Climate change, planned relocation and land governance in the Pacific region

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Pati Doi – Anua Magere (Our Beautiful Home)

Amari mange, abe kibala ma.
Masawako, kusuaki nge tago di ado.
Ugealako makasi lo kuteo ma
Rubem ba – ama ti – inare
Namam kira be kutaokama
Be anua tailalo. Kimaramama!

The sun is slowly setting on the horizon
Here I am alone in a foreign land, finding it difficult to survive
I look far across the sea to the horizon
You protrude firm and lonely
You were frustrated and chased us
We become drifters in another man’s place

Anua Negu
Anua Nema
Abruoma omo dieno
Motu anua
Anua Moagere

My home
Our home
Our hearts are always with you
Our island home
Our beautiful home

Table of Contents

Table of Figures .......................................................................................................................... 5
List of Acronyms .......................................................................................................................... 7
Acknowledgments ......................................................................................................................... 9
Abstract ......................................................................................................................................... 11

1 Chapter 1: Introduction ............................................................................................................. 12
  1.1 Introduction ........................................................................................................................ 12
  1.2 Research Objective and Research Questions .................................................................... 13
  1.3 Rationale for the Research ................................................................................................. 14
  1.4 Theoretical Frameworks ...................................................................................................... 15
    1.4.1 Cultural Relativist Theory and International Human Rights Theory ...................... 15
    1.4.2 Theory of “Hybrity” ..................................................................................................... 16
  1.5 Gaps in Evidence-Based Research Informing Policy ......................................................... 18
  1.6 Overview of the Different Chapters ................................................................................. 23

2 Chapter 2: Literature Review .................................................................................................. 26
  2.1 Introduction ........................................................................................................................ 26
  2.2 Terminology and Definitions ............................................................................................. 28
  2.3 Climate Change and the Need for Adaptation ................................................................... 32
    2.3.1 Impacts of Climate Change in the Pacific Islands .................................................... 32
    2.3.2 No Choice but to Move? Human Mobility as Adaptation Strategy ....................... 33
    2.3.3 Limits to Adaptation, Cultural Cohesion and Land in the Pacific ......................... 35
  2.4 Fostering “Sustainable Relocation” .................................................................................. 37
    2.4.1 Examination of Contextual Definition (UNCED, 1992) ............................................ 37
    2.4.2 Relocation Categories and Approaches ..................................................................... 38
    2.4.3 Debates Around Internal versus International Relocation: International Protection and Polluter State Responsibility ................................................................................ 39
    2.4.4 Debates Around Staggered versus Whole Community Relocation ....................... 40
  2.5 The Specifics of Land in the Pacific Islands ........................................................................ 41
    2.5.1 Customary Law, Land Ownership and Land Tenure in the Pacific Islands ............ 41
    2.5.2 Debates over Land Rights: Collective versus Individual Rights ............................ 43
    2.5.3 Debates over Cultural Relativism versus Cultural Universalism ............................ 44

3 Chapter 3: Methodology ........................................................................................................ 47
  3.1 Introduction ........................................................................................................................ 47
  3.2 Literature Review Methodology ........................................................................................ 48
  3.3 Key Approaches Addressing Research Questions ............................................................. 50
  3.4 Hypothesis Tested in this Thesis ....................................................................................... 52
  3.5 Field Study ......................................................................................................................... 55
    3.5.1 Site Selection Criteria ............................................................................................... 55
  3.6 Methods of Data Collection ............................................................................................... 57
    3.6.1 Qualitative Methods .................................................................................................. 57
    3.6.2 Indigenous Methods ................................................................................................. 62

4 Chapter 4: Human Mobility as Adaptation Strategy to Climate Change in the Pacific...65
  4.1 Introduction ........................................................................................................................ 65
  4.2 Intra-regional Differences in Vulnerability to Climate Change in the Pacific ................. 66
  4.3 Slow-Onset Environmental Events: Rising Sea Levels .................................................... 68
  4.4 Increased Frequency and Intensity of Extreme Rapid-Onset Events ............................... 74
Table of Figures

