



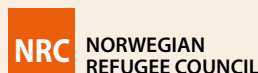
# NEGLECTED DISPLACEMENT: HUMAN MOBILITY IN PACIFIC DISASTER RISK MANAGEMENT AND CLIMATE CHANGE ADAPTATION MECHANISMS

**Norwegian Refugee Council (NRC)**  
**Internal Displacement Monitoring Centre (IDMC)**

Daniel Petz and Justin Ginnetti  
September 2013

DISASTERS  
CLIMATE CHANGE AND  
DISPLACEMENT  EVIDENCE  
FOR ACTION

PARTNERS





# Neglected displacement

Human mobility in Pacific disaster risk management and climate change adaptation mechanisms

September 2013

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Cover photo: The floods that hit Fiji caused widespread damage, leaving 15,000 people temporarily displaced in Sigatoka, Fiji. Credit: OCHA ROP, March 2012.

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## Acronyms

CCA	Climate Change Adaptation
CCAS	Climate Change Adaptation Strategy (Kiribati)
DM	Disaster Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ENSO	El Niño–Southern Oscillation
EIA	Environmental Impact Assessment
FfA	Framework for Action
FSM	Federated States of Micronesia
GEF	Global Environmental Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
IPCC	Intergovernmental Panel on Climate Change
JNAP	Joint National Action Plan on Disaster Risk Management and Climate Change Adaptation
KAP	Kiribati Adaptation Project
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
NACCC	National Advisory Committee on Climate Change (Vanuatu)
NAP	National Action Plan on Disaster Risk Management
NAPA	National Adaptation Programme of Action
NCCP	National Climate Change Policy (Fiji)
OHCHR	Office of the High Commissioner for Human Rights
PDRMPN	Pacific Disaster Risk Management Partnership Network
PNG	Papua New Guinea
SIDS	Small Island Developing States
SOPAC	Secretariat of the Pacific Community, Applied Geoscience and Technology Division
SPC	Secretariat of the Pacific Community
SPCR	Strategic Programme for Climate Resilience (Papua New Guinea)
SPREP	Secretariat of the Pacific Regional Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction
UNHCR	Office of the United Nations High Commissioner for Refugees

# Executive Summary

This paper reviews 19 laws and policy documents from 15 Pacific countries and territories. The documents are:

- Pacific National Adaptation Programmes of Action (NAPAs)
- National Action Plans on Disaster Risk Management (NAPs)
- Joint Action Plans on Disaster Risk Management and Climate Change Adaptation (JNAPs)
- disaster risk management and climate change laws and strategies
- national development plans.

Drawing on evidence from these documents, this paper analyses how:

- Pacific Island countries and territories identify their risks and vulnerabilities to natural hazards and climate change
- displacement risks are addressed and the extent to which wider human mobility issues (including migration, planned relocation and resettlement) are considered
- displacement risks and human mobility issues are incorporated into action plans, strategies and proposed projects.

## Some of the main findings are:

- Evacuations (as a form of displacement) are frequent, yet often pass unnoticed. There are many cases of evacuations undertaken as a temporary measure, but which end up becoming prolonged.
- Displacement is a largely invisible issue in the reviewed documents. On average, the inclusion of displacement and human mobility issues in Pacific laws and policies is far from comprehensive and conceptualisation of displacement is weak. Inclusion in action plans and strategies is mostly lacking. This problem is further complicated by inconsistent use of key terms.
- International human rights standards on internal displacement such as the *Guiding Principles on Internal Displacement* or the *Framework for Durable Solutions* seem to have not informed any of the documents reviewed. Concerning situations of potential displacement, these internationally recognised standards and principles should be applied.
- The general embrace of the comprehensive disaster risk management paradigm across the region could have positive effects on preventing displacement from disasters and climate change impacts. The approach brings a broader integration of risk reduction measures

into disaster risk management frameworks and a focus on early warning, community involvement and an all-hazards approach.

- Many laws and policies have a strong focus on improving the technical aspects of evacuations, while generally ignoring related human rights concerns. Evacuations in the reviewed laws and policies are not linked to a broader discussion of disaster-induced displacement. This may lead to failure to discuss long-term displacement.
- Migration as adaptation has not yet been embraced as a policy option. Internal, rural-to-urban or outer-to-inner-island migration is largely framed in negative terms. International migration is regarded either as an opportunity to alleviate population and environmental pressures or as undermining sustainable development in the face of climate change. Migration can also pose demographic challenges.
- Permanent, planned relocation and resettlement are discussed from a variety of different angles. There is agreement that low-lying islands and coastal areas are particularly vulnerable in terms of the need to move. There is a sliding scale of necessity in the discussions. Some states are already integrating relocation planning while others are still contemplating it as a possible adaptation strategy.
- In discussions of planned relocations and resettlement, land rights and land tenure issues are seen as potential impediments. Other contentious issues mentioned are land availability, people's willingness to move, cultural and heritage issues, lack of legal and policy frameworks and financing. There is little discussion on impoverishment risks, particularly the reestablishment of livelihoods for relocated and/or resettled communities.
- International relocation/resettlement, when discussed, is seen as a result of major disasters (tsunamis) or as a last resort if climate change adaptation fails.
- Several projects around human mobility included in NAPAs seem to have not yet been funded or implemented.

## Background

Every year, tens of millions of people worldwide are forced to flee their homes as a result of floods, cyclones, earthquakes, landslides, droughts and other natural hazard-induced disasters. Most of these people find refuge within their own country but some have to move abroad. In the context of global warming, such movements are likely to increase together with displacement related to gradual processes such as the loss of territory caused by rising sea levels and saltwater intrusion into aquifers. National and international responses to this challenge are insufficient and protection for affected people remains inadequate.

At a Ministerial Conference organised by the Office of the United Nations High Commissioner for Refugees (UNHCR) in December 2011 to commemorate the 60th anniversary of the 1951 *Convention on the Status of Refugees* and the 50th anniversary of the 1961 *Convention on the Reduction of Statelessness*, Norway and Switzerland addressed the need for a more coherent and consistent approach to the protection of people displaced externally (i.e. across international borders) in relation to natural hazard-induced disasters, including but not limited to those

associated with climate change. The two governments declared that:

*“A more coherent and consistent approach at the international level is needed to meet the protection needs of people displaced externally owing to sudden-onset disasters, including where climate change plays a role. We therefore pledge to cooperate with interested states, UNHCR and other relevant actors with the aim of obtaining a better understanding of such cross border movements at relevant regional and sub-regional levels, identifying best practices and developing consensus on how best to assist and protect the affected people.”<sup>1</sup>*

This pledge was welcomed by several states and provides the basis of the Nansen Initiative. The first sub-regional consultation occurred in May 2013 and was hosted by the Cook Islands. This paper was prepared as an input into the ongoing Nansen Initiative process and the key findings of an early draft were presented at the Pacific consultation.



Destruction caused by the earthquake in Santa Cruz Island, Temotu Province, Solomon Islands. Credit: WPSA Rapid Assessment Team/Steven Clegg, February 2013



# 1

## Introduction

*“Displacement is a development challenge in terms of prevention, mitigation, disaster risk reduction, environmental risk assessment, early recovery, and durable solutions.”<sup>2</sup>*

—Chaloka Beyani, UN Special Rapporteur on the Human Rights of Internally Displaced Persons

*“Small islands, whether located in the tropics or higher latitudes, have characteristics which make them especially vulnerable to the effects of climate change, sea-level rise, and extreme events.”<sup>3</sup>*

—Intergovernmental Panel on Climate Change

### The Pacific

The Pacific Ocean is the world's largest ocean, covering an area of approximately 165 million square kilometres – one-third the Earth's surface. While an ocean, it also comprises many smaller, regional seas. It extends some 15,000 kilometres from the Bering Sea in the north to the northern extent of the Southern Ocean at 60°S. Its greatest east-west width occurs at approximately 5°N latitude, where it spans almost 20,000 kilometres (halfway around the world) from Indonesia to Colombia.

There are 22 Pacific Island countries and territories (Figure 1). These include American Samoa, the Commonwealth of the Northern Mariana Islands, Cook Islands, French Polynesia, Guam, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Caledonia, Niue, Palau, Papua New Guinea (PNG), Pitcairn, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Wallis and Futuna. In terms of its physical and human geography, the region is classified into three geo-cultural sub-regions: Melanesia, Micronesia and Polynesia. Melanesia comprises large, mountainous and mainly volcanic islands, while Micronesia and Polynesia are made up of much smaller island landmasses and mostly contain small atolls with low elevation as well as some islands of volcanic origin. Some countries consist of a single island (Nauru and Niue), while others are composed of hundreds which are separated by great distances (e. g. PNG).<sup>4</sup>

### Glossary of Key Terms

**Climate change** is a change in the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external pressures, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.<sup>5</sup>

**Disaster** is defined as “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.”<sup>6</sup> Disasters result from a combination of risk factors: the exposure of people and critical assets to single or multiple hazards together with existing conditions of vulnerability, including insufficient capacity or measures to reduce or cope with potential negative consequences.

**Disaster risk** is considered to be a function of **hazard, exposure** and **vulnerability**. Disaster risk is normally expressed as the probability of loss of life, injury or destroyed or damaged capital stock in a given period of time. **Exposure** refers to the location and number of people, critical infrastructure, homes and other assets in hazard-prone areas. **Vulnerability** is the degree of susceptibility of these assets to suffer damage and loss due to inadequate design and construction, lack of maintenance, unsafe and precarious living conditions and lack of access to emergency services.<sup>7</sup> **‘Natural’ hazards** are events or conditions originating in the natural environment that may affect people and critical assets located in exposed areas. The nature of these hazards is often strongly influenced by human actions, including urban development, deforestation, dam-building, release of flood waters and high carbon emissions that contribute to long-term changes in the global climate. Thus, their causes are often less than ‘natural’.

**Displacement** may be caused by the threat and impact of disasters. It also increases the risk of future disasters and further displacement. In the context

## Glossary of key terms (continued)

of slow-onset events associated with climate change, displacement occurs when people have been forced to flee their homes or places of residence and the possibility of return is not permissible (e.g., in the context of some relocations) or feasible (e.g., when land has been lost), or when return cannot reasonably be required (e.g., when land is no longer habitable). Being displaced puts people at a higher risk of impoverishment and human rights abuses, creating new concerns and exacerbating pre-existing vulnerability. This is especially true where homes and livelihoods are destroyed and where displacement is recurrent or remains unresolved for prolonged periods of time. Forced from their homes or places of residence, people face specific forms of deprivation, such as the loss of shelter, and often face heightened or particular protection risks such as family separation and sexual and gender-based violence, particularly affecting women and children.<sup>8</sup>

People are considered displaced when they have been forced to leave their homes or places of residence and the possibility of return is not permissible, feasible or cannot be reasonably required of them. Voluntary **migration** is at the other end of the spectrum of population mobility. 'Voluntary' does not necessarily imply complete freedom of choice, but merely that "voluntariness exists where space to choose between realistic options still exists."<sup>9</sup>

**Impacts** are the effects of physical events, disasters and climate change on natural and human systems.<sup>10</sup>

The 22 Pacific Island countries and territories are very vulnerable to natural hazards, some of which have been or are likely to be compounded by climate change.<sup>11</sup> The 2012 report by the Intergovernmental Panel on Climate Change (IPCC) on extreme events reiterates some of the vulnerabilities of small island states: "The small land area and often low elevation of small island states make them particularly vulnerable to rising sea levels and impacts such as inundation, shoreline change, and saltwater intrusion into underground aquifers."<sup>12</sup> The 2013 *Global Assessment Report* notes that "disasters are amplified in SIDS [Small Island Developing States] because their economies are undiversified; hazard events may affect their entire territory; and many are heavily indebted and have a constrained fiscal space."<sup>13</sup> The World Risk Index, which measures both natural hazards and vulnerabilities to them, ranks three Pacific Island countries (Va-

nuatu, Tonga and the Solomon Islands) among the top four countries at risk.<sup>14</sup> The wide array of geo-physical, hydro-meteorological and climatological natural hazards in the region contribute to frequent disasters, both rapid-onset (such as earthquakes and cyclones) or slow-onset (such as droughts and coastal erosion due to sea-level rise) in nature. There are indications that some weather-related extreme events have increased in frequency and/or intensity in recent decades, and growing populations and environmental degradation have compounded vulnerabilities to such hazards.<sup>15</sup>

Assessments show that disaster impacts have more serious outcomes in countries with small and vulnerable economies, including many SIDS.<sup>16</sup> SIDS also have elevated relative risks in proportion to their size and population given that people and assets are concentrated in small areas.<sup>17</sup> For example in regard to cyclones, Vanuatu has the highest mortality risk per million inhabitants in the world.<sup>18</sup>

There is clear evidence that sudden-onset disasters cause displacement. A study by the Internal Displacement Monitoring Centre and the Norwegian Refugee Council found that in 2012 more than 32 million people were displaced by disasters globally – 144 million people over five years (2008–2012).<sup>19</sup> An estimated 2.7 million people were displaced by disasters in SIDS over the past five years, and in Oceania more than 318,000 people were displaced by disasters related to rapid-onset natural hazards during this time. This includes an estimated 128,550 people forced from their homes by flood and storm disasters in 2012 – the highest disaster-induced displacement figure reported for 2008–2012.<sup>20</sup> Samoa and Fiji were among the ten countries worldwide which saw the highest per capita levels of displacement in 2012. Displacement was also reported in Papua New Guinea, Solomon Islands, Tonga, Vanuatu and Palau, as well as in Australia and New Zealand.

Globally, most disaster-induced displacement is internal, even more so in Pacific Island countries which often are hundreds, if not thousands, of kilometres away from their nearest neighbour. There is a common perception that most displacement from disasters is short-term and short-distance. This may indeed have been the case in the Pacific but there is growing evidence that many of those displaced by disasters can be displaced for long periods of time.<sup>21</sup> There are also concerns that major disasters and/or slow-onset climate change impacts such as sea-level rise, deterioration of coral reefs and salinisation of ground water might make certain islands or even countries uninhabitable and might lead to large-scale international displacement.<sup>22</sup>

The term displacement always implies that movement is

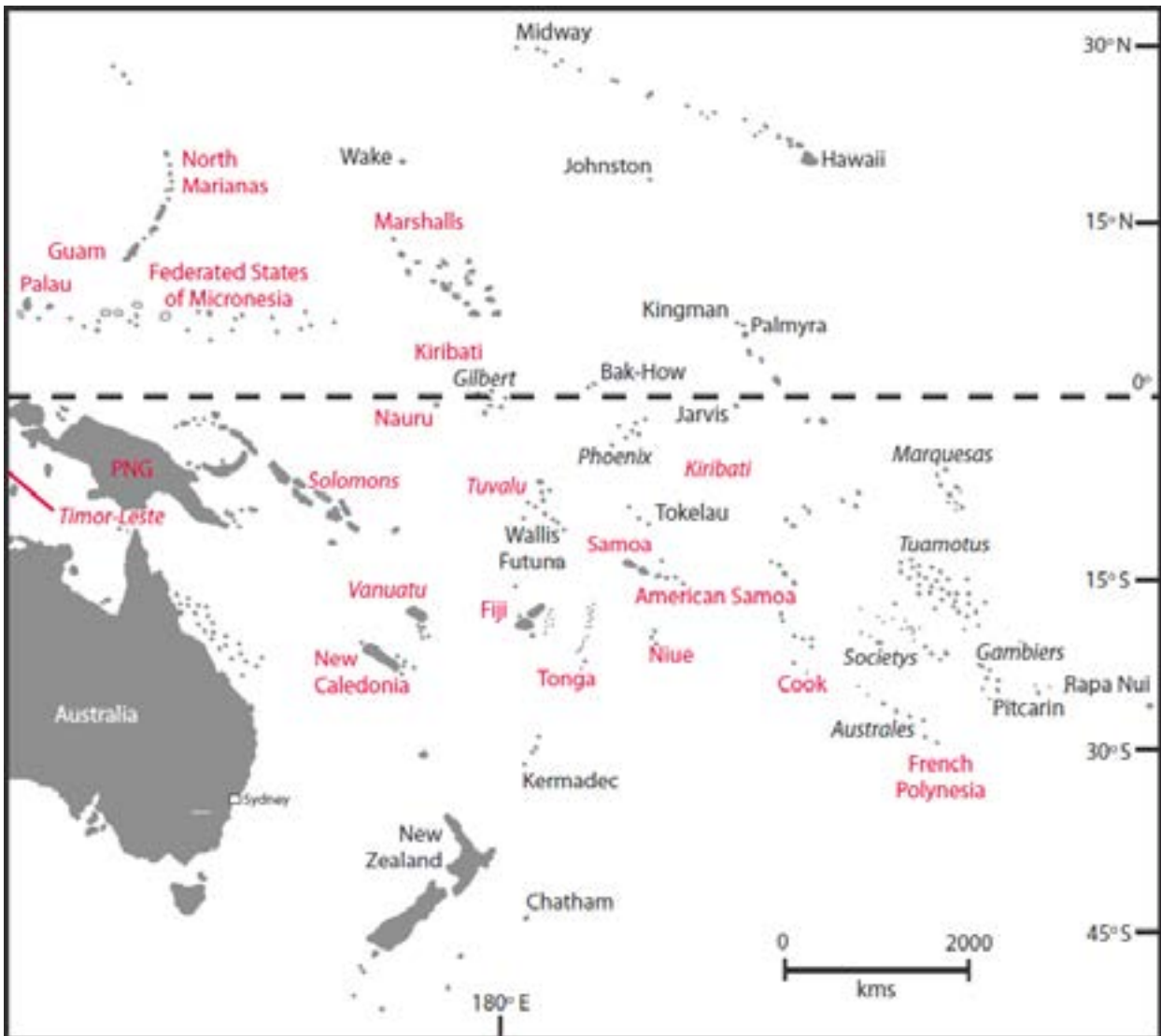


Figure 1. Map of the Pacific Ocean region with Small Island Developing States and Territories indicated (in red). Countries in italics are also classified as Least Developed Countries (Source: Dale Dominey-Howes)

forced (even if it is anticipatory of negative events). This is an important point in the discussion of human movement in the context of slow-onset disasters and climate change impacts. The exact point at which movement is 'voluntary' (and thus termed migration) or is 'forced' (and therefore described as displacement) is difficult to pinpoint (see Glossary for more). In many cases there is an array of contributory push and pull factors. These include environmental factors such as pressure on livelihoods because of sea-level rise and coastal erosion. Migration is also increasingly seen as an adaptation strategy to climate change. It should be noted that those people who are unable to move or are forced to stay may be among those at greatest risk of displacement.<sup>23</sup> As a large part of global migration is to urban areas, there is also growing concern that new migrants often end up settling in hazard-prone informal settlements.<sup>24</sup>

Another set of human mobility strategies that arise when

discussing disasters and climate change are (planned) relocations and resettlement. These involve individuals, households or entire communities being either proactively or retroactively moved to a different location. They entail at least some degree of planning. Relocation and resettlement are terms that are often not clearly differentiated. Responses to development-induced displacement (e.g., related to tourism) should involve not only the physical relocation of communities but also wider issues of restoration of living standards and livelihoods.

