body of analytical works examining their projects, policies, and potential investments, as well

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as the ability to draw from lessons around the world. This article examines the complexities of producing so-called success stories, drawing from a case study of 'best-practices' in climate change adaptation.

Much research has assessed the World Bank and its hegemonic knowledge work, examining the institution's unparalleled ability to influence the terms of development debate through persuasive paradigm maintenance and its World Development Reports (Mehta, 2001; Wade, 2001, 2002; Goldman, 2005, 2007; Roy, 2010). Goldman's (2005) treatise traces how the World Bank has become a global knowledge Bank that uniquely produces information about development through its research institutes, frameworks, data sets, professionals, networks, and policies. For Goldman, however, there is a tension or a struggle to continually maintain that '*its* worldview, *its* development framework, and *its* data sets [are] the ones that people around the world choose above others' (2005; xv).

The World Bank as Knowledge Bank has culminated most recently in a focus on the 'the science of delivery'. Through this agenda, recently appointed President Jim Kim aims to collect and distribute evidence of 'what works for development' (World Bank, 2013; see also Banerjee and Duflo, 2011). For Kim, like his employees:

> One of the World Bank Group's key comparative advantages is that we have partnered with communities and policymakers across nearly all developing countries in every sector; to become a solutions bank we need to systematically leverage and apply the lessons from these experiences (Kim, 2012, np).

This push to share lessons learned is part of transforming to become a leaner, more responsive 'solutions bank', that 'demand[s] that we are honest about both our successes and our failures. We can, and must, learn from both' (Kim, 2012, np). Following Goldman, here I explore the potential gaps between this rhetoric and practice of sharing 'lessons learned' in how this solutions bank is made.

This article engages with recent geographical literature on 'policy mobilities' to explore how global expertise works in practice within the World Bank. The growing policy mobilities literature is concerned with the globalization and transnationalization of policy makers, technologies, and practices. Following this literature's interest in the social mobilization and deployment of policy models, this chapter asks a simple question of the World Bank's hubris around experimentation: do these mobile programs travel as their originator claims? I ask this question by studying climate change adaptation policies and programs in the Pacific Islands. Specifically, this article explores how best practices are mobilized from the experimental Kiribati Adaptation Project (KAP) and taken up in the Community Resilience to Climate Change and Disaster Risk in Solomon Islands Project (CRISP). These two adaptation projects might seem strange comparisons. After all, the two island countries have different physical characteristics and abilities to cope with anticipated climate changes. Both the low-lying atolls of Kiribati and the mountainous Solomon Islands must adapt to increases in temperature, rainfall volume and intensity, sea levels, and coral bleaching events (Australian Bureau of Meteorology and CSIRO, 2014). However, Solomon Islands must cope with the impacts of extreme rainfall events and tropical cyclones triggering flooding and landslides, and the impacts on climate sensitive resources like logging and agricultural production (World Bank, 2014), whereas Kiribati seeks to address the impacts of climate change on their freshwater lens and coastal infrastructure. Climate impacts and adaptation strategies are mediated by local social and environmental conditions. For instance, in South Tarawa – the capital of Kiribati – adaptation must also contend with rapid urbanization and population growth, which negatively effect the volume and quality of the freshwater lens and coastal stability (Storey and Hunter, 2010; Duvat *et al*., 2013).

These differences in climate change impacts and adaptation options, however, make this relational case study particularly compelling. Because, despite these differences, the World Bank explicitly and continuously mobilizes the KAP as a source of best practice for the CRISP. This article, therefore, explores the ways that the World Bank attempts to bring these projects – and diverse experiences of climate change and adaptation – together through the mobilization and citation of best practice projects. As Robinson (2011, 15) prompts, such 'circulations are created – they cannot be assumed' to exist due to similar physical and social geographies or climate change impacts. Instead, following Robinson, this article attends to 'topological spatialities', which examine how people and places are drawn 'close' through projects and phenomena.

I draw throughout the article from observations and key-informant interviews from three research visits to the Republic of Kiribati between 2010 and 2014, two research visits to Solomon Islands in 2013 and three research visits (two to Washington DC, and one to Sydney, Australia) to the World Bank in 2013 and 2014. During these field research trips, I interviewed policy and project officials, technical consultants, government bureaucrats, and aid workers in an attempt to elucidate the contours of a climate change adaptation circuit, in which governance technologies, project management systems, and climate finance innovations may circulate.

Policy mobilities, adapted?