Figure 2.1. Contextual definitions from the Advisory Group on Climate Change and Human Mobility, 2014................................................................. 30
Figure 2.2. Main Challenges faced by migrants when arriving in new communities (Corendea et al. 2015:12). .............................................................................. 36
Figure 2.3. Logistical and Sociological approach to relocation revealed by an exploration of the literature (Middle-Ground approach). ................................................................. 46
Figure 3.1. Keywords used for systematic search .................................................................... 48
Figure 3.2. Criteria used for the evaluation of literature .................................................................. 49
Figure 3.3. The ‘Middle-Ground Approach to relocation’ revealed through an exploration of ‘Logistical’ and ‘Sociological’ arguments in the literature (Gharbaoui Blocher 2016)................................................................................................. 53
Figure 3.4. Community field study methodology................................................................. 59
Figure 3.5. Aggressive and Passive approach scale to water conflicts (Zeitoun, Warner 2006)........ 60
Figure 4.1. Pacific Island Countries (Barnett and Campbell, 2010: 6)........................................ 67
Figure 4.2. Evolution of the Global average of Sea Level Rise in the Past Source: (IPCC 2014)........ 68
Figure 4.3. Evolution of the Global average of SLR in the future (Source: IPCC 2014)............. 69
Figure 4.4. Percentage of land area and population below 5 metres (Source: UN-HABITAT, 2015:19) .... 70
Figure 4.5. Percentage of customary, urban land area and population below 5 metres in SIDS countries (Source: UN-HABITAT, 2015) ................................................................. 71
Figure 4.6. Climate data, Bureau of Meteorology, 2018.......................................................... 72
Figure 4.7. Observed changes in some extremes, their attribution and their future projection, table 3.1 in IPCC, 2012). ........................................................................................................ 74
Figure 4.8. Cultural, social, political, psychological, and economic costs of community relocation based on differing thresholds of relocation. Source: J. Campbell, “Climate Change and Population Movement in Pacific Island Countries”, Climate Change and Migration South Pacific Perspectives, Institute of Policy Studies, School of Government Wellington, 2010. ........................................................................................................... 80
Figure 4.9. International and National Relocations ranging in distance from over 1800 km to less than one between 1920 through to 2004 (under Colonial administration and National Sovereignty) (APN 2005). 82
Figure 4.10. Young Manam men in a care centre boil fish, yams and local greens in coconut milk for their visitors using traditional cookware as others look on. Traditionally women and girls prepare meals. In recent years, according to Manam residents, they have had more difficulty fishing and are often finding smaller and smaller fish between the mainland and Manan Island. This is likely to be a result of overfishing as well as the destruction of corals due to dynamite fishing, cyanide fishing, and the harvesting of coral to make powdered lime (which is chewed with betel nut, a popular stimulant). (Photo © Julia Blocher, 2015). ............................................................................................................. 92
Figure 5.1. Historical case studies in Fiji as independent states and under colonial administration ...... 103
Figure 5.2. Biausevu Relocation. Initial movement started from Tilivaira to Teagane in 1875, then the community relocated to Biausevu in 1881 and in 1940 from Biausevu to Busadule. The fourth relocation in 1983 was to the elevated site called Koroinalagi (Source: Campbell et al 2005). ............................... 105
Figure 6.1. Map of Fiji provinces (Jaldouseri 2016). .................................................................... 125
Figure 6.2. Cyclone Winston impacting the Republic of Fiji, February 20, 2016 (NASA 2016)......... 126
Figure 6.3. Matawatu village, Located in Ba region, in Western division of the main island of Viti Levu, Fiji (Google 2018).............................................................. 127
Figure 6.4. Matawalu village, located in the Lautoka district in the Ba province (Google 2018) ............. 127
Figure 6.5. Matawalu village located at the intersection of Kings Road crossing all of Lautoka and Johnson Road in Lautoka. (Google 2018) ......................................................................................................... 128
Figure 6.6. Tukuraki village origin site, North-East of Koroyanitu National Heritage Park in Lautoka district, North-West of Viti Levu Island, Fiji (Google 2018) .................................................. 129
Figure 6.7. Category 4 Cyclone Evans trajectory; passing near the Ba province, December 2012 (ABC News 2012) .................................................................................................................................................. 129
Figure 6.8. Destructive landslides in Tukuraki Village (Photo: Janet Lotawa). ........................................ 130
Figure 6.9. Tukuraki villagers take refuge in cave shelter after devastating landslides (Photo: Janet Lotawa). .................................................................................................................................................. 131
Figure 6.10. Tukuraki new relocation: site inauguration marking the start of the village reconstruction (Photo: Fiji’s National Disaster Management Office) ........................................................................... 132
Figure 6.11. List of vulnerable communities per sector affected in the The Fiji Second National Communication to the UNFCCC including potential relocation .......................................................... 133
Figure 6.12. Lami Village and nearby settlements (Orcheton 2015) ........................................................................... 133
Figure 6.13. Matawalu customary chief, Josaia Rakoto, and his family (Photo: Dalila Gharbaoui) ........ 134
Figure 6.14. Kavula site, future hosting site of the Matawalu village (Photo: Dalila Gharbaoui) ............ 136
Figure 6.15. Palm trees described by Matawalu villagers as « seawalls » protecting their homes from flooding by the nearby river. Piles of wood are also regularly added by the community to protect their homes (Photo: Dalila Gharbaoui). ........................................................................................................................................ 137
Figure 6.16. River bordering Matawalu village and causing flooding after heavy rains (Photo: Dalila Gharbaoui) .................................................................................................................................................. 137
Figure 6.17. Matawalu village coastline impacted by flooding by the bordering river (Photo: Dalila Gharbaoui) .................................................................................................................................................. 138
Figure 6.18. Matawalu village member and his son in front of a village house damaged by flooding. He particularly insisted on meeting in person people from UN-Habitat to tell them about the will of the community to have a vulnerability assessment carried-out by external stakeholders in order to avoid internal tensions within his community. (Photo: Dalila Gharbaoui) .................................................................................................................................................. 139
Figure 6.19. Tukuraki village new relocation site, 60km North of Lautoka, 10km from site of origin. (Photo: Julie Cleaver/PMC) .................................................................................................................................................. 141
Figure 6.21. Tukuraki relocation site; the land of the Mataqali Yalimar/M Tokatoka Navuti. (Photo: Julie Cleaver/PMC) .................................................................................................................................................. 143
Figure 6.22. Men at work in the new construction site. (Photo: Julie Cleaver/PMC) ........................................ 144
Figure 6.23. The new Tukuraki village finalized in July 2017 (Photo: Julie Cleaver/PMC) ......................... 144
Figure 6.24. Results on Average rating from 1-10 on issues with the potential to cause conflict over the management and use of customary land in planned relocation in Matawalu and Tukuraki. ........................................ 148
Figure 6.25. Field study tool developed in the field reveals key results observed for Matawalu and Tukuraki relocation ............................................................................................................................................... 149
Figure 6.26. Aggressive and Passive approach scale to water conflicts (Zeitoun, Warner 2006) ............... 151
Figure 6.27. Perception on current water conflicts in Lami, Suvavou and Qauiya ........................................ 151
Figure 6.28. Perceptions on tensions related to water conflicts at pre-relocation phase .......................... 152
Figure 6.29. Perceptions on tensions related to water conflicts in potential future relocation

Figure 6.30. Typology of planned relocations (Gharbaoui 2018)

Figure 6.31. Typology of planned relocations including State-based, Externally-based and Community-driven relocation (Gharbaoui 2018)

Figure 7.1. In Fiji and the Pacific region, there has been an important increase in urban growth over the last two decades (Mitchell, Orcherton, Numbasa and McEvoy 2016)

Figure 8.1. Key interrelated concepts emerging from the study with core land dimension

Figure 8.2. Key interrelated concepts emerging from the thesis

List of Acronyms

ACP – African, Caribbean and Pacific Group of States
ADB – Asian Development Bank
AIMS – Africa, Indian Ocean, Mediterranean and South China Sea
AIMS – Africa, Indian Ocean, Mediterranean and South China Sea
ANU – Australian National University
AOSIS – Alliance of Small Island States
APEC – Asia-Pacific Economic Cooperation
APC – Asia Pacific Consultations of Refugees, displaced persons and Migrants
APN – Asia-Pacific Network
AusAID – Australian Agency for International Development
BRICS – Brazil, Russia, India, China, South Africa
COP – Conference of Parties
ENSO – El Niño Southern Oscillation
ESCAP – Economic and Social Commission for Asia and the Pacific
EU – European Union
FAO – Food and Agriculture Organization of the United Nations
FSM – Federated States of Micronesia
GCF – Green Climate Fund
GDP – Gross Domestic Product
GEF – Global Environment Fund
GHG – Greenhouse Gas
HEC – Human Ethics Committee
IDMC – Internal Displacement Monitoring Centre
IDP – Internally Displaced Persons
IOM – International Organization for Migration
IPCC – Intergovernmental Panel on Climate Change
IR – International Relations
LMCM – Land Management and Conflict Minimisation Project
MECLEP – Migration, Environment and Climate Change: Evidence for Policy
MFAIC – Ministry of Foreign Affairs and International Cooperation
MTA – Ministry of iTaukei Affairs
NAPA – National Adaptation Plan of Action
NLC – Native Lands Commission
NZQA – New Zealand Qualification Authorities
PIDC – Pacific Immigration Directors’ Conference
PCCM – Pacific Climate Change and Migration
PCCR – Pacific Climate Change Roundtable
PICL – Pacific Islands Conference of Leaders
PICTs – Pacific Island Countries and Territories
PIF – Pacific Islands Forum
PIFS – Pacific Islands Forum Secretariat
PM – Prime Minister
PNG – Papua New Guinea
PIR – Pacific Islands Region
REDD – Reducing emissions from deforestation and forest degradation
SIC – Small Island Countries
SIDS – Small Island Developing States
SIS – Smaller Island States
SPC – South Pacific Commission
SRDP – Strategy for Disaster and Climate Resilient Development in the Pacific
SOPAC – South Pacific Applied Geoscience Commission
SPREP – South Pacific Regional Environment Programme
TLFC – iTaukei Lands and Fisheries Commission
UK – United Kingdom
US – United States
USAID – United States Agency for International Development
UN – United Nations
UNCCD – United Nations Convention to Combat Desertification
UNCED – United Nations Conference on Environment and Development
UNFCCC – United Nations Framework Convention on Climate Change
UNHCR – United Nations High Commissioner for Refugees
UNU-EHS – United Nations University-Institute for Environment and Human Security
USP – University of South Pacific
USAID – United States Agency for International Development
VRF – Vanua Research Framework
WHO – World Health Organization
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Abstract