There are legal and operational challenges to both internal and cross-border displacement. For internally displaced persons (IDPs) the *Guiding Principles on Internal Displacement* are fully applicable. However, realisation of the principles is weak, both normatively and in operational terms. Persons moving across borders in the context of disasters are protected by human rights law, while refugee law applies to a very limited extent only. However,

human rights protection does not address technical issues such as admission and temporary/permanent stay, meaning there is a legal gap with respect to cross-border displacement when triggered by the impacts of disasters and climate change.<sup>25</sup>

Given the widespread human mobility concerns related to disasters and climate change, the issue has gained more attention in recent years.<sup>26</sup> Acknowledging the importance of human mobility, State Parties to the *United Nations Framework Convention on Climate Change* (UNFCCC) at the 2010 Conference of Parties in Cancun, Mexico, agreed to a decision that:

*“Invites all Parties to enhance adaptation action under the Cancun Adaptation Framework taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, to undertake, inter alia:*

*... .*

*(f) Measures to enhance understanding, coordination and cooperation related to national, regional and international climate change induced displacement, migration and planned relocation, where appropriate.”<sup>27</sup>*

There is gathering interest in human mobility issues in the Pacific, not least through the (often alarmist) narrative of ‘disappearing states’.<sup>28</sup> As well as worst-case scenarios – of justified concern to some low-lying atoll countries – climate change and disasters have a strong potential to disrupt Pacific societies and make people want or have to move both internally and internationally.

The often mentioned remoteness and the vastness of distance between islands can obscure recognition of the Pacific’s long history of human mobility, beginning with the initial settlement of the Pacific Islands millennia or centuries ago. This historical context needs to be acknowledged. Colonial rule led to increasing in- and out-migration. In many cases resource exploitation by colonial powers as well as environmental variability led to resettlement of whole communities.<sup>29</sup> The legacy of colonial history determines many of the migration possibilities in and out of the region today and should shape any debate about human mobility. So grave are the risks posed by geophysical and hydro-meteorological disasters and climate change impacts to Pacific communities that debate on how to respond is already ongoing.

This paper attempts to facilitate this debate by close analysis of some of the key regional documents recently developed to address issues of disaster risk management and climate change adaptation. Section A looks at National Adaptation Programmes of Action (NAPAs)

which are part of the UNFCCC process to support least developed countries to cope with climate change effects. Section B analyses National Action Plans on Disaster Risk Management (NAPs) and Joint National Action Plans on Disaster Risk Management and Climate Change Adaptation (JNAPs). Section C reviews other relevant documents, such as national disaster management laws, climate change adaptation frameworks and the relevance of wider national development frameworks.

The paper particularly focuses on the extent to which displacement risks are addressed and how wider human mobility issues impact discussion. It further looks at how displacement risks and human mobility issues are incorporated in action plans and proposed projects. Each analysis starts with brief background on each of the countries. Each section ends by drawing together main findings of the analysis. The paper concludes with an overall synthesis and recommendations for Pacific Island governments, humanitarian and development actors and other stakeholders. In line with the Nansen Initiative’s focus on cross-border displacement, the paper particularly focuses on how the documents conceptualise and address cross-border displacement.

The study acknowledges its limitations in the number of documents it was able to review. It thus does not claim to be a comprehensive analysis of all laws and policies in the Pacific region pertaining to disaster risk management and climate change adaptation. Still, it should provide a comprehensive analysis of Pacific NAPAs and NAPs/JNAPs.

# 2

## Analysis of Laws, Policies and Plans in Pacific Island Countries

### A. National Adaptation Programmes of Action (NAPAs)

#### 1. Background

The National Adaptation Programmes of Action (NAPAs) are an outcome of UNFCCC negotiations. NAPAs were aimed to support Least Developed Countries (LDCs) in “communicating priority activities addressing the urgent and immediate needs and concerns . . . relating to adaptation to the adverse effects of climate change.”<sup>30</sup>

The outcome document of the 7th Conference of Parties (COP) in Marrakech in 2001 states that the rationale for developing NAPAs rests on the low adaptive capacity of LDCs. NAPA activities would be those “whose further delay could increase vulnerability, or lead to increased costs at a later stage.”<sup>31</sup> NAPA formulation should be based on a national consultative process and the outcome should be the identification of key climate-change adaptation measures, based, to the extent possible, on vulnerability and adaptation assessment.<sup>32</sup>

To facilitate the preparation and implementation of the NAPAs, the COP agreed to establish a Least Developed Countries Fund (LDCF).<sup>33</sup> The LDCF was established by the Global Environmental Facility (GEF).<sup>34</sup> By June 2012, the LDCF had funded the preparation of 48 NAPAs, 47 of which were completed. Forty-six countries have submitted NAPA implementation projects for approval. As of April 2013 the LDCF had supported 75 initiatives in 44 countries, totaling \$334.6 million and leveraging \$1.59 billion in co-financing.<sup>35</sup>

Five Pacific countries – Kiribati, Samoa, Solomon Islands, Tuvalu and Vanuatu – are classified as LDCs by the UN. All have developed NAPAs.

**Table 1: List of Pacific countries that have prepared NAPAs**

Country	Year
Kiribati	January 2007
Samoa	December 2005
Solomon Islands	December 2008
Tuvalu	May 2007
Vanuatu	December 2007

This section will analyse how these five LDCs locate displacement risk within the documents and if and how they address human mobility (displacement, migration and relocation). It looks at where the countries locate their vulnerabilities in respect to climate change and if and how they directly or indirectly address human mobility. It further looks at the policy and project component of the NAPAs to see if they include explicit or implicit references to human mobility. We briefly analyse project plans funded by the GEF for those countries whose NAPAs include human mobility provisions to see if they do indeed address human mobility concerns.

#### 2. Kiribati

##### Locating climate and disaster risks and vulnerabilities in the NAPA

Its NAPA notes that Kiribati – consisting of three island groups of 33 atolls that mostly rise only three or four metres above sea level<sup>36</sup> and are on average only a few hundred metres wide – is one of the most vulnerable countries to the adverse impacts of climate change.<sup>37</sup> Kiribati has a population of 103,058, a third residing on mostly urban and densely populated South Tawara, where the capital is located.<sup>38</sup>

In terms of vulnerability, the NAPA particularly highlights inundation and erosion, as well as the contamination of the fresh groundwater lens by storm surges.<sup>39</sup> Environmental and social problems identified include:

- emerging unacceptable levels of inequality
- increasing population
- deteriorating states of coastal zones, coral reefs, fisheries, fresh ground water, human health and biodiversity
- inadequate urban services such as water supply and sanitation
- over-exploitation of natural resources in urban Tarawa
- difficulty in enforcing land use management strategies and controls.<sup>40</sup>

The NAPA notes that “with warmer temperatures, sea-level rise, increased storm surges, climate variability and the increase of associated adverse effects such as erosion, past adaptation practices in Kiribati are no longer found to be effective.”<sup>41</sup> Climate change is seen as to have exacerbated the socio-environmental challenges listed above. This is particularly the case on South Tawara.

The first reference to human mobility concerns the re-settlement of families in the 1930s from the Southern Gil-

berts to three uninhabited islands of the Phoenix Group after population growth put pressure on subsistence livelihoods. The islands provided a new home but were not suitable for permanent settlement, because water was seriously saline. The population had to be resettled to an unspecified foreign country in the 1950s and 1960s.<sup>42</sup>

The NAPA also refers to the relocation of traditional settlement areas (*kaainga*), which were scattered among the island, to existing village sites that are located along one edge of the island, usually on the side sheltered from the prevailing easterly winds.<sup>43</sup> The NAPA notes that processes of erosion and deposition of sediments on shore, most likely affected by climate change, are threatening villages. The NAPA explains that a few cases of relocation of parts of villages have already occurred, with “implications on the uses and sometimes conflicting claims over resettled land.”<sup>44</sup> Erosion is not only seen as a risk for the structure of villages but as particularly threatening for urban infrastructure in South Tarawa.

Another displacement risk for communities in Kiribati is flooding caused by storm surges and exceptionally high spring tides. The NAPA notes that traditional houses have raised floors, which have proven an appropriate mitigation measure during flooding. When flooding leads to erosion or land is persistently inundated people have to “relocate themselves or retreat.”<sup>45</sup> The NAPA refers to traditional methods of disaster mitigation such as using preserved traditional foods as emergency stocks. Kiribati’s integration into the global economy has led to an erosion of both traditional values and mitigation methods. Historically, during storms and storm surges, people would camp out on the sheltered side of the island, with houses being propped up with additional timber supports. While those methods might be still applicable, higher housing demand due to a growing population and stresses on the environment caused by climate change leads to lesser availability of building materials. This can lead to inferior housing more vulnerable to natural hazards.<sup>46</sup>

The document also voices serious concerns about the effects of climate change on agriculture and water. Erosion and more frequent and damaging storm surges will reduce agricultural productivity while drought and increased air temperature threaten the resilience of crops. Drought and salt-water intrusion pose severe risks to freshwater resources.

#### *Locating human mobility in adaptation policy and projects*

Concurrent with the implementation of the NAPA, which focuses on immediate adaptation needs, Kiribati is also implementing the Kiribati Adaptation Project (KAP) focusing on long term planning for adaptation. The NAPA document notes that adaptation planning should be con-

sistent with national development policies and strategies. The climate change adaptation strategy (CCAS) of Kiribati therefore stresses the long-term perspective of adaptation planning and implementation. The CCAS focuses on eight focal areas, one of which is “population and resettlement” about which the NAPA does not elaborate.

Kiribati’s NAPA includes a range of interventions – such as water resource adaptation, well improvements, coastal zone management, strengthening climate change information and monitoring, institutional strengthening, upgrading of meteorological services, composting, using gene banks, coral monitoring, upgrading of coastal defenses and enabling Kiribati’s effective participation in international fora.<sup>47</sup> However, there is no mention of any human mobility related interventions. Several projects, however, have disaster risk reduction (DRR) components that might have implicit effects on displacement risks from hydro-meteorological disasters. For example, the project on upgrading the meteorological service has an objective to increase its “role in enabling the public and individuals to be able to manage risks from extreme weather events.”<sup>48</sup> Several of the other NAPA projects – including those involving coastal management, agriculture and coastal defenses – will also impact displacement risks from both sudden and slow-onset disasters.

For its part, the KAP has a component to support population and resettlement programmes.<sup>49</sup> The Kiribati Government acknowledges that “relocation of our people may be inevitable,” and that it “would be irresponsible to acknowledge this reality and not do anything to prepare our community for eventual migration in circumstances that permit them to migrate with dignity. That said, relocation will always be viewed as an option of last resort.”<sup>50</sup> The relocation strategy seeks to facilitate migration in the present in order to build expatriate communities of I-Kiribati abroad.<sup>51</sup> Once established, these communities will be able to absorb future migrants while simultaneously increasing remittances to support those who remain. The strategy also includes provisions to increase training and qualifications of Kiribati’s population to facilitate people’s ability to find employment abroad.<sup>52</sup>

### **3. Samoa**

#### *Locating climate and disaster risks and vulnerabilities in the NAPA*

Samoa consists of two main (Upolu and Savai’i) and seven small islands. It has a population of 186,340 (2011), 76 per cent of whom live on Upolu, with 20 per cent in the urban area of the capital, Apia.<sup>53</sup>

Samoa is highly vulnerable to disasters and the impacts of climate change since 70 per cent of the population and infrastructure is located in low-lying areas. Samoa’s

NAPA highlights climate-related hazards such as tropical cyclones, prolonged periods of drought, extreme flooding, pests and unpredictable diseases, storm surges and sea-level rise.<sup>54</sup> The main projected climate change impacts for Samoa will be reduced overall annual rainfall, higher occurrences of high intensity rainfall, increased average temperature, rising sea levels and increased tropical cyclone frequency and intensity.<sup>55</sup>

Food production and freshwater are expected to be most affected by climate change-driven drought, flooding and seawater intrusion into underground water aquifers.<sup>56</sup> Climate change will also have a significant impact on urban settlements, which are also affected by high population growth and rural-urban migration. The NAPA notes that “poor drainage systems, no strategic planning, and an increasing urban population will only exacerbate the impacts of climate change on urban settlements.”<sup>57</sup> The NAPA mentions damage to village housing, coastal erosion, flooding of low-lying areas and damage to cultural and heritage sites.<sup>58</sup> A number of village communities already experience flooding, a problem compounded by deforestation.<sup>59</sup>

#### *Locating human mobility in adaptation policy and projects*

Of the nine priority activities which are the outcome of Samoa’s country-wide NAPA consultations, the project on implementing coastal infrastructure management in highly vulnerable districts entails relocation of roads and communities farther inland. It anticipates as expected outcomes the incremental relocation of community and government assets away from coastal hazard zones, the establishment of lifeline services such as health care and water outside the hazard zones, as well as the elevation of residential developments to mitigate flood risks.<sup>60</sup> Other issues raised were land ownership and tenure as well as the preference for coastal communities to be able to access coastal resources.<sup>61</sup> The proposed funding for the project, \$450,000, includes only one major relocation-based component – identification of a new site for the relocation of district hospitals and clinics outside hazard zones.<sup>62</sup>

Another priority project is the development of a climate early warning system. Referencing previous cyclone and wildfire impacts, the project seeks to provide more timely warnings, monitoring and identification of flood-prone areas.<sup>63</sup>

## **4. Solomon Islands**

#### *Locating climate and disaster risks and vulnerabilities in the NAPA*

The Solomon Islands’ land area consists of a double chain of six large islands and a total of 997 islands. The

country’s estimated population was 508,000 in 2007 with a projected population of 607,000 by 2014. The main environmental concerns raised in the NAPA result from logging, land clearing, subsistence farming, over-fishing and other forms of marine resource exploitation. Other environmental issues concern population growth, waste disposal and the adverse effects of climate change and sea-level rise.<sup>64</sup>

With 84 per cent of Solomon Islanders living in rural areas in 2006 and 85 per cent of the rural population being dependent on subsistence agriculture and fisheries, agriculture is of key importance. The NAPA notes that to avoid land disputes some cultivators have reduced the length of fallow periods and moved to more marginal land to be able to farm. Climate change impacts on agriculture are observed from extreme events (cyclones and floods), as well as temperature changes, drought or continuous heavy rain, salt-water intrusion and changing patterns of pests and diseases. Sea-level rise and coastal erosion are particularly affecting atoll islands.<sup>65</sup>

Looking at the vulnerabilities of human settlements, the NAPA recognises land tenure and ownership have implications for dealing with and managing the effects of climate change and sea-level rise. It further highlights the pivotal importance of land when considering relocation and resettlement schemes.<sup>66</sup> The document describes previous relocation activities within and outside the country as a result of disasters, population pressures and, probably, climate change (on a very minimal scale). Other factors leading to relocations are difficulties accessing water and growing crops, thus pushing people to leave their cultural and traditional homes to relocate elsewhere in the country.<sup>67</sup> The NAPA is vague on elaborating if these relocations are planned or spontaneous, though it seems more likely this section refers to forms of environmental and economic migration. The document further points out relocations have taken place in Western, Guadalcanal, Temotu, Malaita and Choiseul Provinces, as well as Honiara.<sup>68</sup>

The NAPA mentions the likelihood that climate change and sea-level rise will displace communities, particularly those on low-lying atolls and artificially built islands where adaptation potential is limited, land is in short supply and residents live in high-risk, disaster-prone and climate-sensitive environments: “it will be necessary for these groups of people to be resettled but will require and depend entirely on national and provincial government efforts.”<sup>69</sup> The NAPA suggests that land owning groups should be given powers over the tenure system at community, provincial and national levels. One priority for the government, therefore, seems to be provision of land titles to owners of customary land,<sup>70</sup> holders of 87 per cent of the land area of the Solomon Islands.<sup>71</sup>

The NAPA lists climate change impacts on human settlements:

- movement of communities to areas where food and water are available
- loss of soil moisture due to prolonged drought
- loss of arable land and settlements due to the impacts of erosion, storm surges, and coastal and riverine flooding on settlements and arable land
- inability of some coastal and island communities to move inland and to enter territory of other tribes
- frequency of movement of many coastal communities: some have relocated two or three times in the last decade or so with impacts particularly apparent along the Weather Coast of Guadalcanal, the coast of Makira and elsewhere where inhabitants live facing the open ocean and lacking fringing protective reefs
- serious damage to villages and housing due to the increasing intensity of tropical cyclones.<sup>72</sup>

In relation to education, the NAPA discusses relocating or rebuilding key infrastructure such as schools in the wake of disasters. It cites the relocation of Selwyn College from the Ngalibia area to Maravovo as a good example for a disaster mitigation strategy for educational institutions.<sup>73</sup>

#### *Locating human mobility in adaptation policy and projects*

The overall framework for adaptation to climate change and for development in the Solomon Islands is embedded in the Medium Term Development Strategy 2008–2010.<sup>74</sup>

In the consultative phase of the NAPAs most communities reported they had already carried out adaptation measures. These included moving inland or to higher ground, building on stilts overwater, seawall construction, propping up houses in the water and building on stones.<sup>75</sup> The NAPA show some communities have very limited adaptation options, particularly in Langalanga, Kwai, Ngongosila and Lau (where most of the settlements are built on water and low-lying atolls), Ontong Java, Sikaiana and the Reef Islands.<sup>76</sup>

As an outcome of the NAPA process, the Solomon Islands identified seven priority areas for adaptation projects. Priority one comprises a wide range of sectors, including agriculture and food security, water and sanitation, human settlements and human health, education awareness and information. The other six priorities are 2) low-lying and artificially built-up islands, 3) waste management, 4) coastal protection, 5) fisheries and marine resources, 6) infrastructure development and 7) tourism.<sup>77</sup>

Component three priority one (dealing with human settlements) proposes community vulnerability and adaptation assessments to enhance the capacity of islands and communities to plan for adaptation. The introduction to

the project component notes that island people (communities and villages created as part of the former British Solomon Islands Protectorate policies) and migrant communities (both of which have often moved partially as a consequence of disasters as well as opportunities for employment) often have limited resources and adaptation options. One key potential option is relocation: since relocation has serious political, economic and socio-cultural implications, the project clearly seems to be framed around it.<sup>78</sup>

The project proposal for priority two (climate change adaptation on low-lying and artificially built islands in Malaita and Temotu provinces) aims at supporting settlements built on water as well as low-lying atolls. The project rationale states that for most of the respective communities relocation is a potential adaptation measure. However, relocation is problematic when communities do not own land on nearby islands. Land tenure and land management systems prohibit any discussion, let alone relocation, to nearby islands. The NAPA gives an example of the Langalanga people, who cannot move to a nearby island where they do not own land.<sup>79</sup> It again affirms that relocation will become the responsibility of the government at all levels.