Both the World Bank and scholars of policy mobilities are interested in the conditions under which policies can travel fast, emphasizing borrowing 'what works' from experimental localities for implementation in other sites. This literature stands in contrast to the concept of policy transfer and related positivist theorizing in political science that evaluates policy success and posits hierarchies of innovative governance. This political science literature is principally concerned with documenting the actors involved in policy transfer who are assumed as 'optimizing, rational actors, who know what they are after and scan 'the market' for possible solutions, making decisions and trade-offs over which policy products to adopt' (McCann and Ward, 2012, 327). Moreover, studies of policy transfer are focused on the national scale and assume literal transfer over space, tending 'to suggest the importation of fully-formed, off-the-shelf policies' (Peck and Theodore, 2001, 449). Instead, the field of policy mobilities studies 'how, why, where and with what effects policies are mobilized, circulated, learned reformulated and reassembled' (McCann and Ward, 2012, 326). Policy mobilities research suggests policy making is a social, inter-scalar, and relational process, where policies are not simply transferred intact, but their 'form and their effects are transformed by these journeys, which also serve to continuously remake relational connections across an intensely variegated and socio-institutional landscape' (Peck, 2011, 793). Here, fast policy is a *condition*, a tension between fixity and motion that must be problematized (Peck and Theodore, 2015). Accordingly, rather than a simple celebration of policy technologies that travel further, faster and along new routes, the contradictions between policy-as-model and the stubborn stickiness of implementation must be explored.

Policy actors, boosters, gurus, consultants and other experts (Larner and Laurie, 2010; Prince, 2012; McCann, 2013) are embedded in elite networks (Peck, 2011; or even assemblages, see McCann and Ward, 2011). Alongside policy agents, representations, discourses, persuasive stories, informational infrastructures, and mobilizing technologies are enrolled in policy-making networks to interpret policy problems and package institutional fixes (McCann, 2011). These interpreted, produced and circulating best practice models are not merely emulated in new sites of replication, but 'mutate and morph' (Peck and Theodore, 2010). Such technologies of mobilization create relations between sites of experimentation and replication, and policy problems in need of solutions, forming webs of 'experimentation-emulation-evolution' (Peck and Theodore, 2012). And, while policy models are constantly remade, as bundles of 'persuasion and motivation' (Temenos and McCann, 2013), so too are the sites of implementation (McCann, 2011; Clarke, 2012).

There are three concepts from the policy mobilities literature of particular relevance for this article. In their volume exploring the 'worlding' of Asian cities, Ong and Roy (2011, 4) find that city ambitions and formations 'are reimagined in relation to shifting 'forms and norms' of being global . . . [including] seemingly unavoidable practices of inter-city comparison, referencing and modeling.' Key here: 'modeling' is a practice through which an urban form – or, for our sakes an adaptation project or policy – is 'disembedded from its hometown and adopted in other sites . . . [being] raised in the imagination of planners' (Ong, 2011, 14). Modeling involves discursive and material practices that hope to capture an element or essence of the model that can be invoked, emulated, but never reproduced. Second, these models are vital components of constellations of inter-referencing, wherein citation, comparison and contrast bring policies and places into (topological) relations (Ong, 2011). Inter-referencing practices can open up aspirational 'elite dreaming' where citation of successful antecedents can have discursive power and effects, reinforcing particular policy choices, for instance (Bunnell, 2013). Third, policies on the move do not simply transfer from place to place, but instead mutate, morph, and evolve in motion, in unpredictable and often

contradictory ways. Peck and Theodore (2015) find policy models – participatory budgeting and conditional cash transfer – that mutate from a radicalizing project of deep democracy to tokenistic budgetary devolution and from disciplinary neoliberal reform to neo-welfarist experimentation, respectively. But, although these mutated policies maintain reference to their antecedents, how much can a policy evolve before it becomes a different model altogether? Is the inter-referencing of a policy model and claims of replicating best practices sufficient for successful policy mobilization?

This article builds on the policy mobilities literature by examining the complex and intensive work required to make a mobile policy, focusing on modeling, inter-referencing, and mutation. Taking cue from warnings to '[guard] against the risks of sliding into affirmative (or even celebratory) accounts of the cosmopolitan "spaces of flows" ' (Peck and Theodore, 2012, 21), this study focuses attention on the stoppages, failures and tensions of policy making; an attempt at avoiding 'unfettered flowsterism' (Marston *et al*., 2005; Jones *et al*., 2007). Here, multiple failures and stoppages are pertinent: failure in project outcomes, failure to mobilize, failure to implement in replication sites, and, most importantly, failure that becomes success through iterative extraction and interpretive processes for extra-local learning. The relational case study drawn across Kiribati and Solomon Islands, and sustained institutional research with the World Bank also allows an examination of the connections between sites of experimentation and emulation, beyond merely circumstantial evidence of documentary citation and personnel similarities. Hoping to avoid swiftly touching in and out of policy sites along with policy models (Clarke, 2012; Jacobs, 2012), and becoming a 'dupe of the policy network' (Peck and Theodore, 2015, xxi), I look to the contextualized and contingent to dig beneath the surface of supposed connections.