The adverse effects of climate change in the Pacific are increasingly forcing islanders to relocate in order to cope with the threats to their livelihoods. Relocations such as retreating from coastal areas in response to changing environmental conditions have long been a part of the adaptive strategies, culture and practice of Pacific Island communities. Relocation processes are particularly complex, as most of the land is under customary tenure and land is a common cause of conflict. Yet customary land tenure as a factor in relocation is seldom mooted in discussions on adaptation strategies in the Pacific. Based on the theories of “Cultural Relativism,” “International Human Rights” and “Hybridity,” this dissertation explores the complex relationships between relocation and land tenure, in particular how cultural norms associated with land ownership impact on sustainability of population movements resulting from climate change in the Pacific, focusing on Fiji as case study. Key results underline the need to reframe the role of traditional community leadership in planned relocations through the "middle-ground approach to relocation" where, rather than being limited to participation and consultation, their role in the relocation process should be central and active. The thesis proposes a re-conceptualisation of the role of traditional authorities in the relocation process and a conceptual framework including the “typology of planned relocation.” It proposes to redefine the role of customary chiefs and land owners as central in land acquisition while considering “resilience,” “perceptions” and “immobility” as key concepts for conceptualising planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land. After putting in perspective field study results with the political frameworks at work in the region, the study finds that regional governance is a promising venue to address planned relocation through the “middle-ground approach to relocation” as it allows specific challenges and cultural features the region holds to be addressed, including specific issues surrounding customary ownership of the land, directly conditioning water access and security. The thesis also argues that land management in the context of climate-induced relocation in the Pacific would benefit greatly from a strong and coherent regional framework that would support national and local governance specific to each country. Ultimately, the dissertation provides specific policy recommendations that could serve as tool for future policy in the region while proposing directions for future research on climate change, human mobility and land tenure.
Chapter 1: Introduction

1.1 Introduction

The scientific body of literature on planned relocation as an adaptation strategy to climate change is gradually forming both in academia and at the policy level. In the particular context of the Pacific challenges associated with land are central in addressing those questions. The need for such research arises in a context where much of the literature on relocation of Pacific Islanders has tended to focus on long distance forced displacement particularly resulting from sudden-onset events. Measures leveraging short distance relocation, preparedness and adaptation to climate change are less studied despite the urgent need for planning transitional measures in affected locations and internal relocation. Furthermore, land security associated with good governance of land tenure systems has been given little importance in the literary debate about adaptation strategies in the context of climate change. Therefore, this research thesis will hopefully shed light on a range of issues relating to resilience, adaptation and mitigation which could be useful in framing research-based evidence for policy making in the Pacific region. Climate change policies in the context of human mobility are very scarce in the Pacific and this is a great opportunity to contribute to academic research and policy thinking in the field.

Through this thesis, we will examine whether strategies addressing land tenure and relocation as adaptation to climate change in the Pacific should include both state-based governance mechanisms combined with customary non-state institutions. Ultimately, we will examine whether this combination would allow governance of adaptation to climate change in the region to include local mechanisms of resilience, promote approaches to security based on Pacific culture and avoid tensions occasioned by mobility caused by environmental events as well as backlashes occurring when customary land tenure is not considered in relocation processes. For this purpose, the thesis will examine the notion of “combined approach to relocation” that will be further developed in Chapter 2 (Literature Review). This approach considers customary authorities and institutions as legitimate governance actors holding their own governance mechanisms in the Pacific region. It suggests that strategies addressing land tenure governance and relocation as adaptation to climate change in the Pacific should include both state-based governance mechanisms combined with customary non-state institutions. In order to understand how to include these two forms of governance in relocation as adaptation strategy to climate
change, it is necessary to understand what role traditional authorities hold in the currently
developing decision-making process on relocation which will be one of the purposes of the field
study (see Chapter 3 on Methodology for more details).

Ultimately, the lessons deriving from this thesis aim to be easily “translatable” from research into
policy while being exportable to other regions where customary land tenure prevails and that will
need to develop institutional tools to address community relocation in the context of climate
change. The following sections will present in more detail both the theoretical and research-based
policy orientations of this thesis. This approach aims to contribute to the body of knowledge on
resilience to climate change through migration while generating peace, security and structural
stability for future generations.

This dissertation relies on both desk and field research. Furthermore, over the course of my
research I have engaged in several projects, conferences, seminars and workshops where I have
exchanged ideas with scholars, scientists, political figures and experts. I have also published
peer-reviewed articles based on my PhD chapters and findings (all referred to, used and cited in
the thesis). Confronting other scholars and experts with my results also allowed me to confirm
that my understanding and analysis of the study was going in the right direction.

1.2 Research Objective and Research Questions

The broad aim of the study is to reconceptualise planned relocation as an adaptation strategy to
climate change in order to develop appropriate policy responses that would address challenges
associated with land.

The specific objectives of this thesis are:

- To examine relocation of communities as an adaptation strategy to climate change in the
  Pacific, using Fiji case studies and some of the challenges associated with it;

- To explore some of the challenges related to land tenure, land ownership, rights and access as
  a result of relocation;

- To examine the different roles and approaches of the state and communities in the relocation
  process;
• To look at some of the consequences and implications of relocation in terms of conflict, resource distribution and power relations;

• To identify the current political processes linking climate change and human mobility being developed in the region;

• To identify the gaps on land that should be addressed in future planning, and;

• To identify lessons for research and policy that can be learned on land in the context of planned relocation as an adaptation strategy which is inclusive and empowering for affected communities.

The major research question is: How can planned relocation as an adaptation strategy to climate change be reconceptualised in order to develop appropriate policy responses that would address challenges associated with land?

1.3 Rationale for the Research

In the coming decades, the adverse effects of climate change in the region are likely to exacerbate both slow and sudden-onset environmental events, threatening sustainable livelihoods and increasingly leading Pacific Islanders to use migration, displacement and planned relocation as a coping mechanism. The first two type of human mobility in the context of climate change will be addressed in the study but the main focus will be on planned relocation as adaptation strategy to climate change.

“Climate change is expected to require the planned relocation of communities as regions become uninhabitable because of the effects of global warming. While considerable attention has been directed toward the first two categories, there is still a large gap around planned relocations and community resettlement.” (Warner & al. 2003: 31)

a major difficulty with this type of human mobility is the disarticulation of communities and social structures following the relocation process. This is particularly crucial in the context of the Pacific region where the link between social groups and their land are inseparable and define their collective identities. However, there has been little study on the impact of climate-induced relocation on land rights and land tenure systems. It has been given little importance in the literary and policy debates on adaptation strategies in the context of climate change. It is crucial
to address this dimension, particularly in the context of Pacific Islands where, in the majority of the countries, 80% of land is under customary tenure. The thesis will attempt to do justice to this deficit by exploring the literature, case studies involving past and recent examples of planned relocations in Fiji.