The project aims at developing a relocation framework involving consultation with vulnerable communities, government authorities and land and resource owners. Preparation and approval of plans for new settlements includes the relocation of communities and/or villages and a strengthening of dialogue between land and resource owners.<sup>80</sup> Discussing the sustainability of the project, the NAPA notes that currently there is no legislation or legal framework which would allow climate change-affected communities to relocate. Therefore, it states the process will require development of specific legislation and legal frameworks. The biggest identified risk for implementation is the failure of landowners to agree with terms and conditions of relocation and demanding the government pay prohibitive amounts of compensation. The proposal therefore suggests the government engages landowners at the very early stages of planning to ensure programme sustainability. The proposed budget for this project is \$3.5 million.<sup>81</sup>

## **5. Tuvalu**

### *Locating climate and disaster risks and vulnerabilities in the NAPA*

Its NAPA summarises risks facing Tuvalu: “The islands of Tuvalu rarely exceed 3 meters in height. There is no high ground on the islands to escape to during a tsunami or tidal wave. The combination of minimal land, high population density, and no high ground to escape to in an event of a disaster makes Tuvalu one of the most vul-



nerable nation in the world to natural hazards, especially in regards to rising sea levels and extreme events due to climate change.”<sup>82</sup>

Tuvalu faces multiple challenges: a limited natural resource base, widely scattered and sparsely populated islands, small size, isolation from international markets, increasing poverty in rural areas, growing population pressures on a limited land and marine resource base, land degradation arising from coastal erosion, saltwater intrusion and increasing deforestation and incidence of drought.<sup>83</sup>

Tuvalu is one of the least populous Pacific Island states, with an estimated population of 11,206 in 2011.<sup>84</sup> Over half of the population (53 per cent according to a 2010 statistical report<sup>85</sup>) lives on Funafuti, the capital and only urban centre. The NAPA notes that due to increasing changes in lifestyle and dependence on imported foods internal migration, especially to the capital, has been high.<sup>86</sup> There has also been significant international migration – over a thousand people, some ten per cent of the population – emigrated between 1991 and 2002. While this relieves some of the population pressure induced by high birth rates it also highlights what the NAPA calls Tuvalu’s “poverty of opportunity.”<sup>87</sup> Migration often leaves elderly people on outer islands abandoned by relatives who depart for urban centres or overseas. This effect is shown by the fact the NAPA indicates only two islands have had major population increases. They are Funafuti, on which the capital is located, and Vaitupu, where the NAPA notes that a government funded secondary school has taken in more students. Six of the other seven islands saw significant population decreases, with Niulakita, for example, seeing a decrease of 60 per cent (from 75 to 35 persons) in a decade. Population projections in the NAPA anticipate a possible doubling of the population by 2026.<sup>88</sup>

The NAPA identifies several key challenges and vulnerabilities exacerbated by climate change:

- Coastal erosion, saltwater intrusion and increasing vector- and water-borne diseases due to sea-level rise and natural disasters. Stakeholder consultations demonstrated some families already have lost land as a consequence of climate change. As 90 per cent of communities live close to the coast, and the most important infrastructure is located in coastal zones, combatting coastal erosion is identified as a priority. The main causes of erosion are sea-level rise, flooding, storm surges, tropical cyclones, major hurricanes, removal of soil to use as aggregate for construction of buildings and coastal development activities.
- Flooding and inundation. The worst recorded floods in Funafuti, in February 2006, led to some evacuations and community claims for damage to livelihoods through saltwater intrusion into pits used to grow *pulaka* (a form

of taro).<sup>89</sup> Other islands also experienced flooding.

- Inadequate potable water due to less rainfall and prolonged droughts. This risk is particularly challenging for densely populated areas and northern islands closer to the equator. Pollution of groundwater by waste also plays an important role. Droughts have led to importation of desalination equipment.
- Negative effects on agricultural production and fisheries. In addition to the impacts on pulaka production fisheries are also affected: by sea surface temperature changes and increasing frequency of extreme events.<sup>90</sup>

The increasing frequency of the El Niño–Southern Oscillation (ENSO), which is associated with either erratic rainfall or low rainfall, is linked to stress on groundwater lenses. Cyclones are reported to cause severe destruction of vegetation and crops and also loss of life.<sup>91</sup> Tuvalu was hit by an average of only three cyclones per decade between the 1940s and 1970s, but eight occurred in the 1980s and at least ten in the 1990s.<sup>92</sup>

#### El Niño–Southern Oscillation (ENSO)

The ENSO (El Niño–Southern Oscillation) cycle refers to the coherent and sometimes very strong year-to-year variations in sea-surface temperatures, convective rainfall, surface air pressure and atmospheric circulation that occur across the equatorial Pacific. El Niño and La Niña represent opposite extremes in the ENSO cycle. La Niña is characterised by unusually cool ocean surface temperatures in the central and eastern tropical Pacific. La Niña is characterised by unusually warm ocean surface temperatures. Both La Niña and El Niño disrupt the large-scale ocean-atmospheric circulation patterns in the tropics and have important consequences for weather and climate around the globe.<sup>93</sup>

#### *Locating human mobility in adaptation policy and projects*

The NAPA stresses that the overall impacts of climate change and sea-level rise will increase. Adaptation measures should thus seek to mitigate the most severe effects and to address the greatest vulnerabilities. In a worst case scenario the last resort would be migration and resettlement.<sup>94</sup>

The NAPA was designed to be compatible with Tuvalu’s national strategy for sustainable development 2005–2015 (TeKakeega II) and other plans such as the National Action Plan on Desertification and Land Degradation.<sup>95</sup> Tuvalu’s NAPA identifies seven projects, ranked in order of priority:

- coastal: Increasing resilience of coastal areas and settlement to climate change
- agricultural: increasing subsistence on pit grown *pulaka* through the introduction of a salt-tolerant species
- water: adaptation to frequent shortages through increasing household water-storage capacity and water conservation techniques
- health: strengthening of community health through control of vector-borne and climate-sensitive diseases and promotion of access to quality potable water
- fisheries: strengthening of community-based conservation programmes on highly vulnerable near-shore marine ecosystems
- fisheries: adaptation to near-shore coastal shellfish fisheries resources and safeguarding coral reef ecosystems
- disasters: strengthening community disaster preparedness and response potential.<sup>96</sup>

Only the project on strengthening community disaster preparedness and response potential directly addresses human mobility. One of its activities – budgeted at \$15,000 – is developing a post-disaster resettlement and rescue plan. It also includes activities to develop a disaster preparedness and response strategy, to integrate risk reduction into national development and to develop early warning systems.<sup>97</sup>

## 6. Vanuatu

### *Locating climate and disaster risks and vulnerabilities in the NAPA*

Vanuatu, consisting of over 80 islands with a fast-growing population of about 210,000 (2006), is a relatively rural country. The NAPA notes sixteen per cent of the population live in Port Vila and six per cent in Luganville, the two main urban centres.<sup>98</sup> Population growth is adding to pressure on available arable land. In urban areas, pressure has increased on water resources and services.<sup>99</sup> Consisting of mostly volcanic islands, inter- and intra-island travel and communications are difficult.

Vanuatu is exposed to cyclones, ENSO-driven alternating prolonged droughts and wet conditions, as well as storm surges, coastal and river flooding, landslides and hailstorms. In addition the country also experiences frequent earthquakes and occasional tsunamis and volcanic eruptions.<sup>100</sup> The NAPA particularly highlights the huge impacts of cyclones in the late 1980s which caused property damage of \$152 million, with negative consequences on economic development.<sup>101</sup> The frequency of tropical cyclones has been increasing. Climate models predict warmer and drier conditions in much of Vanuatu, coupled with increasingly strong rainfall from more intense and frequent tropical storms and depressions. More frequent El Niño episodes could also lead to prolonged dry sea-

sons. With 65 per cent of the population relying on small-scale agriculture, changes in precipitation and temperature have the potential to disrupt agricultural practices and the livelihoods of farmers. Much of the infrastructure as well as the main urban centres are located in coastal areas. Only a few metres above sea level, they are particularly vulnerable to storm surges and cyclone impacts.<sup>102</sup>

### *Locating human mobility in adaptation policy and projects*

The inter-agency National Advisory Committee on Climate Change (NACCC), the main institution in Vanuatu tasked with climate change policy, was also responsible for drafting the NAPA. Simultaneously NACCC was also overseeing the 'Capacity Building for the Development of Adaptation Measures Project', which implemented the first global climate change adaptation project in Vanuatu. The project relocated a settlement Lateau on Teguaisland, in Torba province in the northern part of Vanuatu. Prior to relocation, inhabitants faced regular inundation due to rising sea levels, water scarcity due to limited rainwater catchments and storage capacity and serious health issues. A vulnerability and adaptation assessment was conducted and community education and awareness programmes implemented. With NACCC technical assistance and the provision of basic infrastructure the entire community was relocated.<sup>103</sup>

A listing of adaption options by province suggests relocation as an adaptation option against coastal erosion, cyclones and flooding. "Relocation of settlements and various infrastructures" is pointed out as a possible adaptation option for the provinces of Malampa, Penama, Sanma, Shefa, Tafea and Torba.<sup>104</sup> Relocation of vulnerable settlements and infrastructure is mentioned among the 19 NAPA priority strategies.<sup>105</sup>

At the end of the prioritisation process seven areas were picked for NAPA projects.

- agriculture and food security (preservation/processing/marketing, modern and traditional practices, bartering)
- water management policies/programmes (including rainwater harvesting)
- sustainable forestry management
- community based marine resource management programmes (modern and traditional, aquaculture)
- mainstream climate change considerations into infrastructure design and Environmental Impact Assessments (EIAs)
- sustainable livestock farming and management
- sustainable tourism.<sup>106</sup>

The only NAPA project that refers to human mobility is that on sustainable tourism development. It includes the preparation of a climate risk profile for Vanuatu, which

gives specific attention to tourism. Contingency and evacuation plans in case of extreme climatic events are named as possible adaptation measures.<sup>107</sup>

### **7. A brief look at NAPA project implementation**

Given that most Pacific NAPAs were submitted between five and eight years ago, this paper briefly examines how implementation of NAPA projects in Pacific LDCs has progressed, especially those including a component on human mobility. Once a country has submitted its NAPA it can apply for LCDF funding. Projects need to be implemented through one of the ten GEF agencies.<sup>108</sup> Projects over \$2 million are referred to as full-sized projects and those under as medium-sized projects. Once the project is approved by the GEF funds are released to the implementing agency.<sup>109</sup> To allow for tracking of projects the GEF maintains an online project database.<sup>110</sup> This shows that only a small number of priority projects in Pacific NAPAs have been funded by the LCDF. Those funded are not necessarily those prioritised in NAPA documents.

For LCDF funding to Vanuatu, for example, the database shows three projects – preparation of the NAPA, one entitled *Increasing Resilience to Climate Change and Natural Hazards* and another entitled *Adaptation to Climate Change in the Coastal Zone in Vanuatu*. The document for the resilience project shows that it groups together activities proposed in several separate projects in the country's NAPA. It argues that “the NAPA and recent GFDRR [Global Facility for Disaster Reduction and Recovery] stock-take identified a number of on-the-ground activities which simultaneously address Vanuatu's immediate adaptation needs and also tackle risks posed by disasters. Given capacity constraints, these priorities cannot be implemented in their entirety under this project therefore their scope has been reduced.”<sup>111</sup> The project has several components on hazard mapping, early warning systems and the development of land use regimes. A tourism component focuses on developing hazard risk profiles for a range of existing tourism facilities. This is similar, though less comprehensive, than the tourism project proposal in the NAPA.<sup>112</sup>

The Solomon Islands only have two approved projects: the NAPA formulation and an adaptation project for the Solomon Islands water sector. This project seems to address one part of a multi-sector proposal of seven priority projects. The human settlements component, which deals with planning the relocation of vulnerable populations, does not appear to have been funded nor implemented.<sup>113</sup>

## **8. Analysing Pacific NAPAs**

### *Shared hazards and vulnerabilities*

All five Pacific countries with developed NAPAs already experience negative climate change effects, particularly

on agriculture and water availability. The NAPAs indicate awareness of societal processes and environmental issues threatening sustainable development. Recurring themes are rapid population growth, unplanned or under-planned urbanisation, over-exploitation of land and marine resources and inadequate waste and sanitation management, particularly in urban areas. Subsistence farming and fishing are still the main economic activities of a large part, if not a large majority, of the population. Impacts on agricultural systems therefore have major ripple effects on the population and the economy. While the natural hazard profiles of the five countries diverge significantly, many of the overall hazards are fairly similar. Each country mentions storms and cyclones as major hazards. ENSO seems to lead to large shifts in rainfall distribution, bringing drought to some areas and increased heavy rainfall elsewhere. Countries also face similar climate change impacts such as a rise in coastal flooding and erosion, due to increased storms and rising sea levels, changes in heavy precipitation and drought patterns and salinisation of ground water sources. There is a general understanding in the NAPAs that low-lying atolls and coastal areas will bear the brunt of negative climate change impacts.

### *NAPAs, displacement risk and human mobility*

In the five Pacific NAPAs the term ‘displace’ is only found in that of the Solomon Islands. It is unfortunate that the NAPAs have not given more emphasis to this concern given that all five countries have witnessed displacement from sudden-onset disasters. In Samoa and Vanuatu this failure to mention displacement is particularly surprising. Having said this, it should be noted that discussions about displacement, migration and planned relocation in the context of climate change adaptation were still very much in their infancy in the UNFCCC process at the time of NAPA formulation. Human mobility issues were only acknowledged in paragraph 14(f) of the COP 16 *Cancun Adaptation Framework* in 2010, meaning that displacement-related issues were little discussed in early state-centred adaptation discourses.<sup>114</sup> In addition there is still a tendency to see displacement as a humanitarian rather than a development issue and the NAPA process was clearly entrusted to development actors.

While there may be scant mention of displacement in the NAPA documents there is some in the proposed NAPA projects. The use of terminology regarding human mobility is at times inconsistent, particularly around the usage of ‘relocation’. In some NAPAs it is indiscriminately used to describe displacement, migration and planned relocation.

This section attempts to compare some of the main themes surrounding displacement, migration and planned relocation in the NAPAs.

While displacement is not spelled out in four of the five reviewed NAPAs it is an implicit part of the debate surrounding natural hazards and climate change vulnerabilities. The main goals NAPAs and the suggested adaptation projects are mitigation of the negative effects of sudden-onset disasters on communities, infrastructure and livelihoods as well as the mitigation of effects of slow-onset disasters and slow-onset climate change.<sup>115</sup> Failure to specifically address disaster-induced displacement in the NAPAs may stem from the fact that most past disaster-related displacement was both short-distance and often short-term. Tuvalu's, for example, mentions evacuation of populations due to king-tides and Kiribati mentions people camping on sheltered sides of islands during storms. There clearly is an understanding that better early warning systems would allow people to get to safety faster. Several NAPAs include early warning components. Some also mention improvement of emergency plans. Vanuatu's includes tourism-related contingency and evacuation plans.

Migration is one of the common themes in all the NAPAs, with several mentioning internal and some international migration. They emphasise rural-urban migration and migration from outer islands to urbanised main or inner islands. They see migration in terms of economic transformation and globalisation rather than climate change impacts. Tuvalu's NAPA mentions large scale international migration as a means to mitigate population pressure. Interestingly, the NAPAs mention the term migration almost as often discussing the migration of fish (particularly tuna) as of humans, thus indicating the importance of livelihood concerns in climate change-affected Pacific countries.

By far the most mentioned human mobility issue in the NAPAs is relocation, but there is considerable divergence of emphasis concerning how this term is used. The Solomon Islands' NAPA frankly discusses the potential need to relocate and resettle vulnerable communities whereas other NAPAs are more cautious and identify relocation as one of many options. Samoa's NAPA mentions relocation as a key adaptation strategy and one of its priority projects seeks to provide assistance to relocate roads and highly vulnerable communities inland. Vanuatu's NAPA notes the first global climate change adaptation project was the planned relocation of a settlement. But, while relocation of vulnerable settlements is among 19 priority actions, it is not ranked among the adaptation strategies with the highest importance. Additionally it is not included in any of the proposed projects of the NAPA. The NAPA of Kiribati notes the relocation of parts of villages has already occurred but, as with Vanuatu, no project component on relocation is included in the NAPA. Tuvalu's NAPA does not use the term relocation.

Comparing different approaches to relocation in the NAPAs is further complicated by the broad range of usages. This is not surprising, as the definition of relocation can be rather broad even in displacement literature. Ferris, in a paper for UNHCR, notes that "relocation generally refers to the physical process of moving people and can be either temporary or permanent and either voluntary or forced. In this sense, relocation is much less ambitious than resettlement in that it does not necessarily imply restoration of living standards and livelihoods."<sup>116</sup> The NAPAs include a wide range of uses of the term 'relocation'. It is used for describing the movement of houses and settlements (slightly) inland or to higher ground to counteract coastal erosion and flooding. In several mentioned cases, this seems to be seen as an adaptation measure that affected families or communities implement without much support from the government. In other cases, the term is almost congruent with resettlement, which usually involves some kind of outside intervention and support. In those cases, relocation refers to larger scale movement of people, the relocation of whole communities or villages to higher ground (Samoa) or even different islands (Solomon Islands). The Solomon Islands' plan uses the term migration in a broad set of senses. At one point it references previous activities of relocation within and outside the country as a result of disasters, population pressures and probably climate change, in which case relocation seems to stand in for both the terms of displacement and migration.<sup>117</sup>

It is also noteworthy that all relevant NAPAs discuss relocation from a village or community, rather than from an individual or household, perspective.