The KAP in/and the World Bank

The KAP

The Kiribati Adaptation Project is one of the earliest World Bank climate change investments. After completing a preliminary study of climate change in the late 1990s – *Cities, Seas, and Storms* (World Bank, 2000) – its authors were interested in constructing an adaptation project based on their experiences and knowledge, and chose Kiribati for this initial project. Historical involvement was 'a clear rationale for the Bank to continue its involvement in climate change issues in Kiribati' (Global Environment Facility, 2005, 3); as one early project manager described: 'after that [the report], we started thinking, now we have the study, let's do some operation and do something about it [adaptation]. And that's how the KAP came up.'[5] The KAP-I, funded by the World Bank/Global Environment Facility and the Japanese Climate Change Fund from 2002–2005, had two principal components. First, it conducted extensive National Adaptation Consultations and Mainstreaming, and second were Project Preparations and Technical Support including in the areas of social, environmental, and economic assessment. Principally, the KAP-I prepared for greater adaptation investments in policy and planning.

The second phase of the KAP, funded by the World Bank/Global Environment Facility, AusAID and NZAID from 2006 to 2011 intended to trial the proposed adaptation investments. The original design of the KAP-II involved five components: (i) policy planning and information, including awareness raising; (ii) land use, physical structures and ecosystems; (iii) freshwater resources; (iv) capacity-building at the island and community level; and (v) program management. In 2009, however, the scope and geographical location of these projects were vastly reduced due to insufficient progress. A rare occurrence for World Bank projects, the KAP-II was officially judged unsatisfactory through the mid-term review process (Global Environment Facility, 2009). After this restructure the project focused on freshwater resources, and coastal planning and protection in the capital, Tarawa, where climate change impacts intensify local environmental degradation of the freshwater lens and coastal ecosystems.

The intention of the third phase of the KAP was to 'scale-up' adaptation, taking implementation beyond Tarawa. Within the KAP, therefore, the KAP-II was to serve as the experimental pilot policy phase, to be mobilized and deployed during the KAP-III. Has the KAP-III has been successful in this measure? First, despite intentions the KAP has found it prohibitively difficult, in terms of cost and time, to extend any experimental best-practices into the outer-islands to constitute a geographical policy mobilization. Second, inasmuch as the KAP-III has retained a focus on freshwater resources and coastal protection, this has not necessarily entailed either scale

up, or building on techniques honed in previous phases, as shown below.

Consider the case of freshwater resources. During the KAP-II, the primary focus of the freshwater resources component of work included numerous freshwater policies, completion of an infiltration gallery, rainwater harvesting and storage facilities in several sites in South Tarawa, and some monitoring and assessments of the freshwater lens through boreholes and modeling. There were also one-off adaptation measures, including to the hospital water supply. With regards to rainwater harvesting, for example, practices were specifically developed to

> look at piloting different types of first flush devices and different pipe gutters, and looking at what works, what's suitable for here and . . . what's affordable in this context and what's not, for households . . .. That's the difference, we're not doing [the rainwater harvesting work] so much for getting places done, as to look at different styles of techniques . . .. [It's] realistic best practice.[6]

Later, reflecting on the freshwater resources work, one member of the KAP team declared that the greatest successes were the water resource assessments, 'because they tell us how much water we've got there that we can pump. . . . We've got to have that data for everywhere, otherwise we're stuffing up the country . . . We sort of piloted it [during the KAP-II], so that's probably what I'm proudest of.'[7]

The KAP-III has not extended these successes. Other climate change and water related projects have taken up some of the practices of the KAP: for instance, a water engineer has discussed findings with the New Zealand Aid Program, has taken members of the European Union funded KiriWatSan program to examine the rainwater harvesting investments that they might replicate in outer islands, and has worked closely with an Australian consulting team who are modeling groundwater reserves. Yet, the KAP-III remains concentrated in Tarawa, and is primarily engaged with negotiations around, and governance of, the groundwater reserves (the land on top of which people are not permitted to reside). As the KAP engineer reiterates with regards to the assessments and rainwater harvesting: 'But [they] finished with the KAP-II.'[8]

The example of coastal protection is similar, although it also involves negotiations related to what constitutes best practice in Kiribati. During the KAP-II the coastal protection component

Figure 1 KAP-II sea wall in South Tarawa including apron.

aimed to pilot ecosystem (mangrove) based approaches and physical protection measures (sea walls) for protecting shorelines from erosion and sea level rise. While mangrove planting is not sufficient in mitigating the impacts of sea level rise, this component has been rated highly successful and is one of the few measures that could really be judged to 'roll-out' during phase III with implementation in priority sites throughout the Gilbert group of islands (the western islands of Kiribati). To pilot and construct seawalls at four key sites in South Tarawa, a foreign firm was hired to design and oversee construction, resulting in a variation on a vertical sandbag seawall augmented with an apron to protect against overtopping (see Figure 1).[9] Shortly after completion, these seawalls were already causing erosion, and within two years of being built one will be replaced. For one consultant to the KAP, the seawalls were an egregious failure – deplorably behind the times – which do not dissipate wave energy, lack flank protection, and do not attempt to resuscitate reef health.[10] For other observers, they simply reflect an appropriate solution within the Kiribati context, limited by access to resources such as concrete and freshwater and technical engineering skills: these are seawalls that the Ministry of Public Works and