This study was inspired by a number of factors. Firstly, climate change is now a major issue in the Pacific Islands and the situation is expected to get worse in the future. The process of relocation as a result of sea level rise, erosion and other natural disasters is already happening and are expected to intensify in the future. Secondly, while a lot of resources have been put into the study of the science of climate change, there has been minimal study of its effects on people's vulnerability as they are forced to relocate. This is an opportunity to carry out a comprehensive examination of the issue with the hope that it will identify some challenges and provide some solutions to some emerging problems. Thirdly, while there has been a lot of focus on the role of international agencies and states, there has been very little research carried out on the role of local Pacific communities in developing resilience and adaptation strategies. Also of importance is how these community-based systems can integrate with formal state approaches to provide a more holistic and diverse approach.

1.4 Theoretical Frameworks

1.4.1 Cultural Relativist Theory and International Human Rights Theory

Central to this thesis, is the use of theories relevant to understanding the existing scholarly debates on customary land tenure and sustainable relocation in the Pacific region that will be developed in Chapter 2. Indeed, the below theories has been used in order to analyze those scholarly debates that have been key in framing our main research hypothesis.

Firstly, to analyse the literature, this thesis will be using the cultural relativist theory and international human rights theory (IHR) to address the issue of customary land tenure implying collective and individual land rights. Indeed, it is important to consider tensions surrounding debates on individual versus collective land rights. Conflicts have existed even before the Pacific states’ independence, in part due to politics around land tenure, rights and ownership. Current and future relocation planning will need to consider these dynamics in negotiations over land.
Another key concept that will be discussed in the thesis relates to the notion of “sustainability” in the context of relocation. The scholarly debates on this concept are extremely contrasted. The use of the concept “sustainable relocation” will therefore need to be approached with care. In order to define “sustainable relocation” at the theoretical and conceptual level in the thesis, I will first proceed with the examination of a contextual definition appropriate to my research. The 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro defined “sustainable development” as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Three protective dimensions are important: environmental protection, economic growth and social development (Bruntland Commission 1987; UNCSD 2012). Sustainable relocation could therefore be defined as “a process by which a number of {…} people from one locale come to live together in a different locale” (Lieber 1977: 343) whilst simultaneously ensuring protection of the environment, economic growth and social development for the present and without compromising the ability of future generations to do the same. After observing challenges around the definition of “sustainable relocation”, I have undertaken an extensive interdisciplinary review of literature on relocation strategies in order to appreciate various points of views of sustainable relocation including firstly Internal versus international relocation: international protection and polluter state responsibility and secondly debates around Partial versus Cohesive Relocation. Another step in building my theoretical framework was to observe debates over Land Rights opposing proponents of Collective versus Individual Rights leading me to observe more in-depth the debates opposing Cultural relativism versus cultural universalism and International Human Rights theory. This discussion will be further developed in Chapter 2 “Literature review” that will reveal our main research hypothesis based on the “combined-approach to relocation” (see Chapter 2).

1.4.2 Theory of “Hybridity”

After analyzing the theories above and framing our main research hypothesis based on discussions present in the literature, we will frame our research and analyze our case studies through the scope of the theory of “hybridity”. There is an important body of theories related to hybrid models of governance. Of particular relevance, the “hybrid approach” (Cosmin Corendea, 2007), a legal research tool using human rights, environmental and migration law in climate
change-related case analysis; as well as the model of “hybrid governance” associated to the Pacific regional context and the three core dimensions of the relationship between the state and other political orders in Polynesia and Melanesia revealed in 2007 by Kevin P. Clements, Volker Boege, Anne Brown, Wendy Foley and Anna Nolan. Order in “State Building Reconsidered: the Role of Hybridity in the Formation of Political Order”. This includes the concepts of “substitution” defined as “the identification of functional equivalents of the state outside state institutions.”, “complementarity” described as “{…} the identification of areas of overlap between modern state approaches and customary approaches” and “incompatibility” or “the identification of customary approaches that conflict with modern state approaches.” (Clements and al. 2007: 52). Those are crucial concepts that could support future research related to the research findings.

In its theoretical approach, our thesis will be inspired by the model of “hybrid governance” (Clements and al. 2007) developed above but will particularly focus on the “hybrid approach” (Cosmin Corendea 2007) by suggesting that political responses to address climate change adaptation and human mobility should use a flexible and positive approach such as the hybrid approach as much as it is the case for legal responses. The “hybrid approach” methodology was elaborated in order to allow a comprehensive interpretation of the relationship between climate change and customary law in the Pacific. The two main outcomes of the “hybrid approach” underline (i) the importance of a regional approach that would consider both customary institutions (characterised by collective and community forms of governance) and Weberian institutions (characterised by the State practising domination over community)(ii), International hybrid law as legal research tool which “concurrently, indivisibly, interdependently, and interrelatedly examines a climate change case study from three perspectives: environmental law, human rights and refugee (migration) law. Hence, the research is simplified, using a single lens as a replacement for a three-way analysis” (Corendea 2016: 9).

Applying both the “combined-approach to relocation” and the “hybrid approach” in the context of this thesis is particularly relevant as it will help frame our analysis around land tensions based on customary ownership of the land in a context where planned relocation should also be organised at the state-level.
1.5 Gaps in Evidence-Based Research Informing Policy

From the early 1990s until today, the low-lying coastal countries known as the Small Island Developing States (SIDS) composing the Pacific, the Caribbean and the Africa, Indian Ocean, Mediterranean and South China Sea (AIMS) region have progressively gained official recognition and international attention as a group particularly threatened by the adverse impacts of climate change in the coming decades. Land use changes, burning of fossil fuels and greenhouse gas emissions from other sources are exacerbating climate variability and contributing to an increase in global average temperatures. It is likely this warming is compounding the phenomenon of rising sea levels in coastal and low-lying areas as well as the intensifying incidence and magnitude of natural hazards (IPCC 2014a). Some regions seem particularly vulnerable to those environmental events, making sustainable development more complex and difficult to achieve. The Pacific Islands Region (PIR) is one of these and will have to deal with the complexity of the climate challenge and develop strategies to overcome the threat to island communities.

The Intergovernmental Panel on Climate Change (IPCC) in its fifth assessment report released in March 2014 has recognised that the past experiences of the Pacific region show that environmental change can affect land rights and land use while change of land use has also become, in turn, a driver of migration. At the same time, the third International Conference on Small Island Developing States (SIDS) that took place in Apia from 1 to 4 September 2014 with the “Small Island Developing States Accelerated Modalities of Action (Samoa Pathway)” emphasised the importance of considering land use and land planning in the context of disaster risk reduction and within the scope for improvement of sustainable development in all regions mainly composed on small low-lying islands and threatened by sea-level rise. Land planning in the Pacific region has therefore been recognised as particularly crucial, as land degradation has been identified as one of the primary environmental issues placing pressure on natural resources in the SIDS.

Another important element to consider is the strong demand for more appropriate governance mechanisms by Pacific Islanders. Decision-making should further prioritise Pacific Islands’ values in order to promote sustainable, equitable, and spiritual development of the region. The disconnection between stakeholders (resource users, developers, policy makers, communities)
and the lack of information about climate change impacts tailored to the needs of the people needs to be seriously considered in future regional strategies on adaptation to climate change.

There is therefore a strong need for evidence-based research to support policy and there are gaps in the existing body of literature on relocation as adaptation strategy to climate change to support policy making. In 2008, the United Nations High Commissioner for Refugees (UNHCR) underlined that:

The global discourse on the impact of Climate Change and environmental changes tends to focus on environmental and ecological effects and the direct economic costs of mitigation and adaptation for the affected states and their populations. Featuring less prominently on these debates is any concrete assessment of the risk of forced human displacement both within and outside physical territory of a sovereign state, and how to ensure durable, right-based solutions to this growing spectre {sic} of Climate Change-induced displacement. (UNHCR 2008).