Several NAPAs reference resettlement. The starkest instance is that of Tuvalu which notes that "for a worst case scenario the last resort adaptation would be migration and resettlement."<sup>118</sup> There is no clarification if this relates to internal or international resettlement, but is probably the latter. Regarding more immediate adaptation options, the NAPA includes a post-disaster rescue and resettlement plan as an activity.

The Solomon Islands' NAPA references resettlement several times, most often in discussing "relocation and resettlement schemes."<sup>119</sup> It also clearly references the responsibility of the government for the resettlement of inhabitants of low-lying atolls and artificially built islands, noting this will depend on national and provincial government efforts.

Resettlement of communities to another country is only mentioned in a historic example in the NAPA of Kiribati. Three of the five countries (Samoa, the Solomon Islands and Tuvalu) have relocation or resettlement components as part of their NAPA priority projects. The Solomon Is-

lands is the most far reaching, including the development of relocation plans, consultations with communities and landowners and resettlement of communities. Samoa includes the inland relocation of communities but the project proposal does not reference any concrete steps on community relocation. Tuvalu's NAPA includes a \$15,000 project component to develop a post-disaster resettlement and rescue plan. The other two NAPAs don't include relocation/resettlement components in their priority projects.

NAPAs see land rights, land tenure and land availability as the main obstacles to successful relocation. Kiribati's notes that in the few cases of relocation that have already occurred the process has led to conflicting claims over resettled land. Samoa's also highlights land tenure and ownership issues as risks and barriers for relocation. The Solomon Islands' has the most extensive discussion on land rights and tenure issues. It mentions land disputes that are leading people to move to marginal land for subsistence agriculture as well as land conflicts arising from tourism and forestry development. Its plan acknowledges securing land as a critical issue. One government strategy to deal with land issues is the provision of tenure and land titles to owners of customary land, which makes up almost 90 per cent of the land of the country. Especially regarding relocation and resettlement to other islands, the NAPA notes the lack of land resources as a major obstacle and notes that current arrangements "prohibit any discussion, let alone relocate to nearby islands."<sup>120</sup> Therefore, the NAPA priority project suggests the involvement and consultation of landowners at an early stage of the projects, as well as the development of specific legal frameworks.

NAPAs recognise the need to develop plans, as well as laws and policies, for community relocation/resettlement. The Solomon Islands' NAPA implicitly notes the financing of relocation and resettlement schemes as a major issue.

There is hardly any discussion in the NAPAs about the effects that relocation/resettlement might have on resettled communities. Experience from resettlement due to development projects shows resettlement can lead to severe risks for resettled communities.<sup>121</sup> Therefore, access to livelihoods opportunities and health and education services is key to reestablishing sustainable communities at the place of destination.

Locating the Pacific NAPAs among the global NAPA process, they fare relatively well in their discussion of human mobility issues. McAdam notes that by July 2011, of the 45 NAPAs submitted, only ten mentioned migration or resettlement in their priority projects and a further eleven raised it as a possible adaptation or policy strategy. She notes that forward-planning to forestall future

population movement should be within the urgent and immediate needs to be addressed by the NAPAs.<sup>122</sup> Three of the Pacific NAPAs are located within the first category analysed by McAdam and two in the second, indicating Pacific LDCs have given mobility issues a higher priority than many of the other LDCs. Still, as the discussion above shows, the inclusion of human mobility issues into the Pacific NAPAs is far from comprehensive.

The 2007 *Human Development Report* raised several criticisms of NAPAs, highlighting their limited scope and their primary focus on 'climate-proofing' through small-scale projects. They have mostly been developed outside frameworks for national planning on poverty reduction.<sup>123</sup> For the Pacific NAPAs it is clearly the case the NAPAs do not permit holistic addressing of adaptation needs. They seem to have led to an important debate and consultative process in the five Pacific countries. Given the small scope of many of the proposed projects (in particular those that include human mobility aspects) and the fact that not even all of the priority projects have received funding or been implemented highlights the need for concerted activity around climate change adaptation outside of the NAPA framework.

## B. National Action Plans on Disaster Risk Management and Joint National Action Plans on Disaster Risk Management and Climate Change Adaptation

### 1. Background

In the last decade, Pacific states have developed two major regional frameworks to address disaster risk and climate change, the Pacific Regional Disaster Risk Reduction and Disaster Management Framework for Action 2005 – 2015 (also called the Madang Framework)<sup>124</sup> and the Pacific Islands Framework for Action and Climate Change (2006-2015).<sup>125</sup> The Applied Geoscience and Technology Division (SOPAC)/Secretariat of the Pacific Community (SPC) started coordinating the implementation of the disaster risk management framework. The Pacific Regional Environmental Programme (SPREP) coordinates implementation of the climate change framework. To support the implementation of both the Hyogo Framework for Action and the regional framework, SOPAC, in cooperation with UNISDR, facilitated the establishment of the Pacific Disaster Risk Management Partnership Network (PDRMPN). The network has agreed to support the development and implementation of disaster risk management plans (NAPs) for countries in the region. Given that many disaster risk management activities tie directly into climate change adaptation, several countries have developed Joint National Action Plans (JNAPs) for disaster risk management and climate change adaptation.<sup>126</sup>

This section will analyse NAPs and JNAPs, looking first at how they address displacement risks and wider human mobility issues before exploring the extent to which they propose projects and interventions related to human mobility. Not all countries have developed action plans and

several (such as Fiji and Kiribati) are in the process of doing so. We will analyse seven plans: two from the Cook Islands and one each from the Marshall Islands, Niue, Papua New Guinea, Tonga and Vanuatu (see Table 2). The Cook Islands<sup>127</sup>, Niue and Tonga have developed JNAPs for DRM and climate change adaptation, while the other countries have developed NAPs that focus on disaster risk management only. For the case of Vanuatu, we will discuss how the NAP relates to the NAPA analysed in section A above.

### 2. Cook Islands

#### *Locating climate and disaster risks and vulnerabilities in the NAP and JNAP*

The Cook Islands comprise 15 small islands. There is a marked contrast between the northern low-lying atolls and the primarily volcanic southern islands. The northern and southern groups have different vulnerabilities in terms of climate change, natural hazards and environmental risks. While islands in the northern group generally suffer from poor soil fertility, the southern group suffers from population pressures and environmental problems tied to development and tourism.<sup>128</sup>

The Cook Islands are facing the hazards of storm surges, cyclones (with the southern group twice as likely to be affected), intense rainfall events, droughts and climate change. In 2005, the country was hit by five consecutive cyclones over a period of two months, causing high levels of damage. Based on data of 24 cyclones that affected the islands since 1995, the average cost per cyclone is NZ\$6.5 million (US\$5.5 million) or about two per cent of GDP. The country also experiences infrequent earthquakes and there have been at least 22 recorded tsunamis since 1837.<sup>129</sup> ENSO has strong effects, with El Niño leading to drought conditions in the southern group

**Table 2: National Action Plans and Joint National Action Plans**

Country	Plan	Date
Cook Islands	National Action Plan for Disaster Risk Management 2009–2015 Joint National Action Plan for Disaster Risk Management and Climate Change Adaptation 2011–2015	January 2012
The Marshall Islands	National Action Plan for Disaster Risk Management 2008–2018	November 2007
Niue	Niue's Joint National Action Plan for Disaster Risk Management and Climate Change	April 2012
Papua New Guinea	Disaster Risk Reduction and Disaster Management National Framework for Action 2005–2015	2005
Tonga	Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management 2010–2015	July 2010
Vanuatu	Disaster Risk Reduction and Management National Action Plan 2006-2016	May 2007

and more rainfall in the northern group. La Niña brings heavy rainfall with potential flash flooding to the southern group while the northern group suffers drought.<sup>130</sup> The Cook Islands are also vulnerable to a range of climate change impacts, including sea-level rise, increasing intensity of cyclone activity, changing precipitation patterns, accelerated coastal erosion, loss of agricultural productivity and declining quality of fresh water resources.<sup>131</sup> Among climate change vulnerabilities the JNAP mentions relocation of people as one of the cross-cutting socio-economic considerations stemming from extreme weather events.<sup>132</sup>

In 2008, the population was estimated at 15,750, with two-thirds living on Rarotonga. Due to outward migration, especially during an economic crisis in the 1990s during which many people emigrated to New Zealand, Australia and other countries, the population has declined since 1965. The government sees continuous out-migration as a major threat to sustainable development.<sup>133</sup> Socio-economic conditions are markedly different between Rarotonga (where incomes are much higher) and the outer islands which have high rates of unemployment.<sup>134</sup>

#### *Locating human mobility in disaster risk management and climate change adaptation policies and projects in the NAP and JNAP*

There are few references to human mobility issues in the NAP. Goal three (Effective Preparedness, Response and Recovery) notes the existing system of emergency safety shelters is poorly maintained. The NAP suggests commissioning a review of the safety shelters evacuation system, increasing commitments by civil society and communities to ensure long-term management of shelters and to retrofit shelters.<sup>135</sup> Goal five (Analysis and Assessment of Hazards to Reduce Underlying Risk) proposes development of a relocation strategy for vulnerable properties adjacent to fuel storage facilities.<sup>136</sup>

The JNAP is equally scarce on action related to human mobility. On disaster management and climate change adaptation (strategic area three, strategy one) it proposes to strengthen preparedness, response and early recovery systems, promote public awareness on tsunami evacuation routes and include special arrangements for vulnerable groups.<sup>137</sup> Under strategic area four (risk reduction) it proposes the construction of coastal protection structures and development of regulations on coastal buffer zones.<sup>138</sup> It also encourages hotel operators to set up cyclone shelters for their guests.<sup>139</sup>

### **3. The Marshall Islands**

#### *Locating climate and disaster risks and vulnerabilities in the NAP*

The Republic of the Marshall Islands is made up of 29

low-lying atolls and five islands. Over two-thirds of the population is concentrated on two atolls, Majuro and Kwajalein, which are essentially urban, while the remainder of the islands and atolls are rural. The population was an estimated 55,000 in 2011.<sup>140</sup> The country has one of the highest birth rates in the Pacific, but this has been mitigated by a net out-migration of 13,000 persons between 1990 and 2004. The country became independent in 1986 but has a strong relationship with the United States. A Compact of Free Association allows Marshall Islanders entry to the US and exemption from work permits.<sup>141</sup> The NAP highlights concerns posed by strong migration trends from the outer islands to the urban Majuro and Kwajalein.<sup>142</sup>

The main natural hazards are tropical storms and typhoons, high tides and drought. The NAP mentions several factors that contribute to the country's high-risk profile:

- extremely high population densities on islands such as Ebeye and Majuro
- high levels of poverty – 20 per cent of the population lives on less than \$1 per day
- low elevation (the average elevation in the Marshall Islands is some three metres above sea level)
- islands scattered over a vast expanse of ocean
- ecosystem fragility – including the invaluable ecosystem services offered by coral reefs protecting the coastline
- limited fresh water resources highly vulnerable to over-use and contamination
- poorly developed economy vulnerable to global influences
- poor waste management
- mining of coral reefs for building materials.<sup>143</sup>

One issue particularly highlighted is land management. The government owns little land with most land in the hands of very influential landowners. Their power makes land-use planning and the enforcement of environmental regulations difficult.<sup>144</sup> There is also a development away from building traditional houses to brick houses. While they are more storm resistant than traditional ones, they cannot be moved when threatened by coastal erosion. The larger islands face many problems related to poor planning, while the outer islands are lacking disaster management infrastructure needed in cases of disasters.<sup>145</sup>

#### *Locating human mobility in disaster risk management and climate change adaptation policies and projects in the NAP*

There is not a single reference to human mobility in the action plan. It aims at achieving ten key goals, among which are the improvement of emergency preparedness and response capacity at national and local levels, the building of strong and resilient disaster management early warning and emergency communication service,

as well as sustainable development in coastal zones.<sup>146</sup> Among the actions proposed are public awareness campaigns on emergency response procedures (e.g. location of safe shelters), community preparedness and response plans for outer islands and coastal hazard and vulnerability assessments of high-risk areas. The action plan also proposes regular consultation meetings between landowners, the private sector and regulatory agencies as well as a review of land-use regulations in light of disaster vulnerability.<sup>147</sup>

#### **4. Niue**

##### *Locating climate and disaster risks and vulnerabilities in the JNAP*

Niue is a self-governing nation in free association with New Zealand and with a population of 1,625, one of the least populated states in the world. Large outward migration to New Zealand since the 1970s has made the population shrink from 5,000 in 1966: there are now four times as many Niueans in New Zealand than in Niue. Population decline is a major national concern as it goes hand in hand with a loss of human capacity.<sup>148</sup> Foreign aid makes up for 70 per cent of Niue's GDP.<sup>149</sup>

The country is the world's largest elevated atoll and faces a range of disaster risks from cyclones, droughts, earthquakes and tsunamis. Tropical Cyclone Heta, a Category Five storm which hit Niue in 2004, for example, caused extensive damage three times Niue's GDP.<sup>150</sup> Expected climate change impacts are an increase in cyclone intensity, sea-level rise and increase in extreme rainfall, coupled with a decrease in overall rainfall. Waste management, deforestation and overuse of marine resources are some of the environmental issues summed up in its JNAP.<sup>151</sup>

##### *Locating human mobility in disaster risk management and climate change adaptation policies and projects in the JNAP*

Niue's JNAP has five priority areas:

1. strong and effective institutional basis for disaster risk reduction and climate change adaptation
2. strong public awareness and improved understanding of the causes and effects of climate change climate variability and disasters
3. strengthening of livelihoods, community resilience, natural resources and assets
4. strengthening capacity to adopt renewable energy technologies and improve energy efficiency
5. strengthening disaster preparedness for effective response.<sup>152</sup>

The only references to human mobility are in respect to evacuations, under the fifth priority area. In the section on strengthening community disaster preparedness, response and recovery the plan encourages the use of

evacuation centres and proposes actions to ensure vulnerable groups are considered. It also includes review and update of evacuation plans and implementation of recommendations arising. It also addresses retrofitting of existing evacuation centres and assessment to determine if low-lying evacuation centre should be moved.<sup>153</sup>

In the section on community preparedness it includes the development of a manual to guide communities in preparing for disasters and adapting to climate change.<sup>154</sup> Under its third priority the JNAP includes the establishment of a climate early warning system to assess land and water resources, hazards and climate change.<sup>155</sup>

#### **5. Papua New Guinea**

##### *Locating climate and disaster risks and vulnerabilities in the Framework for Action (FfA)*

PNG occupies the eastern half of the island of New Guinea, sharing a border to the west with the Indonesian province of West Papua. Apart from the island of New Guinea, the country has four large islands (Manus, New Ireland, New Britain and Bougainville) and some 600 small islands.<sup>156</sup> PNG's population was estimated at about seven million in 2011, more than the other 21 Pacific countries and territories combined. PNG's population grows annually by 2.8 per cent.<sup>157</sup>

Its FfA starts by listing some of the natural hazards facing PNG: earthquakes, volcanic eruptions, tsunamis, droughts, floods, tropical cyclones, landslides, the impact of climate change and climate variability and sea-level rise. Other risks emerge from technological and human-induced disasters (e.g., oil spills). There is large-scale pollution, unsustainable land use practices and rapid population growth.<sup>158</sup>

The framework notes that DRR and DM planning and implementation have been impeded by resource constraints, serious lack of capacity at provincial and community levels and a lack of skilled disaster managers. This is compounded by incomplete hazard information, lack of a strong legislative framework and shortcomings of early warning arrangements and communication systems.<sup>159</sup>

##### *Locating human mobility in disaster risk management and climate change adaptation policies and projects in the NAP*

The framework develops a series of themes, each of which is broken down into key actions at national, provincial, district and sub-district level. Themes include governance; early warning systems; knowledge, information, public awareness and education; planning for effective preparedness, response and recovery; risk, hazard and vulnerability analysis and evaluation and reducing underlying risk factors.