Utilities can replicate.[11] One observer describes: 'they did a good job within their brief. Because it is repeatable by the average person who builds their own seawall, and that's what they were to do.'[12]

A combination of factors contributed to dissatisfaction with the seawall construction, including a rush to disperse funding before the project ended and hiring engineers inexperienced with atoll environments and contexts. Central, however, are disagreements as to whether policy actions should contain marks of cutting edge, international best practices, or echo locally specific and contextually adapted measures (Temenos and McCann, 2012). Nonetheless, these seawalls will not be replicated by the KAP-III. Instead, for each new site, unique and integrated ecosystem and concrete protection will be developed by a consulting firm, suggesting the persistently local character of best-practice.[13] Coastal protection is not a highly mobile technology.

As a result, having piloted for almost ten years and spent more than US$10 million the KAP-III is, once again, experimenting. Its entirely new components include: (i) infiltration galleries and associated extensive community engagement, voluntary land agreements, and local water governance legislation and frameworks in two North Tarawa towns;[14] (ii) water and land governance for the freshwater lens that supplies South Tarawa including renewed rental agreements with land owners to keep squatters/tenants away; (iii) and a novel and extensive water reticulation and leakage detection system for South Tarawa. And, although both previous phases of the KAP invested heavily in national adaptation planning and mainstreaming, the KAP-III has repeated – perhaps duplicated – these investments by contributing to the Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management. In short, despite being explicitly programmed as a design-experiment-roll-out process, even within the KAP the World Bank failed to mobilize their developed best practices.

The KAP for the World Bank

While the KAP had its own internal cycle of 'experimentation-emulation-evolution' (Peck and Theodore, 2012), it also contributes to these webs within the World Bank. At the beginning of the KAP, the World Bank had limited experience in designing adaptation projects. An adaptation specialist at the World Bank since the late 1990s observes:

> Well, it's [adaptation] become much more visible since Kiribati, hey? At the time of Kiribati there was no one interested, we were basically chasing [money], it was completely new. Ah, and, you know we used some pilot funds that were available here and there, and squeezed it through, but there was very little experience of how to do it. . . . We had done quite a bit of analytical work, the *Cities, Seas and Storms*. So we had that basis in order to do an investment project, but we didn't yet have the experience.[15]

The KAP investment was driven by experiences producing analytical works in Kiribati, and the desire to experiment in adaptation programming to generate knowledge and expertise in the sector.

Since then, the KAP and its results have featured in numerous analytical reports intended to enhance expertise in adaptation at the World Bank. Table 1 provides an overview of several such reports. A review of these documents suggests that the KAP played a central role in earlier reports dating from the 2000s, although very recently other larger projects and investments play a central role (for instance World Bank and GFDRR, 2013). After the Strategic Framework for Development and Climate Change was initiated and alongside financial investments and sources such as the Pilot Program for Climate Resilience and the Global Facility for Disaster Reduction and Recovery, adaptation projects and lessons have grown immensely (Independent Evaluation Group, 2012). These recent investments still draw extensively on the practices of the KAP.[16]

Several key lessons from the KAP echo throughout these analytical reports, as evident in Table 1. For focus, however, it is worth delving into the specific recommendations of *Lessons Learned from the Kiribati Adaptation Project* (World Bank and GEF, 2008) and assessing them against the outcomes of the KAP. This report was written by three former World Bank Task Team Leaders (TTLs), or managers, of the KAP, who have gone on to implement similar programs in other countries. They describe the KAP as a source of inspiration with 'similar efforts now starting in a number of other countries' (World Bank and GEF, 2008, v). The authors find eight key best practices for successful adaptation the KAP: (i) climate change should be treated as an economic and social risk; (ii) prepare for long term climate change by addressing short-term

Table 1 Review of World Bank adaptation analytical documents and their lessons from the KAP.