The Intergovernmental Panel on Climate Change (IPCC) as early as 2007 also underlined this need, putting a particular emphasis on social vulnerability:

There are significant outstanding research challenges in understanding the processes by which adaptation is occurring and will occur in the future, and in identifying areas for leverage and action by Government. {…} Many initiatives on adaptation to Climate Change are too recent at the time of this assessment to evaluate their impact on reducing societal vulnerability. Further research is therefore needed to monitor progress on adaptation, and to assess the direct as well as ancillary effects of such measures. In this context there is also a need for research on the synergies and trade-offs between various adaptation measures, and between adaptation and other development priorities. (IPCC 2007b).

In the context of the Pacific, which is particularly vulnerable to climate change, this topic started to emerge in the public arena around the same period and is still very poorly understood. South Pacific Regional Environment Programme (SPREP 2008) underlined this need as early as 2008:

Past studies of adaptation options for small islands have been largely focused on
adjustments to sea-level rise and storm surges associated with tropical cyclones. There was an early emphasis on protecting land through ‘hard’ shore-protection measures rather than on other measures such as accommodating sea-level rise or retreating from it, although the latter has become increasingly important on continental coasts. (SPREP 2008).

Human mobility is particularly understudied in the context of climate change and adaptation studies. Forced displacement, migration and planned relocation have emerged in the last decade as the three main categories of human mobility induced by climate change. Planned relocation is still poorly understood despite an emerging focus and a series of international meetings on the issue from 2011 to 2015 resulting in a concluding document on planned relocations, “Guidance for Protecting People from Disasters and Environmental Change through Planned Relocations.” The document was developed by Brookings Institution, Georgetown University and the United Nations High Commissioner for Refugees (UNHCR) and was directed at states and other stakeholders with the aim to provide guidance on how to plan relocation in order to protect people affected by climate change.

In 2017, another tool was developed by Georgetown University, UNHCR, and the International Organization for Migration (IOM), in close cooperation with the World Bank and United Nations University, entitled “Planning Relocation for people affected by natural disasters and environmental change.” This toolbox aims to provide more concrete suggestions for states and other stakeholders using planned relocation as adaptation strategy. Five cross-cutting elements recurrent in planned relocations are identified in the toolbox: “Establishing and complying with an appropriate legal framework, understanding and addressing the needs and impacts of planned relocations on affected populations, providing information to, undertaking consultation with, and ensuring the participation of, affected populations, understanding and addressing complexities related to land issues, and undertaking monitoring and evaluation, and ensuring accountability.” (Georgetown 2017). In the framework of my research for this PhD thesis, I was consulted for the section on land issues and some of my PhD findings and results were inserted in the toolbox.

Despite the existence of these two key tools, there is still a major gap in the literature. John Campbell (2015) has underlined the need for more data and evidence-based research on community relocation as adaptation to climate change with a particular focus on short-distance
relocation that is already taking place in the Pacific region:

Adaptation is now much more strongly on the Climate Change response agenda and a number of adaptation and community-based adaptation projects have emerged in the Pacific Island Region. Nevertheless, relocation remains a very poorly understood topic. {…} Community relocation has been subject to relatively little research and that which has been conducted has been skewed towards long-distance relocation virtually all of which took place in the Colonial era. {…} Much of the limited literature on relocation tends to focus on these longer-distance movements as shorter relocations are less obvious, are perhaps less attractive as objects of study for migration specialists and often take place under relative obscurity. (Campbell, 2015: 7).

While there is a growing body of literature on land tenure and climate change, less attention has been paid to the implications of land tenure in planning for relocation as an adaptation strategy to climate change. There is still a gap in understanding cultural needs in relocation processes, including the role land tenure and traditional leadership can hold in this process. Land governance in the Pacific still needs a coherent framework including a solid understanding of the conditions for improving tenure security directly contributing to improve water and food security, cultural and social cohesion in the context of planned relocation.

Evidence-based research could be a starting point to support current developments in land management and conflict in the region and ensure that it is considered within frameworks and discussions on climate change and human mobility in the region. This is particularly relevant in a context where the main initiative around land security regionally undertaken by the Pacific Islands Forum Secretariat (PIFS), “Land Management and Conflict Minimisation Project” (LMCM), endorsed by the Forum Regional Security Committee and the Forum Officials Committee in 2006, didn’t extend to the current issue of Climate Change and Human Mobility and has not been inserted into regional frameworks. As a result, there is no regional framework on land governance in the Pacific that is comprehensive and inclusive of tenure security and the cultural aspect of customary land tenure in the context of climate change and climate-induced human mobility. Indeed, LMCM aims at understanding inter-linkages between land management and conflict minimisation, combining approaches related to conflict prevention and economic development. In 2008, this initiative resulted in ten sub-project reports all collected into a
synthesis report focusing on “Improving Access to Customary Land and Maintaining Social Harmony in the Pacific.” This report resulted in 12 guiding principles and an implementation framework providing governance in land management and planning to the Pacific Island Forum States while, at the same time, promoting an approach to land that would minimise land-related conflicts in the region. This initiative reflects the first important regional effort aiming at inserting concerns on customary land tenure into conflict prevention tools at an institutional level. It is also the first time that customary land tenure is officially associated with environment and conflict within a regional framework as “{…} the recognition of the centrality of customary land tenure in the lives of the people of the Pacific is the key underlying principle upon which the LMCM project is founded.” (Loode et. al., 2009:3). In the framework of the present research project, it is interesting to observe that the LMCM initiative includes only one synthetic report linking environment and land (“Environmental Causes of Land-based Conflict”). Furthermore, the review on environment and land includes only four countries in the region, namely: Fiji, Solomon Islands, Tuvalu and Vanuatu. The LMCM initiative mainly takes an approach related to conflict prevention and enters the framework of a security perspective. Therefore, the land-environment-conflicts nexus has started to be considered but there is still a strong need for the development of a regional implementation framework and guidelines which include the land-environment-migration nexus and incorporate local adaptation strategies.

Since the Australian government developed its own “Making Land Work” framework on the Pacific, LMCM has not been extended to current issues relevant to climate change, human mobility and tenure security. LMCM was partially funded by AusAid and did not get more funding after “Making Land Work” was founded. Since then, Food and Agriculture Organization of the United Nations (FAO) has been working directly with countries individually though SPC to promote land tenure principles existing in the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.” The Australian National University (ANU) regional meeting beginning 2018 on “Land and urbanization as regional issue” was an opportunity to promote LMCM’s next stage and for stakeholders to bring climate change and human mobility nexus into the regional agenda. However, it wasn’t pushed forward, and so future frameworks will need to address this dimension. Furthermore, there is a strong need to extend the scope of current similar regional efforts and to develop the region-specific adaptive frameworks that will be necessary to deal with
the future threat of climate change in the region. It is also essential to ensure that adaptation strategies to climate change include customary land tenure as the unique unifying cultural elements of the region inherited through ancestry and local tradition.