Like most other plans analysed in this section, the FfA does not mention displacement, relocation or resettlement. Again, the only reference to human mobility is on evacuations. Under theme four, for the provincial level the FfA prescribes the development of “practical and pro-active disaster management plans for preparedness, response and recovery including evacuation plans.” Based on the provincial plans, the FfA also requires districts to develop their own disaster management and evacuation plans.<sup>160</sup>

## 6. Tonga

### *Locating climate and disaster risks and vulnerabilities in the JNAP*

Tonga is an archipelago of 172 named islands, of which 36 are inhabited. The 2006 census showed a population of 101,991.<sup>161</sup> About 23 per cent of the population is urban and 71 per cent live on one island, Tongatapu.<sup>162</sup>

Disaster and climate risks for Tonga are heavy rainfall, floods and droughts, with El Niño causing diminished precipitation. Warmer temperatures are affecting agriculture and higher sea temperatures are leading to coral bleaching. Sea-level rise, which compounds coastal erosion, is particularly affecting low-lying coastal villages. The JNAP mentions several villages are already affected by sea-level rise, leading to tidal inundation which is particularly strong during spring tides.<sup>163</sup> There has been a trend of increasingly frequent cyclones affecting Tonga, and cyclones have caused major damage to the country in the past. Tonga is also highly vulnerable to geophysical hazards, particularly earthquakes and tsunamis as it lies only 200 kilometres from the Tonga trench, which is a very active seismic fault line. A tsunami in 2009 killed nine people and destroyed a number of buildings and government facilities.<sup>164</sup>

### *Locating human mobility in disaster risk management and climate change adaptation policies and projects in the JNAP*

Tonga does not see the JNAP as a comprehensive plan but as a starting point and a ‘living document’. Issues not captured could be added in subsequent frequent reviews.<sup>165</sup> In the process of developing the JNAP, community consultations discussed adaptation options in terms of climate change and non-climate change factors. Regarding sea-level rise, the consultations saw relocation of people and houses from coastal areas to inner land as a possible adaptation option.<sup>166</sup> Relocation to higher ground was seen as an adaptation option against storm surges. To adapt to tsunami risk, in addition to improving early warning systems, the consultation noted relocating to an overseas country as an adaptation option.<sup>167</sup> During government and NGO consultations, which were part of the development of the plan, the adaptive relocation of

resorts on low-lying islands to higher ground was discussed.<sup>168</sup>

The JNAP develops six goals:

- Goal 1: improved good governance for climate change adaptation and disaster risk management
- Goal 2: an enhanced technical knowledge base; better information, education and understanding of climate change adaptation and effective disaster risk management
- Goal 3: analysis and assessments of vulnerability to climate change impacts and disaster risk
- Goal 4: enhanced community preparedness and resilience to impacts of all disasters
- Goal 5: technically reliable, economically affordable and environmentally sound energy to support the sustainable development of the kingdom
- Goal 6: strong partnerships, cooperation and collaboration within government agencies and with civil societies and NGOs.<sup>169</sup>

While clearly identified as an adaptation option in earlier parts of the plan, relocation is not mentioned again under any of the six goals, neither are there any mentions of displacement or resettlement. As with several previous plans discussed, this plan has several references to evacuations. Under goal one, a key action suggested is training for the formulation of agencies’ emergency support plans (including evacuation plans).<sup>170</sup> Under priority area four, the plan proposes as a key action incorporating water, food hygiene, sanitation management, and road construction in disaster preparedness and evacuation plans. To do so, community workshops are planned in a number of selected provinces.<sup>171</sup> In the section on upgrading early warning systems the JNAP also includes the development of ‘evacuation and exercises’ as part of the planned sub-activities.<sup>172</sup>

## 7. Vanuatu

### *Locating climate and disaster risks and vulnerabilities in the NAP*

As the disaster and climate risk profile of Vanuatu has already been reviewed in the previous section, this analysis will highlight the assessment of key issues Vanuatu faces in the area of disaster risk management pointed out in the action plan:

- Disaster risk management has been generally regarded as either an environmental or humanitarian issue.
- Disaster management has been largely considered in terms of response and recovery from disasters without consideration of risk reduction opportunities in a holistic manner and as an integral element of development planning.
- There is a lack of government policy, organisational structures and a legislative framework to underpin DRR

- and DM in a holistic, coordinated and programmatic manner.
- There is currently inadequate allocation of national financial resources for DRR and DM.
  - Decision-making processes at the national, sectoral, provincial and community levels do not explicitly consider assessment of hazards and vulnerabilities to disasters.
  - There is minimal engagement with communities at risk, the private sector, women's groups and other stakeholders in developing DRR and DM actions and projects.
  - There is a lack or inadequate amount of quality information about hazards and vulnerability available to all levels of decision-makers.
  - Information systems for constant hazard monitoring and early warnings are weak or absent.
  - Communities at risk lack adequate disaster risk reduction efforts to minimise their exposure to hazards, or to make disaster management arrangements which can be invoked in emergencies.<sup>173</sup>

The NAP develops key guiding principles. Noting that DRM is a sustainable development issue and fundamentally involves communities, it calls for an all-government all-hazards approach mainstreamed into national development plans and budgets. It encourages the fusion of traditional knowledge, modern technology and community empowerment.<sup>174</sup>

*Locating human mobility in disaster risk management and climate change adaptation policies and projects in the NAP*

Like the other plans discussed in this section, Vanuatu's NAP scarcely deals with human mobility issues. The plan develops eight themes:

1. governance and policy context
2. mainstreaming DRR and DM in national planning and budgeting. The NAP proposes to develop a sustainable national financing mechanism for supporting response and recovery activities in communities at times of disasters. While this does not mention displacement explicitly, the mechanism would probably be available to provide support for persons displaced from disasters.
3. mainstreaming DRR. The plan proposes the development of DRR programmes and activities incorporating community development and coping mechanisms in times of disaster.
4. strengthening DM through review of disaster management plans and creation of a national stockpile of relief items
5. information, information systems and knowledge management. The NAP proposes to conduct hazard and vulnerability assessments and mapping, including assessment of potential impacts of disasters on 'at risk' communities.

6. capacity building
7. evaluation and reporting
8. implementation.

In the *Vanuatu Supplementary Priorities and Action Agenda 2006*, an annex to the action plan, evacuations are mentioned (under regulatory issues) for the first and only time – referring to the need to provide adequate resources for certain DRR instruments, such as “keeping evacuation routes open.”<sup>175</sup>

**8. Analysing Pacific NAPs and JNAPs**

NAPs are overall comprehensive frameworks for the integration of all stages of disaster risk management. While their main focus clearly seems to be establishing a firm institutional and technical framework for risk they also include preparedness, response and recovery issues. The NAPs attempt to integrate DRM and Climate Change Adaptation (CCA) strategies. It is important to combine disaster risk management and climate change adaptation policies where they overlap in order to promote a more streamlined and comprehensive approach and prevent duplication.<sup>176</sup>

NAPs and JNAPs derive from the Hyogo process and closely follow the structure and language of many of the documents and reports generated by it. Regional disaster risk management and climate change frameworks mentioned above also influence NAPs and JNAPs. Most, if not all, plans have received technical assistance from regional organisations in their development.

These factors need to be taken into consideration when noticing that not one of the seven discussed in this section mentions displacement even once. While evacuations, which in fact are the first stages of displacement, are frequently discussed, there is a complete lack of conceptualisation of displacement. The documents reference and plan activities that are clearly related to displacement but the issue stays invisible.

This lack of focus on displacement, and also most other human mobility issues, is startling. Each of the countries that have developed NAPs and/or JNAPs has large numbers of vulnerable people and assets exposed to natural hazards and each has witnessed disasters in the recent past – some major – several of which have caused, at times, significant internal displacement.

The complete absence of displacement issues in the plans is somewhat more understandable after an analysis of both the *Pacific Regional Disaster Risk Reduction and Disaster Management Framework for Action 2005–2015* (also called the Madang Framework)<sup>177</sup> and the *Pacific Islands Framework for Action and Climate Change (2006–2015)*.<sup>178</sup> Neither makes any reference to displacement, migration, relocation or resettlement.

The *Hyogo Framework for Action* itself only makes one reference to displacement – in its Priority 4, which focuses on reducing underlying risk factors. Among the key activities in the subsection on environmental and natural resource management, the framework prescribes endeavours “to ensure, as appropriate, that programmes for displaced persons do not increase risk and vulnerability to hazards.”<sup>179</sup>

International and regional frameworks are largely silent on issues of human mobility, and though NAPs and JNAPs do address these issues in general, they do not address the issue of displacement *per se*. Migration features in several plans. While not tying migration directly to disasters or climate change, both the Cook Islands' and Niue's plans mention large scale outmigration (mostly to New Zealand to which their citizens have free access). They indicate this is a major concern for the countries' sustainable development. Another set of issues is internal migration from outer islands to urban areas and related planning concerns (particularly highlighted in the NAP of the Marshall Islands).

Relocation is also discussed. The Cook Islands' JNAP sees it as one of the cross-cutting socio-economic considerations stemming from extreme weather events. The Marshall Islands' NAP does not directly mention relocation, but notes that that unlike traditional buildings, brick buildings are not easily moved in response to erosion. Tonga's JNAP contains the only reference to international displacement in the group of plans discussed in this section. Although we only deal with a small sample, there seems to be a trend that JNAPs are more open in discussing relocation issues, possibly seeing it as a climate change adaptation, rather than a disaster risk management, issue. Despite these mentions only one of the NAPs or NAPAs included activities regarding relocations in the documents' action plans: the NAP of the Cook Islands plans the development of a relocation strategy for vulnerable properties in close proximity to fuel storage facilities.

Land issues are not as pronounced in the NAPs and JNAPs as in the NAPAs. Only the Marshall Islands' NAP repeatedly mentions the strong power of landowners, which complicates planning and policy implementation on the side of the government. Regular consultations between government and landowners, as well as a review of land-use regulations, are also mentioned as an activity in the country's action plan.

The one area related to human mobility that all of the plans have included concerns evacuations and/or emergency shelters. The plans propose a range of activities, including:

- reviewing, improving and resourcing evacuation plans

- and policies (Niue, Papua New Guinea, Tonga, Vanuatu)
- assessing relocation of evacuation centres to less hazardous areas (Niue)
- reviewing, improving and/or retrofitting emergency shelters (Cook Islands, Niue, Tonga)
- public awareness campaigns on evacuation routes and procedures (Cook Islands, The Marshall Islands, Tonga)

The many references to evacuations and projects on early warning, hazard mapping and improving disaster response show that countries that have developed NAPs and JNAPs are keen to implement a more comprehensive DRM framework.

## C. Additional National Laws and Policies on Disaster Risk Management and Climate Change Adaptation

### 1. Background

As only LDCs have been required to produce NAPAs, and not all countries have developed (or finished developing) NAPs or JNAPs, this section analyses several additional laws and policies that deal with disaster risk management and climate change adaptation. The primary focus will be on countries that have not been discussed in the previous sections. This will be supplemented by analysis of the *Strategic Program for Climate Resilience of Papua New Guinea*. The documents analysed in this section are:

**Table 3: National laws, policies and plans on DRM and CCA analysed in this section**

Country	Document	Date
Fiji	<i>National Climate Change Policy</i>	2012
Micronesia	<i>National Climate Change Strategy</i>	2009
Nauru	<i>Disaster Risk Management Act 2008; and National Sustainable Development Strategy 2005 – 2025</i>	2008
Palau	<i>National Risk Management Framework 2010</i>	2010
Papua New Guinea	<i>Strategic Program for Climate Resilience</i>	2012
Tokelau	<i>National Strategic Plan, 1 July 2010 – 30 June 2015</i>	2010

### 2. Fiji: National Climate Change Policy

Fiji comprises over 300 islands, the major ones being volcanic. The largest, Viti Levu, is home to some 70 percent of Fiji's population of around 868,000.<sup>180</sup>

Tropical cyclones are major natural hazards. The risk of Fiji being affected by tropical cyclones during an El Niño event remains more or less the same as during a normal year.<sup>181</sup> However, historical data also suggest that during El Niño events there is an increased likelihood of high-intensity tropical cyclones, off-season tropical cyclones and droughts.<sup>182</sup> Regarding possible climate change impacts, Fiji's national climate change policy points out that extreme events and disasters have a stronger effect on people who live in poorly built houses, with marginal communities being the most severely affected. It also notes that land loss and reduction in arable land could lead to urban migration, resulting in over-crowding. It points out the risk extreme events pose for the integrity of houses

and safety of their occupants.<sup>183</sup> The policy discusses displacement in the context of the impacts of climate change on human health, highlighting the psychosocial impacts due to population displacement and income loss.<sup>184</sup>

One of the policy objectives is adaptation in order to reduce vulnerability and enhance the resilience of communities. The plan proposes 15 adaptation measures. Though none directly refers to human mobility issues several will have a prospective impact on preventing displacement. These include strengthening of early warning systems (particularly focusing on isolated, hazard-prone and disadvantaged communities); incorporating climate change impact projects into urban, rural and infrastructure planning; supporting an eco-system based approach; incorporating traditional knowledge into adaptation systems; improving disaster response capacity and access to public health facilities and Improvement of emergency services, communications and evacuation centres.<sup>185</sup>

Fiji is also in the process of developing a JNAP for climate change adaptation and disaster risk management.<sup>186</sup>

### 3. Federated States of Micronesia: National Climate Change Strategy

The Federated States of Micronesia (FSM) is a nation of over 600 islands in the western tropical Pacific. FSM has both low-lying atolls and volcanic islands. Climate and sea level in FSM are strongly influenced by ENSO, with El Niño usually causing drought and La Niña leading to higher than normal sea levels. Coastal erosion is widespread.<sup>187</sup>

The *National Climate Change Strategy of the Federated States of Micronesia* is a concise document that does not make any reference to displacement and/or other human mobility issues. In the adaptation section it focuses on factoring projected climate change impacts into the design of strategic development and infrastructure development plans; strengthening the application of traditional knowledge on conservation and other relevant areas; using eco-system based approaches and enhancing food production.<sup>188</sup>

### 4. Nauru: Disaster Risk Management Act 2008 and National Sustainable Development Strategy 2005 – 2025

Nauru consists of a single island with a surface of 21 square kilometres, which makes it one of the world's smallest countries. Nauru's population in 2002 was about 10,000 of whom 7,600 were Nauruans.

This study analysed two documents, the *2008 Disaster Risk Management Act*<sup>189</sup> and the *National Sustainable Development Strategy 2005 – 2025*.<sup>190</sup> The former defines the responsibilities at each government level for

DRR and disaster management. It is a relatively concise legal act and does not include any hazard or vulnerability analysis. Neither is there mention of any specific hazards or climate change. It only discusses human mobility in terms of evacuations, clarifying the role of the police and the national disaster controller in evacuating people as well as clarifying when authorities are allowed to restrict movement in and out of disaster areas.<sup>191</sup>

The *National Sustainable Development Strategy 2005 – 2025* is a roadmap for the island's development. It seeks to address the adverse impacts of a declining phosphate industry and to reduce aid dependence. The strategy notes the impacts of mismanagement and corruption.<sup>192</sup> A sub-report to the sustainable development strategy on emigration options found they were limited and education standards would have to improve radically if significant numbers of Nauruans were to qualify under relevant emigration and work schemes in the region and beyond.<sup>193</sup>

Surprisingly, the plan makes only one reference to disasters, which is to highlight the development and re-sourcing of the *2008 Disaster Management Act*. Even more surprisingly, the plan makes no single reference to either climate change or global warming. This omission is clearly addressed in a 2009 revision, which makes repeated references to climate change and disaster risk management. It mentions the development of a *National Adaptation Programme of Action* to be developed by 2012 and approved by 2015, as well as the strengthening of climate change adaptation responses by 2012 (without going further into details). By 2025 the plan anticipates compliance with relevant international conventions and regional policy frameworks.<sup>194</sup>

### **5. Palau: National Risk Management Framework 2010**

Palau is made up of six island groups, consisting of over 300 islands. The 2013 population is estimated at around 21,000.<sup>195</sup> Palau's hazard profile shows the country has high levels of risk for storm surges, drought, typhoons and sea-level rise, with related consequences of sea-water intrusion/soil salinisation/coastal inundation and erosion.<sup>196</sup>

The objectives of the DRM Framework are to establish mechanisms for all aspects of DRR and DM, describing organisational arrangements to strengthen all phases of disaster risk management.<sup>197</sup> The plan does not mention displacement, migration or relocation/resettlement, but has several sections on evacuations and evacuation shelters. It lays down institutional responsibilities for the identification of evacuation shelters and mechanisms to provide the public with information. The framework also empowers the police to arrest and detain people who fail to adhere to evacuation instructions.<sup>198</sup> It also discusses the retrofitting of evacuation centres.<sup>199</sup> The framework also requires that

the number of people made homeless be one of the information criteria for the initial damage assessment. However, there is no further specific discussion on support for displaced persons when discussing disaster recovery.<sup>200</sup>

### **6. Papua New Guinea: Strategic Program for Climate Resilience**

PNG was selected by an expert committee as one of the countries to participate in the Pilot Program for Climate Resilience.<sup>201</sup> The development of the Strategic Program for Climate Resilience (SPCR) is one of the first-stage outputs. Compared to the FfA discussed above the strategic programme is based on a much more detailed vulnerability assessment, which also discusses human mobility issues. It highlights the vulnerability of coastal communities to extreme weather events and sea-level rise, loss of wetland and freshwater resources due to saltwater intrusion. It notes flooding of coastal lands "will lead to displacement of communities, resulting in aggravated social problems."<sup>202</sup>

More than a quarter of PNG's shoreline is expected to be moderately to severely inundated, affecting up to 30 per cent of the country's population. The document highlights the danger that some very low-lying islands, including barrier islands, could be completely submerged, a process that is already ongoing in the outer lying atoll islands of Mortlock, Tasman and the Duke of York islands.<sup>203</sup> When discussing social impacts, it notes the strong inverse correlation between levels of socio-economic development of the coastal provinces of PNG and the extent to which they will be affected by climate change. It also notes that "issues of resettlement will be compounded because of the strong inherent customary land tenure system. In instances where resettlement is an option, the financial and cultural (dislocation) costs are likely to be high."<sup>204</sup>

A table on *Strategic Directions – Climate Change Goals in PNG's Development Strategic Plan* notes that Pacific island coastal communities could incur a cost of \$1.4 billion per year due to sea-level rise, resettlement and relocation of climate refugees as well as further costs from drought and changes in precipitation. The table shows that there are very few resources currently available but hopes to secure sufficient financing by 2030.<sup>205</sup> An outcome document from consultative thematic workshops shaping the SPCR development process ranks climate change risks according to priority. The highest are sea-level rise and storm surges, leading to loss of low-lying land on islands and atolls (Ahus, Catrets, Duke of York, Nissan and Siassi). The second ranked is increased incidence of extreme events and changes in rainfall patterns.<sup>206</sup>

The SPCR includes three project components: building climate resilient communities, addressing risks to food security and developing climate resilient infrastructure.

Under component one a main activity is “training of and assistance to pilot vulnerable communities on low-lying islands and atolls to undertake community climate change vulnerability mapping and adaptation planning. Community adaptation plans developed through this process will define viable adaptation options, and may include relocation—develop or improve existing relocation plans (land ownership); addressing social-cultural, socio-economic, and health issues; and viable coastal defenses (soft and hard engineering options), including land reclamation.”<sup>207</sup> Funding of \$2 million has been allocated. In addition, the SPCR establishes a Climate Change Trust Fund (with \$5 million) to provide fast start financing to vulnerable communities to implement community adaptation plans and early warning systems.<sup>208</sup>

### **7. Tokelau: National Strategic Plan, 1 July 2010 – 30 June 2015**

Tokelau consists of three small coral atolls and is a non-self-governing territory of New Zealand whose residents have New Zealand citizenship. At the 2006 census Tokelau had a population of 1,466 people. There is significant migration of young adults.<sup>209</sup>

Because of climate change Tokelau experiences more and more intense cyclones and storm surges leading to coastal erosion. The strategic plan notes that sea-level rise has already caused the disappearance of some of the smaller islets. On larger islands erosion is threatening food production.<sup>210</sup> Warmer temperatures cause coral bleaching and have also affected the quantity and quality of fish in coastal areas.<sup>211</sup>

The National Strategic Plan is a multi-sectoral plan, primarily focusing on development issues. Thus discussion of disasters and climate change is only a part. Tokelau has developed a Tokelau Emergency Plan (TEP) under which each village has its own cyclone plan. The strategic plan suggests a review of the current TEP so as to cover a wider area of hazards. It also includes plans for improvement of early warning systems and the development of evacuation plans for villagers.<sup>212</sup> It further suggests a minimum of three emergency evacuation drills a year.<sup>213</sup> There is no other mention of any other human mobility issues.