Report	Purpose of the report	Some recommendations from the KAP
An Adaptation Mosaic: A Sample of the Emerging World Bank Work in Climate Change Adaptation (Mathur, Burton and van Aalst, 2004)	The report explores some preliminary 'experiments and the valuable lessons from the "learning by doing" ' of the Bank's efforts to integrate 'climate risk management in policies and projects in client countries' (2).	Most of the chapters are analyses of the risks climate change poses to sectors, and previous attempts to cope with disasters. The Kiribati Adaptation Project is the exception to this, and offers an example of dealing 'directly with adaptation measures and policies themselves' (3). The document includes a summary of the *Cities, Seas and Storms* report, and how this has fed into the Kiribati Adaptation Project as the sole example of 'operationalizing adaptation'.
Look Before You Leap: A Risk Management Approach for Incorporating Climate Change Adaptation in World Bank Operations (Burton and van Aalst 2004)	The paper aims to elaborate a 'climate risk management approach' for the World Bank to mainstream climate change into development activities in a just manner.	Pilot adaptation in Kiribati is a key activity, has led to the following key messages: (i) there is elite interest in climate change adaptation; (ii) adaptation must be integrated into national economic planning; (iii) and it must consist of 'no-regrets' actions which face current and future risks (17).
Not If But When: Adapting to Natural Hazards in the Pacific Islands Region. A Policy Note (Bettencourt *et al* 2006)	The Policy Note aims to address the concerns that there is a lack of 'political will' to mainstream risk management into national development planning. It also reviews the trends and lessons of pilot risk management initiatives, paying attention to incentives, institutions, and instruments.	The Kiribati Adaptation Project is one of several Pacific pilot programs from which lessons are drawn, specifically related to addressing perverse incentives, building institutions and appropriate instruments, the authors declare: (i) participatory consultations are key; (ii) place adaptation planning within coordinating bodies; and (iii) often major infrastructure investments are not required, just subtle behavior changes.
Managing Climate Risk: Integrating Adaptation into World Bank Group Operations (van Aalst 2006)	This paper looks at early experiences in climate change and highlights how the World Bank can help better manage the risks that climate chance poses.	The Pacific region was key in turning the World Bank to the importance of climate change. Key lessons from the KAP include that the World Bank needs to ensure that: climate change is treated as an economic and social risk, short and long-term vulnerabilities are addressed, there is high-level coordination, it is mainstreamed into economic and sectoral planning, there is a link between bottom-up consultation and top-down policy, existing regulations are enforced and strengthened, and that no-regrets strategies are pursued.
Lessons Learned from the Kiribati Adaptation Program: Improving Climate Risk Management by Linking Bottom-up Participation with National Economic Planning (van Aalst, Pswarayi-Riddihough and Bettencourt 2008)	'Similar efforts [to the KAP] are now starting in a number of other countries' (v). This report describes the lessons from the 'innovative' project for 'inspiration' in other adaptation programs.	The KAP 'is the first such program of the World Bank to successfully integrate climate risk management into national economic planning.' This has been achieved by linking participatory consultation and development planning, and it has pioneered connecting risk management through existing ministerial operation plans. There are eight lessons from the KAP, explored more in text.
Adapting to Climate Change: Assessing the World Bank Group Experience. Phase III of the World Bank Group and Climate Change. (Independent Evaluation Group 2012)	With its Strategic Framework for Development and Climate Change (FY09-11), the World Bank initiated increased attention to adaptation. Before this, however, were three pioneering projects that provide lessons for these efforts. This report seeks to reviews and learns from existing investments in the World Bank Group.	The report identifies that although the WBG has made progress on coping with climate change it lacks an operational system to identify climate risks at the project level. The report also assesses the successes of long-term planning. Alongside early projects in Colombia and the Caribbean, the KAP has succeeded in building national and regional capacity to adapt. While these were all hampered by thin resources and capacity, the projects combined planning and investments.
Building Resilience: Integrating Climate and Disaster Risk into Development. The World Bank Group Experience (Gitay *et al* 2013)	This report assesses promising approaches, lessons learned, and remaining challenges associated with bringing the climate resilience and disaster risk management communities of practice together, and in turn integrating them into broader development processes.	This report outlines lessons from several adaptation and disaster risk management programs, including in Samoa, the Philippines, Mexico and Colombia. The KAP is mentioned only in passing and in relation to the importance of a high level convening power for implementing adaptation.

vulnerabilities; (iii) adapt through policy changes and regulations rather than physical investments; (iv) adaptation should be flexible not structural; (v) institutions cannot be underemphasized, there needs to be management from a ministry that can coordinate investments; (vi) adaptation must be integrated into national economic and sectoral planning; (vii) investments need to be informed by community consultations and national planning; and (viii) a consultation framework is key.