1.6 Overview of the Different Chapters

In order to address these research needs, answer our research question, meet our main objectives and test our main hypothesis, this thesis will combine an exploration of scientific, academic literature and theoretical frameworks, an exploration of historical case studies, a compilation of datasets collected from the field and an analytical section combining both theory and policy with a final attempt to provide conclusions and evidence-based lessons for policy making in the Pacific region. The chapters will be structured as follows:

After providing in the current chapter (Chapter 1) an introduction to the thesis underlining the main research attributes and priorities, Chapter 2 will present a review of the literature that includes first an attempt to clarify the terminology and definitions commonly agreed at the scientific level that will be used in the thesis. Secondly, it will address the literature on the impacts of climate change in the region and the adaptation needs and limits. Thirdly, the concept of sustainable relocation as an adaptive response to climate change will then be presented, including the current cross-disciplinary debates on climate-induced human mobility and relocation strategies. Fourth, the issue of land rights and land tenure will be observed through current prominent debates in the literature. Finally, the conclusion will attempt to identify some key trends emerging from the literature on climate change, human mobility and land tenure with an aim to address current gaps and needs for future research. This review is essential in providing an overview of the core themes of the thesis present in the literature.

Chapter 3 will present an overview of the methodology used in the thesis, including the literature review and the field study methodology. It will also provide an overview of the key approaches used in order to answer the main research questions and test the main hypothesis. The site selection methodology will be explained in detail as well as the participants interviews’ selection criteria for both the ethnographic and institutional studies.

Chapter 4 on “Human Mobility as Adaptation Strategy to Climate Change in the Pacific” includes desktop research and an exploration of the latest scientific literature in order to
understand the current challenges and impacts of climate change in the Pacific region, including an analysis of human mobility and planned relocation as adaptation strategies. This chapter will put historical and current trends on planned relocation as a result of environmental change into perspective, as introducing the confrontation of these two perspectives is crucial for a comprehensive analysis on the role of land tenure in the relocation process (see Chapters 3 and 5 to further understand the role of historical case studies in this thesis). The chapter will also explore case studies of planned relocation all through the region.

Chapter 5 on “Climate Change, planned relocation and land tensions in Fiji” will explore land tensions in the context of climate-induced relocation by combining desktop research and historical data to reflect on past examples of planned relocation as well as recent examples of relocation in Fiji. This method will allow us to reflect on some of the key challenges related to land tenure and land security in the context of environmentally induced planned relocation in Pacific countries where customary land tenure accounts for more than 88% of land ownership. This chapter is also crucial in providing contextual background information on land tensions in the context of planned relocation in Fiji for the following chapter, which will provide an analysis of field data collected in the Fiji Islands. The variety of case study chosen in Fiji and other Pacific countries (in Chapter 4) will help us approach the question from different vantage points and, in so doing, expose complementary dynamics that provide insight into the longer-term feasibility of relocations in the context of deeply culturally embedded customary land tenure regimes. Therefore, this chapter will present a comparative analysis of case studies and provide a series of trends and lessons useful to conceptually frame planned relocation as an adaptation strategy to climate change and the role land holds in that process.

Ultimately, we will test whether this combination would allow regional governance of adaptation to climate change to include local mechanisms of resilience, promote approaches to security based on Pacific culture and avoid tensions occasioned by migration caused by environmental events as well as backlashes occurring when customary land tenure is not considered in relocation processes.

In order to understand how to include these two forms of governance in relocation as adaptation strategy to climate change, it will be necessary to understand what role traditional authorities hold in the currently developing decision-making process on relocation. Chapter 6, comprising field
study and data collection done in Fiji at both Community and Institutional levels, will place this question at the center of its analysis and aims at exploring those aspects through data collection and analysis that have been used to support conclusions, lessons and recommendations identified in the policy analysis (Chapter 7). Finally, the conclusion (Chapter 8) will summarize the main research findings and identify trends for policy and future research in the region.
Chapter 2: Literature Review

2.1 Introduction

Population movements have always been an essential part of Pacific history. Most literature on human mobility in the Pacific region has focussed on triggering factors such as poverty or conflict while the environment-migration nexus has only started to be studied more in-depth in recent decades. The frequency and intensity of natural disasters and slow-onset events such as sea level rise has significantly increased in the region, triggering the need for further studies on the issue from a wide range of disciplines. The multi-causal nature and complexity of human mobility as it relates to climate change is particularly significant in the case of slow-onset environmental changes such as sea level rise and land degradation. It is particularly the case in the Pacific region where environmental vulnerability often involves challenges associated with land ownership and security of tenure. From the early 1990s until today, the low-lying coastal countries known as the Small Island Developing States (SIDS) have progressively gained official recognition and international attention as a group particularly threatened by the adverse impacts of climate change in coming decades. Land use changes, burning of fossil fuels and greenhouse gas emissions from other sources are exacerbating climate variability and contributing to an increase in global average temperatures. It is likely this warming is compounding the phenomenon of rising sea levels in coastal and low-lying areas as well as intensifying the incidence and magnitude of natural hazards (IPCC, 2014a). The Pacific Islands Region (PIR), mainly composed of SIDS, faces increasing threats to survival in the coming decades due to loss of territory and other adverse impacts of climate change. As global climate change mitigation efforts prove insufficient to protect communities and ensure sustainable living conditions, population movements in response to these changes are a reality facing the Pacific Islands states today. Such movements include migration, displacement and planned relocations, as agreed, most notably, in the outcomes of the 2010 meeting of the parties to the United Nations Framework Convention on Climate Change (UNFCCC) and of the consultation on planned relocation held in San Remo3 in 2014 (UNHCR 2014).

Retreating from coastal areas in response to changing environmental conditions has long played a prevailing role in Pacific Island communities’ culture and practices, with land rights at the centre of the process. The fifth assessment report of the Intergovernmental Panel on Climate Change
(IPCC) recognised that past examples in the region demonstrate that environmental change can affect land rights and land use, which in turn have become drivers of migration (IPCC, 2014a: 1625). Echoing this, the final report of the 3rd International Conference on Small Island Developing States underlined the importance of considering land use and land planning in the context of disaster risk reduction and sustainable development (United Nations General Assembly, 2014: 13).

In academic and policy debates on migration as a response to climate change, however, land rights and land tenure systems have been given little importance. It is crucial to address this dimension in more depth, particularly in the context of Pacific Islands, where around 80% of land is under customary tenure in the majority of countries (Farran, 2011: 65). Despite growing scientific evidence on the complex links between environment and migration, the lack of qualitative and quantitative data on the interaction between land tenure, land rights, water access and human mobility remains a major challenge. In order to address those gaps, this chapter will provide a state-of-the-art critical review of climate-induced human mobility literature, discourses and representations, with a specific focus on land tenure and planned relocation within the Pacific Island Region (PIR). The main purpose of this chapter is to explore conceptual frameworks related to land tenure and climate-induced planned relocations in the Pacific region by providing a critical evaluation of the different positions developed around “land rights” and “sustainable relocation” and by observing past and recent case studies in the region.