### **8. Analysis of laws and policies**

The documents reviewed in this section encompass a broad array of policy fora – from disaster management laws and climate change strategies to national development – making comparison difficult. The two documents which most engage with displacement and human mobility are PNG’s SSPCR and Fiji’s National Climate Change Policy (NCCP). The SPCR has paid more attention to risk and vulnerability analysis and the framing of human mobility issues compared with the FfA. It stresses that

extreme weather events and sea-level rise will lead to displacement of coastal communities and that certain communities, particularly on low-lying islands, will need to be resettled. The document also shows awareness of the difficulties connected with resettlement, noting that many of the most vulnerable communities are poor and that the customary land tenure system is compounding resettlement issues. It also notes that financial and cultural dislocation costs are going to be high in instances where resettlement is an option. Interestingly, the SPCR develops a project component which provides assistance to encourage vulnerable communities to create community adaptation plans which may develop or improve relocation plans. After the Solomon Islands’ NAPA the SPCR is the document reviewed that most discusses human mobility.

Fiji’s NCCP’s discussion is far less comprehensive but it clearly references several human mobility issues. Of particular interest is the possibility of disaster impacts on poor and marginal communities leading to increased urban migration. It also highlights the negative psychosocial impacts caused by displacement and income loss. As with most other reviewed documents, human mobility issues are not prominent. There is a ‘standard’ array of policy prescriptions, from strengthening early warning systems, to climate proofing infrastructure and improving disaster response capacity (including improved access to evacuation centres).

Both PNG’s SPCR and Fiji’s NCCP explicitly link socio-economic vulnerabilities to disaster and climate change vulnerabilities and to displacement risk. The SPCR appreciates that resettlement, probably the best worst option for some affected communities, is highly complex, especially given the resource constraints that most Pacific countries face.

The other laws and policies reviewed in this section mostly ignore human mobility issues and none includes displacement and relocation/resettlement. The exception is Palau, which requires the inclusion of the number of people made homeless (in other words displaced persons) in the initial damage assessment.

Again, as in the NAPs/JNAPs most documents reference evacuations and/or emergency shelters. Among proposed activities are:

- elaborating roles and responsibilities of state authorities on evacuations (Nauru and Palau)
- reviewing and improving evacuation plans and policies (Tokelau)
- reviewing, improving and/or retrofitting emergency shelters (Palau)
- public awareness campaigns on evacuation routes and emergency drills (Tokelau).

# 3

## Synthesis and Recommendations

### A. Synthesis

This analysis of 19 documents from 15 countries and territories – including NAPAs, NAPs, JNAPs, disaster risk management laws and plans, climate change adaptation policies and strategies and development plans – shows that on average the inclusion of displacement and human mobility issues in Pacific laws and policies and their conceptualisation is poor.

This review shows clear differences in various human mobility issues. Below is an attempt to synthesise how displacement, migration, relocation and resettlement are included in the reviewed documents:

#### **Displacement**

As repeatedly noted, the term 'displacement' is missing in most reviewed documents. Only three of 19 documents even mention it. In many countries there seem to be constraints on discussing internal displacement. These are clearly highlighted in a 2011 discussion paper by the Office of the High Commissioner of Human Rights (OHCHR) Regional Office for the Pacific which notes that in the three countries it studied (Samoa, Solomon Islands and PNG) state protection of IDPs was weak:

*"The weak protection by the state seems to be caused in part by a failure to recognise the fundamental and principal responsibility of the state in situations of natural disasters, and the resulting weakness in developing and implementing effective programs and strategies that ensure human rights protection of IDPs. In some cases, governments have not allocated the required human and financial resources, complemented by accountability and monitoring mechanisms, to find durable solution for IDPs."*<sup>214</sup>

Our analysis shows the Solomon Islands' NAPA and PNG's SPCR are among the plans most comprehensively discussing displacement and human mobility. This indicates some lessons might have been drawn from previous experiences with displacement. Still, the overall impression is that international human rights standards on internal displacement – such as the *Guiding Principles on Internal Displacement* or the *Framework for Durable Solutions*<sup>215</sup> – have not informed any of the documents reviewed.

There are, however, positive regional developments in regards to internal displacement from disasters. These include the embrace of the DRM paradigm by most countries and territories. This integrates risk reduction measures into disaster risk management frameworks and has a focus on early warning, community involvement and a multi-hazard approach to DRM. This shift of focus onto disaster prevention and preparedness could potentially prevent (or mitigate the impacts of) displacement from disasters and climate change by well-conceived and implemented CCA and DRR strategies and projects. The relatively strong focus on evacuations in many reviewed documents exemplifies this emerging paradigm. The facilitation of life-saving displacement through timely evacuations can prevent injuries and loss of life. From a human rights perspective, protecting the right to life and moving people out of harm's way, are among key state obligations in response to disasters. Most documents discuss evacuations in rather technical terms, though, focusing on early warnings, evacuation routes and the conditions of evacuation centres. There is hardly any focus on human rights issues, specifying responsibility and methods for evacuation of vulnerable groups and discussions of whether forced evacuations are allowed.<sup>216</sup> It is noteworthy that several plans discuss evacuations for tourists, showing the state's commitment to protect non-citizens in disaster situations.

Another weakness in the discussion of evacuations in the reviewed laws and policies is that evacuations are not linked into a broader discussion of disaster-induced displacement. International human rights standards on internal displacement are applicable regardless of length of displacement. The focus on evacuations typically frames displacement as a short-term, temporary issue with the option for evacuees to return to their homes. This, however, ignores medium- to long-term planning for evacuees who remain displaced – a problem given that several disaster-related displacement events have not been short-term and this lack of planning for displacement can easily lead to human rights violations.

#### **Cross-border displacement**

Most discussion on displacement, in particular pertaining to relocation and resettlement, focus on movement within the island or country. Only a few documents discuss relocations/resettlement on the international level. Tonga discusses international relocation as an option in the case of a tsunami. Tuvalu points out that migration and resettlement would be, as a worst-case scenario. These

two documents show that the possibility of cross-border displacement is contemplated in some of the policy documents reviewed. When mentioned, the issue is envisioned either in the case of major catastrophes or as a last resort.

Given the multitude of natural hazards in the Pacific, as well as projected climate change impacts on the region, consideration of worst-case scenarios should be part of prudent policy planning. Taking a long-term perspective may be beyond the scope of NAPAs, constrained as they are by relatively short time frames.

### **Migration**

There are several ways in which migration is framed in the documents. International migration is – for example in Tuvalu – seen as a mechanism to ease population pressure on finite resources and to address rapid urbanisation and overcrowding on small atoll islands. Several of the environmental pressures that densely populated urban areas in Pacific islands experience are being compounded by climate change. Migration thus seems to be a viable adaptation option to alleviate pressures on fragile social and ecological systems.

It is beyond the scope of this paper to explore the impact of migration and remittance dependence. Migration must be discussed with caution and not endorsed as a universally applicable durable solution. There are cases where those at risk have rights to reside elsewhere – for example the entitlements of residents of the Cook Islands and Niue to New Zealand citizenship. The documents indicate a clear skepticism about migration. It could be that if people are allowed to vote with their feet, on-site adaptation might be jeopardised. High levels of emigration can hasten the demise of societies and their culture and traditions. Recent studies have demonstrated that it is often not the poorest and most vulnerable who migrate in response to changing environments but are instead at risk of being left behind.<sup>217</sup> Examples from internal migration cited in the NAPA confirm that older people tend to stay on outer islands while younger people move to the more urbanised islands where there might be education and work opportunities. Several documents analysed in this paper also point out that it is particularly young people in their twenties who emigrate.

Internal migration is mostly discussed in terms of rural to urban migration or migration from isolated outer to more populated and urbanised inner islands. In most countries this is perceived negatively as it has environmental impacts including pressures on waste management and water provision. The Pacific states are following the global urbanising trend. The majority of their inhabitants may not yet live in urban areas but the phenomenon is clearly unstoppable. The consequences seem poorly understood

in these documents. Only Fiji's climate change policy explores linkages between disaster-affected communities, urban migration and overcrowding. Not a single document reviewed includes migration in any of its projects, plans or strategies.

Our analysis shows that both internal and international migration should be considered as an adaptation option. There may be limits to the extent migration might have positive adaptation effects. Climate change is already, in some cases, a negative driver of migration in the region. There may be tipping points as climate change and/or disaster impacts further undermine the resilience and livelihoods of communities. More of those displaced may seek existing migration channels to escape their predicament.

### **Relocation and Resettlement**

Climate change adaptation frameworks discuss relocation and resettlement with more frequency and detail than DRM frameworks. As noted, the terms are used indiscriminately. The use of resettlement at times implies state responsibility or support. There is agreement that low-lying islands and coastal areas are the most vulnerable areas in terms of the need to move. Some countries already integrate relocation planning and projects into their plans and strategies, while others still contemplate it as a possible strategy. The issue that gets mentioned most frequently when relocations or resettlement are discussed are land rights and land tenure. These are uniformly seen as potential impediments to successful relocations or resettlement. Other contentious issues are land shortages, people's willingness to move, cultural and heritage issues, lack of legal and policy frameworks and financing. There is little discussion on impoverishment risks (and particularly the reestablishment of livelihoods) for relocated and/or resettled communities.

## **B. Recommendations**

### ***Governments in the Pacific region should consider:***

1. reviewing national laws and policies on disaster risk management and climate change adaptation in regards to displacement
2. factoring displacement risk into national laws and policies on disaster risk management and/or climate change adaptation
3. integrating into relevant laws, policies and plans international human rights standards on internal displacement, in particular the *Guiding Principles on Internal Displacement*
4. encouraging and supporting regional organisations and technical bodies to develop capacity and expertise on displacement issues, to incorporate in-



ternational human rights standards on internal displacement into regional frameworks and to consider development of a specific regional framework on internal displacement

5. supporting the inclusion of displacement/human mobility issues and benchmarks into international treaties, frameworks and goals, such as the UNFCCC process and follow-ups to the *Hyogo Framework for Action* and the Millennium Development Goals (MDGs)
6. engaging in a region-wide dialogue on migration as adaptation, exploring how internal and international migration can mitigate forced displacement from climate change
7. engaging in a region-wide dialogue on the issue of climate-induced cross-border displacement, relocation and resettlement
8. improving urban planning and urban development to mitigate negative effects of rural-to-urban migration and the expected impacts of climate change
9. developing laws and policies on planned relocations based on broad stakeholder involvement, human rights, international norms and respect for cultural, socio-economic and land-tenure issues in the region
10. supporting the inclusion of technical assistance and funding for planned relocation and resettlement projects in the UNFCCC's adaptation work programmes and adaptation financing mechanisms.

**Regional Organisations in the Pacific should consider:**

1. supporting local, national, regional and international efforts in disaster risk reduction and climate change adaptation, with a particular focus on projects related to preventing displacement
2. investing in capacity building on displacement and human mobility issues
3. providing technical support to Pacific states to draft and implement comprehensive laws and policies on internal displacement
4. supporting inclusion of displacement/human mobility issues and benchmarks into international treaties, frameworks and goals, such as the UNFCCC process and follow-ups to the *Hyogo Framework for Action* and the MDGs
5. facilitating region-wide dialogue on migration as adaptation, exploring how internal and international migration can mitigate the impacts of climate change-driven forced displacement
6. studying lessons learned from other regions on how to incorporate displacement and human mobility issues into regional frameworks and policies – in particular the African Union's Convention for the Protection and Assistance of Internally Displaced Persons in Africa.<sup>218</sup>

**NGOs and civil society in the Pacific should consider:**

1. supporting local, national, regional and international efforts in disaster risk reduction and climate change adaptation, with a particular focus on projects related to preventing displacement
2. ensuring that research findings about climate change and disaster-related hazards and vulnerability are disseminated to both governments and communities alike in to allow for evidence-based and transparent decision-making on issues related to human mobility
3. holding governments accountable regarding their obligations to assist and protect those displaced by disasters and climate change
4. engaging in a national level process with affected communities and governments regarding laws and policies related to both internal displacement and planned relocations/resettlement
5. advocating for the inclusion of displacement/human mobility issues and benchmarks into international treaties, frameworks and goals, such as the UNFCCC process and follow-ups to the *Hyogo Framework for Action* and the MDGs
6. advocating for a region-wide dialogue on migration as adaptation, exploring how internal and international migration can mitigate forced displacement from climate change.

**Media in the Pacific should:**

1. report findings about climate change and disaster risks to allow communities to make informed decisions that affect human mobility
2. report in depth about displacement, relocation and evacuations associated with disasters and climate change
3. support national and regional discussions on human mobility issues, particularly internal and cross-border displacement and issues of relocations/resettlement from disasters and climate change.

## Annex I: List of Reviewed Documents

1. Government of the Cook Islands, *National Action Plan for Disaster Risk Management 2009-2015*, August 2010, [http://www.preventionweb.net/files/21869\\_17857finalnapdocument200920155b15d1.pdf](http://www.preventionweb.net/files/21869_17857finalnapdocument200920155b15d1.pdf)
2. Government of the Cook Islands, *Joint National Action Plan for Disaster Risk Management and Climate Change Adaptation 2011-2015*, January 2012, <http://www.pacificclimatechange.net/index.php/eresources/documents?task=view&id=502&catid=105>
3. Government of the Federated States of Micronesia, *National Climate Change Strategy 2009*, 2009, [http://www.fsmpio.fm/Nationwide\\_Climate\\_Change\\_policy.pdf](http://www.fsmpio.fm/Nationwide_Climate_Change_policy.pdf)
4. Government of Fiji, *National Climate Change Policy*, 2012, [http://www.gendercc.net/fileadmin/inhalte/Dokumente/Actions/fiji-national-climate-change-policy\\_Feb2012\\_en.pdf](http://www.gendercc.net/fileadmin/inhalte/Dokumente/Actions/fiji-national-climate-change-policy_Feb2012_en.pdf)
5. Government of Kiribati, Environment and Conservation Division, Ministry of Environment, Land, and Agricultural Development, *Republic of Kiribati, National Adaptation Program of Action (NAPA)*, January 2007, <http://unfccc.int/resource/docs/napa/kiro1.pdf>
6. Republic of the Marshall Islands, *National Action Plan for Disaster Risk Management 2008-2018*, November 2007, [http://www.pacificdisaster.net/pdnadmin/data/original/RMI\\_2008\\_2018\\_NAP\\_DRM.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/RMI_2008_2018_NAP_DRM.pdf)
7. Government of Nauru, *National Sustainable Development Strategy 2005 – 2025*, 2005, <http://www.drrgateway.net/sites/default/files/cobp-nau-2012-2014-oth.pdf>
8. Government of Niue, *Niue's Joint National Action Plan for Disaster Risk Management and Climate Change*, April 2012, [http://www.pacificdisaster.net/pdnadmin/data/original/NIU\\_2012\\_Joint\\_NAP\\_CC\\_DRM.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/NIU_2012_Joint_NAP_CC_DRM.pdf)
9. Government of Papua New Guinea, *Disaster Risk Reduction and Disaster Management National Framework for Action 2005–2015*, 2005, [http://www.undp.org.pg/docs/publications/PNG%20National%20Framework%20for%20Action%202005\\_2015.pdf](http://www.undp.org.pg/docs/publications/PNG%20National%20Framework%20for%20Action%202005_2015.pdf)
10. Government of Papua New Guinea, *Papua New Guinea's Strategic Program for Climate Resilience*, 2012, [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Strategic\\_Program\\_for\\_Climate\\_Resilience\\_for\\_Papua\\_New\\_Guinea.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Strategic_Program_for_Climate_Resilience_for_Papua_New_Guinea.pdf)
11. Government of Samoa, Ministry of Natural Resources, Environment & Meteorology, *National Adaptation Programme of Action, Samoa*, 2005, <http://unfccc.int/resource/docs/napa/sam01.pdf>
12. Government of the Solomon Islands, Ministry of Environment, Conservation and meteorology, *Solomon Islands, National Adaptation Programmes of Action*, November 2008, <http://unfccc.int/resource/docs/napa/slb01.pdf>
13. Government of Tokelau, *National Strategic Plan, 1 July 2010 – 30 June 2015*, 2010, <http://www.sprep.org/att/irc/ecopies/countries/tokelau/22.pdf>
14. The Kingdom of Tonga, *Joint National Action Plan on Climate Change Adaptation and Disaster Risk management 2010-2015*, 2010, [http://www.pacificdisaster.net/pdnadmin/data/original/TON\\_2010\\_2015\\_NAP\\_DRM.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/TON_2010_2015_NAP_DRM.pdf)
15. Government of Tuvalu, Ministry of Natural Resources, Environment, Agriculture and Lands, Department of Environment, *Tuvalu's National Adaptation Programme of Action*, May 2007, <http://unfccc.int/resource/docs/napa/tuv01.pdf>
16. Government of Vanuatu, *Disaster Risk Reduction and Management National Action Plan 2006-2016*, 2007, [http://pacificdisastermanagement.kemlu.go.id/Documents/Vanuatu/Disaster\\_Risk\\_Reduction\\_and\\_Disaster\\_Management\\_National\\_Action\\_Plan\\_2006-2016.pdf](http://pacificdisastermanagement.kemlu.go.id/Documents/Vanuatu/Disaster_Risk_Reduction_and_Disaster_Management_National_Action_Plan_2006-2016.pdf)
17. Parliament of Nauru, *Disaster Risk Management Act 2008*, Act No 15 of 2008, 2008, [http://www.ifrc.org/docs/IDRL/Nauru\\_DMAct\\_2008.PDF](http://www.ifrc.org/docs/IDRL/Nauru_DMAct_2008.PDF)
18. Republic of Palau, *National Disaster Risk Management Framework 2010*, October 2010, [http://www.pacificdisaster.net/pdnadmin/data/original/PLW\\_2010\\_NDRM\\_Framework.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/PLW_2010_NDRM_Framework.pdf)
19. Republic of Vanuatu, National Advisory Committee on Climate Change, *National Adaptation Programme for Action (NAPA)*, December 2007, [unfccc.int/resource/docs/napa/vut01.pdf](http://unfccc.int/resource/docs/napa/vut01.pdf)