Several methods are deployed to encourage replication and circulating citations of the KAP. The report declares that other projects have drawn from the KAP's 'innovative' lessons already. And despite many difficulties the KAP has encountered, these are recast as problems overcome, slipping from lessons learned to best practices. A necessary ambiguity haunts the recommendations too (Cohen, Forthcoming). For instance, as articulated in the *Lessons Learned* document and others in Table 1, it is important to build climate change concerns into national and sectoral economic planning, and to maintain momentum for adaptation through bottom-up community consultations and top-down planning. These two practices make reference to planning phases of the KAP-I where relevant ministries were required to specify some climate change practices in budgetary work plans (although were given limited funds to implement, and their actions were subsequently abandoned), and the mass national consultations the KAP-I undertook to generate adaptation options (most of which were also over-ridden during the KAP-II restructure). That the 'best practice' consultations and ministerial planning were forgotten over the KAP-I and the KAP-II transition is obscured by vague reference points and inexplicit methodologies for formulating recommendations. It is precisely this ambiguity that encourages the citation of the KAP best practices, particularly through obligatory 'peer review' processes within the World Bank. As policy mobilities scholars would anticipate, explicit modeling and mobilization is required through informational infrastructures, key champions and authorized experts, yet this is not always sufficient.

Nonetheless, the report recognizes that not all components of the KAP are replicable. While the eight key lessons have been sufficiently abstracted from their geographical and historical specificity, Kiribati remains 'atypical' for a World Bank project. Kiribati is unlike other potential sites for emulation given that 'it has a small population and a small economy . . . and is rather isolated from the rest of the world' (World Bank and GEF, 2008). The size of the country, government, and economy, means that a relatively small World Bank project attracts attention and is able to command an audience with senior government officials and implementing agencies. While this is unique, the report counters by linking to future sites of replication, noting that they may also suffer from the difficulties of sectoral silos within post-colonial government and the need to raise the political profile of climate risks and support for addressing them. Others may also benefit from the novel funding model, where a national program is supported by international finance (World Bank/GEF) that brings together multiple sources of official development assistance (AusAID/NZAid). Such inter-referencing creates relational connections between experimental and duplication sites bringing each other into adaptation policy mobility circuits.

In summary, the KAP process has failed to create cycles of 'experimentation-emulation-evolution' and is instead stuck piloting. The KAP represents best-practice in official World Bank documents, yet has been officially and administratively labeled a 'failure' (Global Environment Facility, 2009), and only 'moderately satisfactory (World Bank, 2011). Despite this, the KAP has continually and successfully populated World Bank analytical documents expounding potentially replicable adaptation best practices.

Taking the KAP to the CRISP

The CRISP

One project that claims to take the lessons and practices of the KAP is the Community Resilience to Climate Change and Disaster Risk in Solomon Islands Project (CRISP). The US$10.2 million project has only recently been approved by the World Bank; it began disbursements and programming in June 2014 and will run until 2019. Co-financed by the Global Environment Facility and the Global Facility for Disaster Reduction and Recovery, the project 'aims to contribute to resilient and sustainable economic and social development' by 'increasing the capacity of selected rural communities to manage natural hazards and climate change risks' (World Bank, 2014). The project proposes to meet these goals through four components: integrating climate change adaptation and

disaster risk reduction into government policies; strengthening climate and disaster early warning systems; investing at the community and provincial level including in risk planning and implementation; and project management and monitoring and evaluation. Within the project there will also be priority areas in water supply and sanitation, human settlements, education on climate change, adaptation in low-lying areas, coastal protection, and resilient infrastructure. It is difficult to judge how well the best practices of the KAP will be implemented given the preliminary stages of the CRISP. Nonetheless, in this section I examine how the KAP lessons have contributed to planning the project thus far. Even given limited implementation, the CRISP appears to directly contradict the stated and implicit lessons of the KAP.

From KAP to CRISP

The CRISP claims to draw from several World Bank and donor initiatives already ongoing in Solomon Islands. This includes the Rural Development Program, which has developed a participatory mechanism for delivering small grants for infrastructure investments, and the Pacific Catastrophe Risk Assessment and Financing Initiative which provides risk methodologies and products. The KAP also plays a central role in the 'lessons learned and reflected in project design' (World Bank, 2014): 'I mean, obviously the KAP in Kiribati brings in a lot of lessons,'[17] states one project manager. Practices said to be followed by the CRISP in official documents (World Bank, 2014) include ensuring: the implementing agency is adequately prepared for the project; that risk information is used in planning; a geographically focused project for feasibility; and engagement among community members for behavioural change to reinforce adaptive capacity instead of only investing in structural measures.