Therefore, the literature review will first (1) attempt to clarify the terminology and definitions on climate change, human mobility, land degradation and land tenure commonly agreed at the scientific level and which will be used in this thesis. Secondly (2), the latest scientific literature on the impacts of climate change and adaptation needs and limits in the Pacific region will be examined in order to provide an overview of the core theme of the thesis present in the literature. The next section (3) will present the concept of sustainable relocation as an adaptive response to climate change impacts and will illustrate current cross-disciplinary debates on climate-induced human mobility and relocation strategies. The issue of land rights in the Pacific Island Countries and Territories (PICTs) will then be examined (4), with an attempt to discuss current literature on the importance of land rights in the sustainability of responses to climate changes. Within this assessment, we will engage with literature on the land tenure systems in the region and consider
ongoing scholarly debates between defenders of collective rights and proponents of individual rights. The foundations of these two camps have implications on how they characterise the relocation process. In this chapter, emphasis will be placed on the neoliberal assumptions associated with land management.

2.2 Terminology and Definitions

Throughout this research, we will be mostly using the term ‘Pacific peoples’ defined as “a broad category encompassing a variety of Pacific Island nations and communities who are linguistically, culturally and geographically distinct from each other” (Health Research Council 2014: 2-3). This is the recommended use of the term in Aotearoa/New Zealand, as Pacific peoples perceive their identity as inclusive of the Ocean “making them ‘grand’ rather than groups of tiny islands spread across the sea” (Pacific Research, Guidelines and Protocols: 2017 Hauofa: 1994, 2000). The term ‘Pacific Islands’ is therefore considered too restrictive and Pacific nations are considered in the research as the 16 countries and territories named the Pacific Island Countries and Territories (PICTs), covering various ethnicities, languages, cultures and religions, and including: Cook Islands, Fiji, French territories (New Caledonia, Tahiti, Wallis and Futuna), Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu. Pacific Island Countries and Territories (PICTs) share common features such as: a high dependency on the Pacific Ocean and its resources; a relatively high exposure to natural disasters; high vulnerability to exogenous environmental and socio-economic changes, and; a relatively low capacity to adapt to changes in climate (SPREP 2009). PICTs are often considered a homogenous category of states as they share common vulnerabilities to climate change mostly attributed to their unique natural features. This should be nuanced as there is a considerable diversity in terms of population, size of economy, culture and geography throughout the PICTs that highly influence outcomes when addressing Human Mobility as adaptation strategy to climate change. The Pacific region can, in fact, be divided in three main zones. However, it was useful in this research to move away from the classic sub-regional classifications of “Melanesia, Polynesia and Micronesia,” as those terms could be controversial and associated to negative and positive outcomes with geographic but also cultural and political referents. The literature reflects on arguments amongst scholars around the use of those terms mainly because of their historical associations with European colonisation and the racism
embedded in these (Lawson 2013). Therefore, as it is more relevant for the purpose of our research, we have rather focused on how each zone in the Pacific is affected differently by climate change according to “resource endowments, size, and the state of economic development” (ESCAP 2000).⁴

In the past, anticipative measures and preparedness strategies to climate change in the Pacific, have essentially translated to planning for community relocation⁵ (Lieber 1977: 343) and rehabilitation⁶ (ADB 1998: 3). This chapter defines ‘planned relocation’⁷ as the organized movement of a population generally conducted with the informed consent of the targeted community and planned by the government, its partners, or a regional entity. It is accompanied by efforts to appropriately compensate the affected population and foster their ability to live sustainably and enjoy rights (de Sherbinin et al., 2010). Relocation may be considered ‘displacement’ if no such consent and compensation are given, for example, to enable private developers to exploit the land, or following the lawful evacuation of the community because of an imminent threat.⁸ Rehabilitation is equally critical for all affected communities, whether movement is temporary or permanent, and whether they find themselves in a new or familiar context. Resilience-building efforts must furthermore address the causes of forced migration in the region, including ensuring sustainable subsistence of the population and reducing the risk of subsequent displacement. Adaptation measures must be developed and couched within actions that would be taken even in the absence of climate change, due to their contributions to sustainable development.

Within the current state of knowledge, there is no internationally agreed terminology on ‘human mobility’ in the context of climate change. However, the Cancun Climate Change Adaptation Framework is commonly used at scientific and academic levels to define ‘human mobility’ in the context of adaptation to climate change. This study will therefore use a definition of human mobility based on Paragraph 14(f) of the Cancun Climate Change Adaptation Framework⁹, referring to three forms of population movement: ‘migration’ as the primarily voluntary movement of persons; ‘displacement’ understood as the primarily forced movement of persons, and; ‘planned relocation’ intended as the planned process of settling persons or groups of persons to a new location¹⁰ (UNFCCC 2012). Such mobility can be within countries or cross-border, temporary or permanent (UNFCCC 2016). However, it is methodologically challenging to
provide evidence that human mobility can occur exclusively in response to slow-onset events as multiple migration drivers need to be considered in the process.

Figure 2.1 below presents a more exhaustive definition of human mobility and ‘planned relocation’ (McAdam & Ferris 2015) used by the Advisory Group on Climate Change and Human Mobility¹¹ that provides technical support to UNFCCC Parties on climate change-induced population displacement, migration, and planned relocation. These working definitions may be a useful complement to the terminology we will be using throughout the research.

![Human mobility diagram](image)

**Figure 2.1. Contextual definitions from the Advisory Group on Climate Change and Human Mobility, 2014.**

The Cancun Agreements use the term “slow onset events” to describe sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity, and desertification” (UNFCCC 2011). Within the scope of this study, slow-onset events mostly related to the Pacific region include sea level rise, salinization, loss of biodiversity and land degradation. The United Nations Convention to Combat Desertification (UNCCD) defines land degradation as “any reduction or loss in the biological or economic productive capacity of the land resource base. It is generally caused by human activities, exacerbated by natural processes, and often magnified by and closely intertwined with climate change and biodiversity loss » (UNCCD 2014).

In the current literature resettlement and relocation often refer to the same process (i.e. moving one population to another place). In the Handbook of Resettlement (1998), relocation refers to the act of “rebuilding housing, assets, including productive land and public infrastructure in another
location” which resembles the definition that Edwards (2015) provides on resettlement: “the reconstruction of houses and community buildings and the restoration of livelihoods.” Relocation and the term evacuation must not be confounded. The latter refers to a temporary movement to a safer place (Campbell et al., 2015). For Lieber (1977) the term resettlement refers to “a process by which a number of homogenous people from one locale come to live together in a different locale”. Perry and Lindell (1977) used the term relocates to describe the people who have been relocated. In order to facilitate comprehension, we will use ‘relocation’ to describe the permanent or long-term movement of a community to another place and ‘resettlement’ as the process of reconstruction of the community in another place. The resettlement is often a process planned by institutional entities; it can be both forced and voluntary.

In this study, ‘land tenure’ will refer to societal rules defining how rights to land are allocated, how control and access is granted, specifying conditions and rights for usage, rules for transfer in addition to limitations of use and responsibilities (FAO, 2002: 7). In the PICTs, over 80% of land is ruled under various forms of customary tenure (Farran, 2011: 65). Two concepts are of key importance; Vanua and Dela Ni Yavu (in many Pacific languages). Vanua means both the land and the social system and Dela Ni Yavu concerns the physical embodiment of the land. Land tenure systems can both facilitate or provide barriers to relocation according to the context.

Discussions of water tensions within the context of planned relocation as an adaptation strategy to climate change will often refer to ‘water security,’ which is defined in this research as:

The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability. (Working Definition, UN-Water: 2013).