## Annex II: Bibliography

- African Union (2009). *African Union Convention for the Protection and Assistance of Internally Displaced Persons (Kampala Convention)*. Adopted by the Special Summit of the Union held in Kampala, Uganda, 22<sup>nd</sup> October 2009.
- Agrawala, S., Ota, T., Risbey, J., Hagenstad, M., Smith, J., Van Aalst, M., Koshy, K. and Prasad, B. (2003). *Development and Climate Change in Fiji: Focus on Coastal Mangroves*. Paris: Organisation for Economic Co-operation and Development.
- Barnett, J., Webber, M. (2010). Migration as Adaptation: Opportunities and Limits. In McAdam, J. (ed.). *Climate Change and Displacement: Multidisciplinary Perspectives*. Oxford: Hart Publishing Ltd.
- Bettencourt, S., Croad, R., Freeman, P., Hay, J., Jones, R., King, P., Lal, P., Mearns, A., Miller, G., Pswarayi-Riddihough, I., Simpson, A., Teuatabo, N., Trotz, U. and Van Aalst, M. (2006). *Not If but When: Adapting to Natural Disasters in the Pacific Islands Region: A Policy Note*. Washington DC, USA: World Bank.
- Beyani, C. (2011). Statement by Chaloka Beyani, UN Special Rapporteur on the Human Rights of IDPs. Annual Meeting of the Informal Consultation Group of the World Bank Global Program on Forced Displacement (GPPD), Copenhagen, 2 December 2011. Washington DC, USA: World Bank.
- Brookings-Bern Project on Internal Displacement (2010). *Inter-Agency Standing Committee Framework on Durable Solutions for Internally Displaced Persons*. Washington, D.C.: Brookings Institution.
- Cernea, M. (2000). Impoverishment Risks, Safeguards, and Reconstruction: A Model for Population Displacement and Resettlement. In Cernea, M. (ed.) *Risk and Reconstruction: Experiences of Resettlers and Refugees*. Washington DC, USA: World Bank.
- Connell, J. (2013). Population Resettlement in the Pacific: Lessons from a Hazardous History? In *Australian Geographer*, 43:2, 127-142.
- Ferris, E. (2012). Protection and Planned Relocations in the Context of Climate Change. In *Legal and Protection Policy Research Series*. Geneva, Switzerland: Division of International Protection, United Nations High Commissioner for Refugees.
- Ferris, E. and Petz, D. (2013). *In the Neighbourhood, The Growing Role of Regional Organizations in Disaster Risk Management*. Washington, DC: Brookings-LSE Project on Internal Displacement.
- Ferris, E., Cernea, M. and Petz, D. (2011). *On the Front Line of Climate Change and Displacement: Learning from and with Pacific Island Countries*. Washington DC, USA: Brookings-LSE Project on Internal Displacement.
- Fletcher, C.H. and Richmond, B.M. (2010). *Climate Change in the Federated States of Micronesia: Food and Water Security, Climate Risk Management, and Adaptive Strategies*. Hawaii, USA: University of Hawai'i, Center for Island Climate Adaptation and Policy.
- Gemenne, F., Brückner, P., Ionesco, D. (eds.) (2012). *The State of Environmental Migration 2011*. Paris: Institute for Sustainable Development and International Relations (IDDRI) / International Organization for Migration (IOM).
- Haberkorn, G. (2008). Pacific Islands' Population and Development: Facts, Fictions and Follies. In *New Zealand Population Review*. 33/34: 95-127.
- Internal Displacement Monitoring Centre and Norwegian Refugee Council (2011). *Displacement Due to Natural Hazard-induced Disasters: Global estimates for 2009 and 2010*. Geneva: Internal Displacement Monitoring Centre and Norwegian Refugee Council.
- Internal Displacement Monitoring Centre and Norwegian Refugee Council (2013). *Global Estimates for 2012: People Displaced by Disasters*. Geneva: Internal Displacement Monitoring Centre and Norwegian Refugee Council.
- International Federation of the Red Cross and Red Crescent Societies (2012). *World Disasters Report 2012 - Focus on forced migration and displacement*. Geneva: International Federation of Red Cross and Red Crescent Societies.
- International Strategy for Disaster Reduction (2005). *Hyogo Framework For Action 2005–2015: Building the Resilience of Nations and Communities to Disasters*. World Conference on Disaster Risk Reduction. Kobe, Hyogo.

- Intergovernmental Panel on Climate Change (2012). *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Field et al. (eds.), A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.
- Julca, A., and Paddison, O. (2010). Vulnerabilities and Migration in Small Island Developing States in the Context of Climate Change. In *Natural Hazards*. 55:3: 717-228.
- Kälin, W. (2010). Conceptualising Climate-Induced Displacement. In McAdam, J. (ed.). *Climate Change and Displacement: Multidisciplinary Perspectives*. Oxford: Hart Publishing Ltd.
- Laczko, F. and Aghazarm, C. (2009). *Migration Environment and Climate Change, Assessing the Evidence*. Geneva: IOM.
- McAdam, J. (2012). *Climate Change, Forced Migration, and International Law*. Oxford: Oxford University Press.
- McAdam, J. (ed.) (2010). *Climate Change and Displacement: Multidisciplinary Perspectives*. Oxford: Hart Publishing Ltd.
- Méheux, K., Dominey-Howes, D. and Lloyd, K. (2007). Natural hazard impacts in small island developing states: A review of current knowledge and future research needs. In *Natural Hazards* 40:2, 429-446.
- Norwegian Refugee Council (2009). *Climate Changed: People Displaced*. Oslo: NRC
- Norwegian Refugee Council (2011). *The Nansen Conference: Climate Change and Displacement in the 21st Century*, Oslo, Norway, June 5-7, 2011.
- OHCHR Regional Office for the Pacific (2011). *Protecting the Human Rights of Internally Displaced Persons in Natural Disasters*, Challenges in the Pacific: Discussion Paper. Suva: OHCHR Regional Office for the Pacific.
- Piguet, E., Pecoud, A. and De Guchteneire, P. (eds.) (2011). *Migration and Climate Change*. Cambridge: Cambridge University Press.
- SOPAC (2005), *An Investment for Sustainable Development in Pacific Island Countries Disaster Risk Reduction and Disaster Management, Building the Resilience of Nations and Communities to Disasters, A Framework for Action 2005 – 2015*.
- SOPAC and SPREP (2005). *Pacific Islands Framework for Action on Climate Change 2006-2015*.
- UNISDR (2009). *2009 Global Assessment Report on Disaster Risk Reduction Risk and poverty in a changing climate*. Geneva: United Nations Office for Disaster Risk Reduction (UNISDR).
- UNISDR Asia and Pacific Regional Office (2012). *Disaster Risk Reduction & Climate Change Adaptation in the Pacific, An Institutional and Policy Analysis*. Geneva: United Nations Office for Disaster Risk Reduction (UNISDR).
- UNISDR (2013). *From Shared Risk to Shared Value – The Business Case for Disaster Risk Reduction. Global Assessment Report on Disaster Risk Reduction*. Geneva: United Nations Office for Disaster Risk Reduction (UNISDR).
- United Nations Human Settlements Programme (2010). *Land and Natural Disasters: Guidance for Practitioners*. Nairobi: United Nations Human Settlements Programme (UN-HABITAT)
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA) (1998). *Guiding Principles on Internal Displacement*. E/CN/4/1998/53/Add2. New York: United Nations.
- United Nations University Institute for Environment and Human Security (UNU-EHS), the Alliance Development Works/BündnisEntwicklungHilft and The Nature Conservancy (TNC) (2012). *World Risk Report 2012*. Berlin: Alliance Development Works.
- United Kingdom Government Office for Science (2011). *Foresight: Migration and Global Environmental Change. Final Project Report*. London, UK: Government Office for Science.
- Warner, K. (2011). Climate Change Induced Displacement: Adaptation Policy in the Context of the UNFCCC Climate Negotiations. In *Legal and Protection Policy Research Series*. Geneva: Division of International Protection, United Nations High Commissioner for Refugees.
- Warner, K., Tamer, A., Kevin, H., Tonya, R., Christopher S., and De Sherbinin, A. (2012). *Where the Rain Falls: Climate Change, Food and Livelihood Security, and Climate Change: Global Policy Report*. Bonn: United Nations University-EHS.

## Notes

- 1 Governments of Norway and Switzerland, with Costa Rica, Germany and Mexico. In *Pledges 2011 Ministerial Intergovernmental Event on Refugees and Stateless Persons (Geneva, Palais des Nations, 7–8 December 2011)*. UNHCR, Geneva, Switzerland. <http://www.unhcr.org/commemorations/Pledges2011-preview-compilation-analysis.pdf>
- 2 Chaloka Beyani, “Statement by Chaloka Beyani, UN Special Rapporteur on the Human Rights of IDPs,” Annual Meeting of the Informal Consultation Group of the World Bank Global Program on Forced Displacement (GPDF), Copenhagen, 2 December 2011, <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1265299949041/6766328-1265299960363/Chaloka-Beyani-statement.pdf>, p.2.
- 3 Intergovernmental Panel on Climate Change, *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Parry, M.L., O.F. Canziani, J.P. Palutikof, P.J. van der Linden, and C.E. Hanson (eds.)]. Cambridge University Press, Cambridge, UK.
- 4 Gerald Haberkorn, “Pacific Islands’ Population and Development: Facts, Fictions and Follies,” *New Zealand Population Review*, 33/34: 95-127, [http://panz.rsnz.org/wp-content/uploads/2010/01/nzpr-vol-33-and-34\\_gerald-haberkorn.pdf](http://panz.rsnz.org/wp-content/uploads/2010/01/nzpr-vol-33-and-34_gerald-haberkorn.pdf)
- 5 Adapted from Intergovernmental Panel on Climate Change (IPCC), 2012, *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Special Report of the Intergovernmental Panel on Climate Change, Cambridge: Cambridge University Press, p.557. <http://ipcc-wg2.gov/SREX/UNISDR>
- 6 UNISDR, 2009. *UNISDR Terminology on Disaster Risk Reduction*. UN Office for Disaster Risk Reduction, Geneva. [http://www.unisdr.org/files/7817\\_UNISDR\\_TerminologyEnglish.pdf](http://www.unisdr.org/files/7817_UNISDR_TerminologyEnglish.pdf)
- 7 UNISDR, 2013, Glossary of Key Terms. In *Global Assessment Report on Disaster Risk Reduction 2013 From Shared Risk to Shared Value: the Business Case for Disaster Risk Reduction*. Geneva: UNISDR. <http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html>
- 8 See the *Guiding Principles on Internal Displacement*, 1998, and the IASC *Operational Guidelines on the protection of persons in situations of natural disasters*, January 2011. Also, Cernea’s Impoverishment Risks and Reconstruction approach analyses forced resettlement in the context of large-scale development projects and outlines eight basic risks faced by displaced people, which are also common to disaster-induced displacement: landlessness; joblessness; homelessness, marginalisation, food insecurity, increased morbidity, loss of access to common property resources and social disarticulation. Michael Cernea, 1999, “Why Economic Analysis is Essential to Resettlement: A Sociologist’s View”, in Michael Cernea (ed.), *The Economics of Involuntary Resettlement: Questions and Challenges*, Washington, DC: World Bank.
- 9 Walter Kälin, 2013, Changing climates, moving people: Distinguishing voluntary and forced movements of people. In *Changing climate, moving people: Framing migration, displacement and planned relocation*, pp.38-43 [Koko Warner, Tamer Afifi, Walter Kälin, Scott Leckie, Beth Ferris, Susan F. Martin and David Wrathall (eds.)]. Bonn, Germany: United Nations University Institute for Environment and Human Security (UNU-EHS).
- 10 IPCC, 2012, p.561.
- 11 Kirstie Méheux, Dale Dominey-Howes and Kate Lloyd, 2007. Natural hazard impacts in small island developing states: A review of current knowledge and future research needs. In *Natural Hazards* 40:2, 429-446.
- 12 Ibid., p.114.
- 13 UNISDR, *Global Assessment Report on Disaster Risk Reduction, The Pocket GAR, From Shared Risk to Shared Value: The Business Case for Disaster Risk Reduction*, 2013, p.14. [http://www.preventionweb.net/english/hyogo/gar/2013/en/home/GAR\\_pocket/GAR\\_pocket\\_3.html](http://www.preventionweb.net/english/hyogo/gar/2013/en/home/GAR_pocket/GAR_pocket_3.html)
- 14 United Nations University Institute for Environment and Human Security (UNU-EHS), the Alliance Development Works/BündnisEntwicklungHilft and The Nature Conservancy (TNC), *World Risk Report 2012*, 2012, <http://www.ehs.unu.edu/file/get/10487.pdf>
- 15 Sofia Bettencourt, Richard Croad, Paul Freeman, John Hay, Roger Jones, Peter King, Padma Lal, Alan Mearns, Geoff Miller, Idah Pswarayi-Riddihough, Al Simpson, Nakibae Teuatabo, Ulric Trotz and Maarten Van Aalst, *Not if but when: Adapting to Natural Disasters in the Pacific Islands Region: A Policy Note*, World Bank, 2006, [http://siteresources.worldbank.org/INTPACIFICISLANDS/Resources/Natural\\_Hazards-report.pdf](http://siteresources.worldbank.org/INTPACIFICISLANDS/Resources/Natural_Hazards-report.pdf), p.5.
- 16 UNISDR, 2009 Global Assessment Report on Disaster Risk Reduction Risk and poverty in a changing climate, Geneva 2009, <http://www.preventionweb.net>

- net/english/hyogo/gar/report/documents/GAR\_Prelims\_2009\_eng.pdf
- 17 Alex Julca and Oliver Paddison, 2010. Vulnerabilities and migration in Small Island Developing States in the context of climate change. In *Natural Hazards* 55:3, pp:717-728.
  - 18 UNISDR, 2009 Global Assessment Report, Executive Summary, op. cit., p.6. [http://www.preventionweb.net/files/9414\\_GARsummary.pdf](http://www.preventionweb.net/files/9414_GARsummary.pdf)
  - 19 Internal Displacement Monitoring Centre (IDMC) and Norwegian Refugee Council (NRC), *People Displaced by Disasters, Global Estimates 2013*, <http://www.internal-displacement.org/publications/global-estimates-2012>
  - 20 IDMC and NRC, op. cit., p.6 and p.29f. Displacement was also reported in PNG, Solomon Islands, Tonga, Vanuatu and Palau, as well as in Australia and New Zealand.
  - 21 Examples are the Indian Ocean tsunami of 2004, the Haiti earthquake, the 2010 floods in Pakistan and the Tinakula volcanic eruption in the Solomon Islands.
  - 22 For analysis of climate-induced displacement and risks to small-island countries see Walter Kälin, "Conceptualising Climate-Induced Displacement" in: Jane McAdam (ed.), *Climate Change and Displacement, Multidisciplinary Perspectives*, 2010, pp.81-104; see also: Jane McAdam, *Climate Change, Forced Migration, and International Law*, Oxford University Press, 2012.
  - 23 UK Government Office for Science, *Foresight: Migration and Global Environmental Change, Final Project Report*, 2011. <http://www.bis.gov.uk/assets/foresight/docs/migration/11-1116-migration-and-global-environmental-change.pdf>
  - 24 See, International Federation of the Red Cross and Red Crescent Societies (IFRC), *World Disasters Report, World Disasters Report 2012 - Focus on forced migration and displacement*, 2012, <http://www.ifrc.org/publications-and-reports/world-disasters-report-2012/>
  - 25 The Nansen Initiative, *A Protection Agenda for Disaster-induced Cross-border Displacement, Concept Note*, 2 October 2012,
  - 26 For analysis of climate-induced displacement see: Walter Kälin, "Conceptualising Climate-Induced Displacement" in: Jane McAdam (ed.), *Climate Change and Displacement, Multidisciplinary Perspectives*, 2010, pp.81-104.
  - 27 UNFCCC, *Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention*, CP 16, 2010, [http://unfccc.int/files/meetings/cop\\_16/application/pdf/cop16\\_lca.pdf#page=3,para14\(f\)](http://unfccc.int/files/meetings/cop_16/application/pdf/cop16_lca.pdf#page=3,para14(f))
  - 28 For an account of this debate see McAdam, 2012, op. cit., p.119ff.
  - 29 McAdam (2012, p.143f) based on Campbell, Goldsmith and Koshny (2005) report that there have been at least 86 relocations of whole communities within the Pacific.
  - 30 United Nations Framework Convention on Climate Change (UNFCCC), *Report of the Conference of Parties on its Seventh Session, held at Marrakesh from 29 October to 10 November 2001, Addendum, Part two: Action taken by the Conference of Parties*, FCCC/CP/2001/13/Add.4, 21 January 2002, p.8.
  - 31 Ibid.
  - 32 Ibid. All NAPAs are at: [http://unfccc.int/cooperation\\_support/least\\_developed\\_countries\\_portal/submitted\\_napas/items/4585.php](http://unfccc.int/cooperation_support/least_developed_countries_portal/submitted_napas/items/4585.php)
  - 33 Ibid., p.6.
  - 34 Global Environment Facility, "Least Developed Countries Fund," <http://www.thegef.org/gef/LDCF>. In addition to serving as a financial mechanism of the UNFCCC, the GEF provides grants for projects related to biodiversity, international waters, land degradation, the ozone layer and persistent organic pollutants.
  - 35 Ibid.
  - 36 The highest point of the country lies on Banaba, 81 metres above sea level.
  - 37 Government of Kiribati, Environment and Conservation Division, Ministry of Environment, Land, and Agricultural Development, *Republic of Kiribati, National Adaptation Programme of Action (NAPA)*, January 2007, <http://www.asiapacificadapt.net/adaptation-practices/national-adaptation-programme-action-napa-kiribati, p.iii>.
  - 38 Government of Kiribati, National Statistics Office, Ministry of Finance, *Report on the Kiribati 2010 Census of Population and Housing*, August 2012. <http://www.mfed.gov.ki/wp-content/uploads/2011/05/Census-Report-2010-Volume-1.pdf>
  - 39 Government of Kiribati, NAPA, p.III.
  - 40 Ibid., p.1.
  - 41 Ibid., p.1.
  - 42 Ibid., p.6.
  - 43 Ibid., p.10f.
  - 44 Ibid., p.11.
  - 45 Ibid., p.12.
  - 46 Ibid., p.27.
  - 47 Ibid., p.39.
  - 48 Ibid., p.47.
  - 49 Ibid., p.59. The scope of this paper did not allow us to review KAP.
  - 50 Office of the President, Republic of Kiribati, Kiribati Adaptation Project, <http://www.climate.gov.ki/category/action/relocation/>
  - 51 Ibid. NB: native inhabitants of Kiribati are known as I-Kiribati.
  - 52 Ibid.
  - 53 Government of Samoa, Ministry of Finance, *Strategy for the Development of Samoa 2012–2016*, July 2012, <http://www.mof.gov.ws/Services/Economy/Economic>