There are several mechanisms through which lessons from the KAP could contribute to the CRISP. For two very brief periods, the projects had the same TTLs at the World Bank. Knowledge of the KAP was, therefore, embedded within CRISP personnel.[18] This embedded knowledge is key in mobilizing best practices; a Pacific specialist explains: 'we do a lot of training, we do a lot of guidance notes and whatever. [But], I don't think there's any substitute for the people,'[19] particularly the 'circulating staff' instituted through the '3-5-7 rule which is basically that your minimum time in a region is three years, your average time is 5 years, the maximum time is 7 years. And after that you're expected to move . . . and take your skills and your learning with you.'[20] Best practices may be held within the experiences and knowledges of TTLs – as one early manager notes: 'those early lessons that we learned in KAP were then very useful, for me, in trying to design similar operations in Madagascar, and in Sao Tome and in Zambia'[21] – but in this particular case, the brief time for cross-fertilization may have limited actual sharing. When pressed to describe the practices shared between the KAP and CRISP, one of these TTLs could only muster:

> It's the same kind of model, its both the policy aspect, but also some investments. . . . I think it's a good combination of both policy reforms and, you know, concrete investment on the ground. I like that. . . . we don't want to only focus on TA – Technical Assistance – we also want to include some investments, just to demonstrate what can be done.[22]

Given that the TTL who recently managed both the KAP and the CRISP could only find similarities in their combination of technical and financial assistance – which is common to most, if not all, World Bank projects – it seems that best practice was not mobilized through this route. Although we can locate the project managers at the site of the two projects and we might therefore expect successful policy mobilization-mutation, in this case personnel are not sufficient.

Beyond the ambiguous policy-and-investment model shared by the two projects, the lessons drawn from the KAP in generating the CRISP are superficial, even given the expectation of mutation and not policy replication (Peck and Theodore, 2010). There are few similarities between the 'best practices' from the KAP and those that the CRISP seeks to implement or has been able to replicate. This is obvious even from matching the lessons learned in Table 1, with those claimed in CRISP documents, and the institutional context of each of the projects. For instance, where the KAP lessons emphasized achieving the right institutional fit with high-level implementation capacity amongst the in-country partner, the CRISP will be coordinated through the Climate Change Division of the Ministry of Environment, Climate, Disaster Management and Meteorology who currently employ two full-time staff. In the CRISP, therefore, not only does climate change remain siloed as an environmental concern rather than transitioning to an economic and social risk

approach as the KAP implores, but implementation capacity within a small, relatively new, and inexperienced office, already coordinating numerous climate change programs, is obviously low.

In other instances, the practices of the CRISP directly contradict the KAP's lessons. For example, when asked to cite a lesson learned from KAP that they recommend to other projects, one observer from a large regional organization recommends 'Just, don't do pilot projects'[23] as they are frustrating for the implementation team, the public and the government.[24] Instead, they recommend fully integrated, whole of Province, long-term, 'Ridge-to-Reef' programs to overcome the 'piecemeal, 30 years of pilot projects, and climate change this and that . . . do one model village, and then leave'[25] Yet, pilot programming is essential to the CRISP, where a Japanese grant will provide 'funds to pilot what we would hope to do under the big project.'[26] Both of these examples also indicate that circulating best practices relate primarily to citations of name and form and not to specific practice. While both projects hope to build capacity, learn along the way, and get the institutions right – and who would disagree with these goals – the exact governmental intervention remains unclear.

Given that the lessons generated by the KAP are not substantively instituted in the CRISP there cannot be said to be mutation. Instead, mention of these lessons in project documents serves to satisfy institutional requirements at the World Bank and produce internal success-stories. All projects at the World Bank are required to demonstrate how they build on existing country and sector programs, and, as part of the peer review process, elucidate best practices from diverse yet relevant contexts. The core of the peer review system is twofold: project documents must cite existing best practices and demonstrate replication, and projects must be reviewed by sectoral experts. The system is an essential component of 'quality control' for the World Bank system.[27] A CRISP manager describes the process:

> So I mean we are asked to do some work to draw some lessons from previous projects . . . similar lessons have been observed from DRM [disaster risk management] and adaptation projects – the KAP. [Then comes] Project implementation da da di, da da da.[28]

For another observer, the limitation of the peer review process – as indicated in the flippant dismissal of 'lessons learned' – 'is that everybody is way too busy, and people don't read.'[29] The peer-review system enforces citations of existing and ongoing project successes, or representations thereof, without ensuring sustained uptake.

Conclusions: On success

This paper has examined how the World Bank mobilizes climate change adaptation best practices, drawing from the relational case study of the Kiribati Adaptation Project and the Community Resilience to Climate Change and Disaster Risk in Solomon Islands Project. I have examined whether and how lessons have travelled between the model site of the KAP and the replication site of the CRISP. For the World Bank, the KAP serves as its own cycle of experimentation and roll-out, as well as an experiment for other adaptation projects, including the CRISP. This example demonstrates that the KAP is formulated as a best practice adaptation policy model through numerous analytical documents and key champions that package mobile insights that are sufficiently prescriptive yet vague, and which create relational and referential connections between the experimental and potential replication sites. Additionally, the example provides insights into the work required for the World Bank to produce potentially mobile projects and policies: creating analytical documents and requiring compulsory peer review which create references of success and extend interpretive networks of success (Mosse, 2005).