- Planning/tabid/5618/Default.aspx, p.2.
- 54 Government of Samoa, Ministry of Natural Resources, Environment and Meteorology, *National Adaptation Programme of Action, Samoa, 2005*, <http://unfccc.int/resource/docs/napa/samo1.pdf>, p.7.
- 55 Ibid., p.11.
- 56 Ibid., p.7.
- 57 Ibid., p.11
- 58 Ibid., p.12.
- 59 Ibid., p.15.
- 60 Ibid., p.23 and p.48.
- 61 Ibid., p.49.
- 62 Ibid., p.50.
- 63 Ibid., p.36.
- 64 Government of the Solomon Islands, Ministry of Environment, Conservation and meteorology, *Solomon Islands, National Adaptation Programmes of Action, November 2008*, p.22.
- 65 Ibid., p.29ff.
- 66 Ibid., p.39.
- 67 Ibid., p.40.
- 68 Ibid., p.40.
- 69 Ibid., p.42.
- 70 The document references a new law that recognises the rights of tribes to title over customary land and which places the administration of all customary land with traditional institutions in collaboration with provincial administrations. See p.40.
- 71 Ibid., p.40.
- 72 Ibid., p.41. A report by the Pacific Climate Change Science Program notes that predictions for the Solomon Islands show a reduced frequency, but an increase in the proportion of, more intense storms. See: Pacific Climate Change Science Program, *Current and Future Climate of the Solomon Islands*, International Climate Change Adaptation Initiative, 2011, p.6. [http://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/13\\_PCCSP\\_Solomon\\_Islands\\_8pp.pdf](http://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/13_PCCSP_Solomon_Islands_8pp.pdf)
- 73 Ibid., p.54.
- 74 Ibid., p.26.
- 75 Ibid., p.65.
- 76 Ibid., p.65.
- 77 Ibid., p.100.
- 78 Ibid., p.80.
- 79 Ibid., p.86.
- 80 Ibid., p.86.
- 81 Ibid., p.86f.
- 82 Ibid., p.30.
- 83 Government of Tuvalu, Ministry of Natural Resources, Environment, Agriculture and Lands, Department of Environment, *Tuvalu's National Adaptation Programme of Action*, May 2007, [unfccc.int/resource/docs/napa/tuvo1.pdf](http://unfccc.int/resource/docs/napa/tuvo1.pdf), p.5.
- 84 Tuvalu, Central Statistics Division, *Tuvalu Statistics at a Glance*, <http://www.spc.int/prism/tuvalu/>
- 85 Tuvalu, Central Statistics Division, *Household Income and Expenditure Survey 2010*, Report, 2010, [http://www.spc.int/prism/tuvalu/index.php/tuvalu-documents/doc\\_download/168-tuvalu-hies-report-2010](http://www.spc.int/prism/tuvalu/index.php/tuvalu-documents/doc_download/168-tuvalu-hies-report-2010), p.20.
- 86 Ibid., p.6.
- 87 Ibid., p.10.
- 88 Ibid., p.11.
- 89 The NAPA notes, that this was the first time that the new disaster plan was put into action for the evacuation of king tide victims. See p.35.
- 90 Ibid., p.6 and p.12.
- 91 Ibid., p.30.
- 92 Ibid., p.31.
- 93 For updates on ENSO, see: NOAA/National Weather Service, Climate Prediction Center, "El Niño–Southern Oscillation (ENSO)," [www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml](http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml)
- 94 Ibid., p.25.
- 95 Ibid., p.34.
- 96 Ibid., p.37.
- 97 Ibid., p.51.
- 98 Republic of Vanuatu, National Advisory Committee on Climate Change, *National Adaptation Programme for Action (NAPA)*, December 2007, p.11.
- 99 Ibid., p.18.
- 100 Ibid., p.11.
- 101 Ibid., p.16.
- 102 Ibid., p.17.
- 103 Ibid., p.20.
- 104 Ibid., pp.23-26.
- 105 Ibid., pp.28.
- 106 Ibid., p.31.
- 107 Ibid., p.41.
- 108 Asian Development Bank, African Development Bank, European Bank for Reconstruction and Development, Food and Agriculture Organization of the United Nations, Inter-American Development Bank, International Fund for Agricultural Development, United Nations Development Programme, United Nations Environment Programme, United Nations Industrial Development Organization and the World Bank.
- 109 Global Environment Facility, Accessing resources under the Least Developed Countries Fund, May 2011, p.7ff.
- 110 [http://www.thegef.org/gef/project\\_list](http://www.thegef.org/gef/project_list)
- 111 GEF, Project Identification Form (PIF), The Least Developed Countries Fund, "Increasing resilience to climate change and natural hazards in Vanuatu, 11 September 2008, [http://www.thegef.org/gef/project\\_detail?projID=3798](http://www.thegef.org/gef/project_detail?projID=3798)
- 112 Ibid.
- 113 For a rationale for the water sector project see: [http://www.thegef.org/gef/project\\_detail?projID=4725](http://www.thegef.org/gef/project_detail?projID=4725)
- 114 For a detailed discussion about the inclusion of paragraph 14f see: Koko Warner, *Climate Change Induced*

- Displacement: Adaptation Policy in the Context of the UNFCCC Climate Negotiations*, UNHCR, Legal and Protection Policy Research Series, May 2011.
- 115 Some of which are already and will be compounded by climate change; For the latest scientific discussion on the impacts of climate change on extreme weather events see: Intergovernmental Panel on Climate Change (IPCC), Intergovernmental Panel on Climate Change (IPCC) “Summary for Policymakers,” in *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Field et al. (eds.), A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change, 2012.
- 116 Elizabeth Ferris, *Protection and Planned Relocations in the Context of Climate Change*, UNHCR, Legal and Protection Policy Research Series, August 2012, <http://www.brookings.edu/~media/Research/Files/Papers/2012/8/protection%2oclimate%20change%20ferris/protection%2oclimate%20change%20ferris.pdf>, p.11.
- 117 Government of the Solomon Islands, NAPA, p.40.
- 118 Government of Tuvalu, NAPA, p.25.
- 119 See: Government of the Solomon Islands, NAPA, p.39 and p.42.
- 120 Government of the Solomon Islands, NAPA, p.86.
- 121 See for example: Michael Cernea, “Impoverishment Risks, Safeguards, and Reconstruction: A Model for Population Displacement and Resettlement,” in vol. *Risk and Reconstruction: Experiences of Resettlers and Refugees*, Washington DC, World Bank, 2000, pp.11-55.
- 122 Jane McAdam, *Climate Change, Forced Migration, and International Law*, Oxford University Press, 2012, p.184.
- 123 See: Susan F. Martin, “Managing Environmentally Induced Migration,” in Laczko and Aghazarm, *Migration Environment and Climate Change, Assessing the Evidence*, IOM, 2009, [http://publications.iom.int/bookstore/free/migration\\_and\\_environment.pdf](http://publications.iom.int/bookstore/free/migration_and_environment.pdf), p.362.
- 124 *An Investment for Sustainable Development in Pacific Island Countries Disaster Risk Reduction and Disaster Management, Building the Resilience of Nations and Communities to Disasters, A Framework for Action 2005 – 2015*, 2005, <http://www.pacificdisaster.net/pdnadmin/data/documents/5017.html>
- 125 SOPAC, SPREP, *Pacific Islands Framework for Action on Climate Change 2006–2015*, 2005, [www.sprep.org/climate\\_change/pycc/documents/PIFACC.pdf](http://www.sprep.org/climate_change/pycc/documents/PIFACC.pdf)
- 126 For a more detailed discussion on Pacific regional frameworks see: Elizabeth Ferris and Daniel Petz, *In the Neighborhood, The Growing Role of Regional Organizations in Disaster Risk Management*, Brookings-LSE Project on Internal Displacement, 2013, <http://www.brookings.edu/research/reports/2013/02/regional-organizations-disaster-risk-ferris>
- 127 The Cook Islands developed an Action Plan in 2010 and a Joint Action Plan in 2012.
- 128 Government of the Cook Islands, *Joint National Action Plan for Disaster Risk Management and Climate Change Adaptation 2011–2015*, January 2012, p.5. <http://www.pacificclimatechange.net/index.php/ere-sources/documents?task=view&id=502&catid=105>
- 129 *Ibid.*, p.6 and p.14.
- 130 Government of the Cook Islands, *National Action Plan for Disaster Risk Management 2009–2015*, August 2010, p.12. <http://www.preventionweb.net/english/professional/policies/v.php?id=21869>
- 131 JNAP, p.8.
- 132 JNAP, p.12.
- 133 NAP, p.8.
- 134 NAP, p.10.
- 135 NAP, p.27.
- 136 NAP, p.30.
- 137 JNAP, p.52.
- 138 JNAP, p.54.
- 139 JNAP, p.56.
- 140 United Nations Statistics Division, *2013 World Statistics Pocketbook Country Profile: Marshall Islands*, 2013. <http://unstats.un.org/unsd/pocketbook/PDF/2013/Marshall%20Islands.pdf>
- 141 Republic of Marshall Islands, *National Action Plan for Disaster Risk Management 2008–2018*, November 2007, p.11f. <http://www.drrgateway.net/content/republic-marshall-islands-national-action-plan-disaster-risk-management-2008-%E2%80%90-2018>
- 142 *Ibid.*, p.10.
- 143 *Ibid.*, p.14.
- 144 *Ibid.*, p.15.
- 145 *Ibid.*, p.15.
- 146 *Ibid.*, p.25.
- 147 *Ibid.*, p.26ff.
- 148 Government of Niue, *Niue’s Joint National Action Plan for Disaster Risk Management and Climate Change*, April 2012, p.3. [http://www.pacificdisaster.net/pdnadmin/data/original/NIU\\_2012\\_Joint\\_NAP\\_CC\\_DRM.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/NIU_2012_Joint_NAP_CC_DRM.pdf)
- 149 *Ibid.*, p.5.
- 150 *Ibid.*, p.5.
- 151 *Ibid.*, p.9.
- 152 *Ibid.*, p.viii.
- 153 *Ibid.*, p.40.
- 154 *Ibid.*, p.40.
- 155 *Ibid.*, p.36.
- 156 Government of Papua New Guinea, *Papua New Guinea’s Strategic Program for Climate Resilience*, 2012, p.9.
- 157 *Ibid.*, p.11.
- 158 Government of Papua New Guinea, *Disaster Risk Reduction and Disaster Management National Framework for Action 2005–2015*, 2005, p.3.
- 159 *Ibid.*, p.4.



- 160 *Ibid.*, p.14f.
- 161 Kingdom of Tonga, *Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management 2010–2015*, 2010, p.4. <http://www.preventionweb.net/english/professional/policies/v.php?id=18242>
- 162 *Ibid.*, p.8.
- 163 *Ibid.*, p.14.
- 164 *Ibid.*, p.19.
- 165 *Ibid.*, p.33.
- 166 *Ibid.*, p.31.
- 167 *Ibid.*, p.35.
- 168 *Ibid.*, p.37.
- 169 *Ibid.*, p.58.
- 170 *Ibid.*, p.61.
- 171 *Ibid.*, p.70.
- 172 *Ibid.*, p.71.
- 173 Government of Vanuatu, *Disaster Risk Reduction and Management National Action Plan 2006–2016*, 2007, p.13. [http://pacificdisastermanagement.kemlu.go.id/Documents/Vanuatu/Disaster\\_Risk\\_Reduction\\_and\\_Disaster\\_Management\\_National\\_Action\\_Plan\\_2006-2016.pdf](http://pacificdisastermanagement.kemlu.go.id/Documents/Vanuatu/Disaster_Risk_Reduction_and_Disaster_Management_National_Action_Plan_2006-2016.pdf)
- 174 *Ibid.*, p.14f.
- 175 *Ibid.*, Annex, p.9.
- 176 For a discussion of these issues see: UNISDR Asia and Pacific, *Disaster Risk Reduction & Climate Change Adaptation in the Pacific, An Institutional and Policy Analysis*, 2012. <http://www.unisdr.org/we/inform/publications/26725>
- 177 SOPAC, *An Investment for Sustainable Development in Pacific Island Countries Disaster Risk Reduction and Disaster Management, Building the Resilience of Nations and Communities to Disasters, A Framework for Action 2005 – 2015*, 2005, <http://www.pacificdisaster.net/pdnadmin/data/documents/5017.html>
- 178 SOPAC, SPREP, *Pacific Islands Framework for Action on Climate Change 2006–2015*, 2005, [www.sprep.org/climate\\_change/pycc/documents/PIFACC.pdf](http://www.sprep.org/climate_change/pycc/documents/PIFACC.pdf)
- 179 United Nations International Strategy for Disaster Reduction (UNISDR), *Hyogo Framework For Action 2005–2015: Building the Resilience of Nations and Communities to Disasters*, 2005, [http://www.unisdr.org/files/1037\\_hyogoframeworkforactionenglish.pdf](http://www.unisdr.org/files/1037_hyogoframeworkforactionenglish.pdf), p.11. The framework mentions evacuations in section five on strengthening disaster preparedness for effective response; one of the key activities is: (d) Prepare or review and periodically update disaster preparedness and contingency plans and policies at all levels, with a particular focus on the most vulnerable areas and groups. Promote regular disaster preparedness exercises, including evacuation drills, with a view to ensuring rapid and effective disaster response and access to essential food and non-food relief supplies, as appropriate, to local needs. (HFA, p.12)
- 180 United Nations Statistics Division, *2013 World Statistics Pocketbook Country Profile: Fiji*, 2013. <http://unstats.un.org/unsd/pocketbook/PDF/2013/fiji.pdf>
- 181 Government of Fiji, *National Climate Change Policy*, 2012, p.8. <http://www.foreignaffairs.gov.fj/about-us/publication/fiji-national-climate-change-policy>
- 182 *Ibid.*
- 183 *Ibid.*, p.13
- 184 *Ibid.*, p.9.
- 185 *Ibid.*, p.23f.
- 186 *Ibid.*, p.17
- 187 Charles H. Fletcher and Bruce M. Richmond, *Climate Change in the Federated States of Micronesia, Food and Water Security, Climate Risk Management, and Adaptive Strategies*, 2010. <http://www.sprep.org/att/IRC/eCOPIES/Countries/FSM/74.pdf>
- 188 Government of the Federated States of Micronesia, *National Climate Change Strategy 2009*, 2009, p.2. <http://www.pacificclimatechange.net/index.php/resources/documents?task=view&id=510&catid=78>
- 189 Parliament of Nauru, *Disaster Risk Management Act 2008*, Act No 15 of 2008. [http://www.ifrc.org/docs/IDRL/Nauru\\_DMAct\\_2008.PDF](http://www.ifrc.org/docs/IDRL/Nauru_DMAct_2008.PDF)
- 190 Government of Nauru, *National Sustainable Development Strategy 2005 – 2025*, 2005, <http://www.ausaid.gov.au/Publications/Pages/nauru-sustdevstrat2005%E2%80%932025.aspx>
- 191 Disaster Risk Management Act 2008, p.11, p.15 and p.16.
- 192 *National Sustainable Development Strategy 2005 – 2025*, p.15.
- 193 *Ibid.*, p.93.
- 194 Republic of Nauru, *Revised National Sustainable Development Strategy 2005 – 2025*, p.59. <http://www.sprep.org/att/IRC/eCOPIES/Countries/Nauru/44.pdf>
- 195 Central Intelligence Agency, *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/ps.html>
- 196 Republic of Palau, *National Disaster Risk Management Framework 2010*, October 2010, p.8. [http://www.pacificdisaster.net/pdnadmin/data/original/PLW\\_2010\\_NDRM\\_Framework.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/PLW_2010_NDRM_Framework.pdf)
- 197 *Ibid.*, p.11.
- 198 *Ibid.*, p.24.
- 199 *Ibid.*, p.51.
- 200 *Ibid.*, p.27.
- 201 Other Pacific countries selected for the programme by the Climate Investment Funds are Samoa and Tonga. For more information see: Climate Investment Funds, *Pilot Program for Climate Resilience*, <https://www.climateinvestmentfunds.org/cif/ppcr>
- 202 Government of Papua New Guinea, *Papua New Guinea's Strategic Program for Climate Resilience*, 2012, p.14, [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Strategic\\_Program\\_for\\_Climate\\_Resilience\\_for\\_Papua\\_New\\_Guinea.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Strategic_Program_for_Climate_Resilience_for_Papua_New_Guinea.pdf)

- 203 Ibid., p.15.
- 204 Ibid., p.16.
- 205 Ibid., p.19.
- 206 Ibid., p.23.
- 207 Ibid., p.30.
- 208 Ibid., p.30 and p.34.
- 209 Tokelau, *National Strategic Plan, 1 July 2010 – 30 June 2015*, 2010, p.9. <http://www.sprep.org/att/irc/ecopies/countries/tokelau/22.pdf>
- 210 Ibid., p.20.
- 211 Ibid., p.57.
- 212 Ibid., p.62.
- 213 Ibid., p.64.
- 214 OHCHR Regional Office for the Pacific, *Protecting the Human Rights of Internally Displaced Persons In Natural Disasters, Challenges in the Pacific*, Discussion Paper, 2011, [http://pacific.ohchr.org/docs/IDP\\_report.pdf](http://pacific.ohchr.org/docs/IDP_report.pdf)
- 215 Brookings-Bern Project on Internal Displacement, *IASC Framework on Durable Solutions*, April 2010, [http://www.brookings.edu/~media/Research/Files/Reports/2010/4/durable%20solutions/04\\_durable\\_solutions.PDF](http://www.brookings.edu/~media/Research/Files/Reports/2010/4/durable%20solutions/04_durable_solutions.PDF)
- 216 For human-rights based guidelines on evacuations see: *IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters*, Brookings-Bern Project on Internal Displacement, January 2011, <http://www.brookings.edu/research/reports/2011/01/06-operational-guidelines-nd>
- 217 UK Government Office for Science, op. cit.
- 218 *African Union, African Union Convention for the Protection and Assistance of Internally Displaced Persons (Kampala Convention)*, 22 October 2009, <http://www.unhcr.org/4aegbedeg.html>

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- 2 > **equip them to plan for and manage** internal relocations of populations in a protection sensitive manner; and
- 3 > **provide States and other relevant actors tools and guidance** to protect persons who cross international borders owing to disasters, including those linked to climate change.



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