Following recent calls among scholars of policy mobilities to avoid fetishizing and reinforcing successes and flows, I have demonstrated the need to examine that which does not circulate, and where contradictions lie in attempts to mobilize best practices. This is only possible through a contextual examination of mobile and mobilized policies, which considers situated policy practices and outcomes in relation to abstracted documents and stories. Failing to be sufficiently attentive to the institutional contexts in which policies are mobilized and redeployed, and to potential disruptions in flows, risks reinforcing the World Bank's circulatory capacity and expansionary tendencies, becoming enrolled in its interpretive echo chambers.

Therefore, despite this 'informational infrastructure', I have shown that policies are not easily mobilized, even allowing for mutation in motion. Although policies and implementation sites must change through policy mobilization practices, there must also be limits to a policy's

evolution, before it becomes a different species altogether. Here, I have argued that, even though it references the KAP model, as the CRISP also directly contradicts the KAP best practices and draws only vague and superficial lessons, we cannot adjudge this successful policy mobilization. Indeed, the apparent and widely reported production of circulating, best practice, adaptation is an effect of the modeling and inter-referencing work of the World Bank, and we must recognize it as such.

This compulsive citation of experiences, best practices, and models of adaptation builds internal and external legitimacy. Within the World Bank, a model and its inter-references can secure an internal coalition to pursue the cutting edge development issue of adaptation, and signposts the current position of World Bank programming. Externally, 'circuits of capital and truth' (Roy, 2010) – consisting of adaptation best practice and expertise, and the financial tools to pursue further adaptation programs – are co-constitutive of development legitimacy and essential for maintaining the World Bank as a 'center of calculation' and 'chief arbiter' of development (Goldman, 2005, viii). Analytical works and interpretive networks peg 'capital' to 'truth' to maintain dominant World Bank interpretations of, and investments in, adaptation success. Attending to the differences between what is mobilized in rhetoric and in practice is, therefore, particularly important in the case of the World Bank, especially at the current juncture, where the World Bank is threatened by financial and developmental irrelevance.

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NOTES

1. Former lead urban specialist, Toronto, 14 May 2013
2. Disaster risk management specialist, Washington DC, 8 May 2013
3. Senior economist, Washington DC, 21 March 2014
4. Senior environmental specialist, Sydney, 18 September 2013
5. Lead adaptation specialist, Washington DC, 6 April 2010
6. Senior water engineer, Tarawa, 10 May 2010
7. Senior water engineer, Tarawa, 9 August 2013
8. Senior water engineer, Tarawa 9 August 2013
9. Seawalls in the Pacific Islands are ubiquitous, and much debated in everyday life, policy and political options, and academic circles (Nunn, 2009; Donner and Webber, 2014). Artificial structures – seawalls – are built in order to cope with coastal erosion and retreat caused by a number of multiplying factors including encroaching coastal settlement, beach mining for aggregate, and sea level rise and storm surges. However, in many instances these hard protection measures are inappropriate, or even damaging because there is insufficient understanding of coastal dynamics to design the best solutions, and they are expensive to properly build and maintain. The effect of these factors is often to exacerbate coastal erosion. While there are *better* seawall designs – for instance, those that reduce wave energy through vegetation, and have shallower slopes – it is not clear that such hard coastal protection measures would ever mitigate the effects of sea level rise. Indeed, it is not clear exactly which measures would protect atoll coastlines from sea level rise.
10. Senior coastal engineer, Tarawa, 7 August 2013
11. Project manager, Tarawa, 20 August 2013
12. Senior water engineer, Tarawa 9 August 2013
13. Program manager, Tarawa, 5 May 2014
14. Community engagement specialist, Tarawa, 4 May 2014
15. Lead adaptation specialist, Washington DC, 1 April 2014
16. Independent evaluator, Washington DC, 18 March 2014
17. Country manager, Washington DC, 3 May 2013
18. Embedded, perhaps, but not very deep: One of the TTLs with a long-standing involvement with the KAP worked on the CRISP for mere weeks, and the reverse is true for the second. Such a high rotation is typical of the smaller projects and smaller countries in the World Bank; in its 11 years life the KAP has had at least six TTLs, and three over the last three years.
19. Economist, Tarawa, 30 July 2013
20. Economist, Tarawa, 30 July 2013
21. Lead adaptation specialist, Washington DC, 1 April 2014
22. Senior environmental specialist, Sydney, 18 September 2013
23. Country program manager, Honiara, 1 November 2013
24. Senior water engineer, Tarawa 9 August 2013
25. Although, the projects this observer works on are 'reef-to-ridge' projects, a kind of competitor policy-model to the KAP.
26. Country manager, Washington DC, 3 May 2013
27. Environmental specialist, Washington DC, 9 May 2013; Country manager, Washington DC, 3 May 2013
28. Senior environmental specialist, Sydney, 18 September 2013
29. Senior economist, Washington DC, 21 March 2014

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