When addressing ‘human security’, it is also important to be careful when referring to the term ‘conflict.’ There are different degrees of conflict that range from simple tension to violence that can be both physical and psychological. According to Loode, et al.:
“…conflict involves at least two parties who disagree over the distribution of material or symbolic resources or perceive their underlying cultural beliefs to be different”, whereas disputes and tensions “arise where two or more people or groups who perceive their needs, interests or goals to be incompatible, communicate their view to the other person or group.” (Loode et. al., 2009).

Conflict has a larger scale whereas disputes are more interpersonal. Concerning land and water resources, a wide range of conflicts can occur. Chapter 5 will use field study undertaken in Fiji in 2017 to illustrate those tensions related to land in the context of planned relocation.

2.3 Climate Change and the Need for Adaptation

2.3.1 Impacts of Climate Change in the Pacific Islands

Although they are home to a high degree of cultural diversity, all Pacific Islands countries share a number of common features. These include: high dependency on the Pacific Ocean and its natural cycles; a high degree of exposure to natural hazards; fragile natural, human and economic resources; and a low capacity to adapt to climate irregularities (SPREP, 2009). The Pacific Islands Countries and Territories (PICTs) can be divided into various zones according to their size, resource endowments and the state of economic development (Hughes, 2005: 3). Each sub-region (specifically, Large High Islands or Melanesian Countries12, Mid-Sized High Islands of Polynesia and Micronesia13, and Small Islands14) is affected differently by climate change according to its constituents’ geographical, ecological or economic features.

Rapid population growth (particularly in urban areas, which are mainly coastal), scarcity of land, land degradation, deforestation, water contamination due to agricultural and mining activities, loss of biodiversity and deterioration of fisheries due to coastal reef decomposition are among the most common concerns. Increases in temperature, precipitation variability and sea level variation can significantly affect clean water availability (IPCC, 2014a; Zbigniew & Mata, 2007: 175; IRIN, 2008). Volcanic eruptions, earthquakes and droughts can also have devastating effects.

It is “virtually certain” that the rate of global average sea level rise has been accelerating since the 1950s, with the western Pacific experiencing a rise of up to four times the global average (IPCC 2014a). Rising sea levels and flooding cause inundation in low-lying areas as well as coastal
erosion and sand loss in coastal areas (UNHCR, 2007: 8; Nicholls, 2003: 6). The fifth assessment report of the IPCC suggested that sea level rise could pose an existential threat to some atoll islands and will particularly impact islands where communities and infrastructure are located in coastal zones with limited possibilities for relocation inland (IPCC, 2014a). Although rising sea levels are mainly attributed to warming global average sea temperatures, some non-climate elements should also be considered. Factors such as volcanic activity, the *El Niño* effect\textsuperscript{15}, overpopulation\textsuperscript{16} (Connell, 2003) and sand mining induced coastal erosion\textsuperscript{17} (Balinuas, 2002) are all also contributors.

Climate change is affecting the essential ecosystems on which the stability of livelihoods, coastal settlements, infrastructure and economic growth in SIDS depends. Most socio-economic activity in the SIDS takes place in low-lying coastal areas (IPCC, 2014a: 1625). Sea temperatures affect coral ecosystems and marine life, with serious direct impacts on food security (Fenner et al., 2008; Adams et al., 1996). Changes in fish migration patterns also impact the livelihood habits and food production capabilities of inhabitants, increasing vulnerability (SREP, 2009).

There is also a strong correlation between climate change and the increasing frequency and intensity of natural hazards such as cyclones, hurricanes and typhoons (IPCC, 2012: 115). The frequency of natural hazard events has increased in the Pacific region since the 1950s, and has notably accelerated by 5-20\% in recent years (Bettencourt et al., 2006). Low-lying islands are among the regions of the world most affected by extreme weather events. Recurrent disasters and displacement, sometimes multiple times per year, leave survivors little time to rebuild their lives or means with which to do so. For some, adaptation *in situ* may not be an option for long. Realistic adaptation strategies that include dimensions accounting for the specific economic, social and political contexts of the region are urgently needed to face an uncertain future.

### 2.3.2 No Choice but to Move? Human Mobility as Adaptation Strategy

Some of the scientific literature on adaptation to the adverse effects of climate change underlines that adaptation should be better coordinated and mainstreamed with disaster risk reduction and development efforts and must be cautiously planned to avoid increasing risks of vulnerability (IPCC, 2014b). The fifth assessment report of the IPCC has revealed interesting debates concerning adaptation opportunities, constraints and limits. Approaching climate adaptation by
focusing on risk is particularly useful (Jones and Preston, 2011; Dow et al., 2012b). Understanding decisions to relocate through this lens can provide a strong ground for determining potential opportunities, constraints, and limits to adaptation (IPCC, 2014b). Moser and Ekstrom (2010) suggest that an individual’s decision to relocate can take place as “adaptive transformation” to avoid intolerable risk, “[They] may be related to threats to core social objectives associated with health, welfare, security, or sustainability” (Klinke and Renn, 2002; Renn 2008; Dow et al., 2013a, b).

Climate-induced mobility has also been conceptualised by Kalin, who takes the following points of departure: “(i) climate and climate change per se do not trigger the movement of people, but some of their effects, in particular sudden and slow-onset disasters, have the potential to do so; (ii) such movement may be voluntary, or it may be forced; and (iii) it may take place within a country or across international boundaries” (in McAdam, 2010, 85-86). Internal mobility is a less politically sensitive category than international migrants, refugees or cross-border displaced populations. Indeed, without recognizing climate change as such, the 1998 UN *Guiding Principles on Internal Displacement*18 cover displacement due to natural disaster (para. 2). Internal mobility does not, in most cases, address affected populations as refugees under international refugee law, and human rights law does not address critical issues such as their admission or stay. Experience from previous cases of sudden-onset disasters in the Pacific show that most of those displaced remain within national boundaries becoming IDPs. Kalin also proposed a typology for climate-induced environmental conditions that may trigger displacement including: (i) sudden-onset disasters; (ii) slow-onset environmental degradation; (iii) ‘sinking’ small island states; (iv) areas designated by the government as prohibited for human habitation, and; (v) unrest disturbing public order, violence and armed conflict (in McAdam, 2010, 85-86). Barnet and Webber (2010) emphasized that, in the Pacific context, climate is not the most significant driver of migration in the region as culture and place attachment are more decisive factors (Barnett & Webber 2010: 62). However, the Pacific Peoples have a long tradition of short-distance whole community relocation undeniably influenced by extreme environmental events and resource variability (Campbell et al., 2005: 3). As already seen in Chapter 1, planned relocation –recognized in 2010 at the 16th conference of the parties to the UN Framework Convention on Climate Change (UNFCCC) as an adaptation strategy (UNHCR-Brookings-Georgetown 2014) – is at the center of our study, including both sudden and slow-onset events as
triggering factors. One of the reasons behind the choice of this type of Human Mobility (and not migration and displacement) is that lessons for future policies can be derived from direct experience of past cases of short distance, internal relocation in the region and is particularly relevant to study challenges associated to land.

Human mobility in PICTs, as everywhere, is based on a complex decision-making process involving multiple factors. Barnett and Webber (2010) observe that culture and place attachment are among the most decisive factors (Barnett and Webber, 2010: 62). However, the region is noted for its long tradition of environmentally motivated migration and short-distance whole community relocation (Campbell 2006; Campbell et al., 2005: 3), and climate change is likely to create long-term and immediate risks that will oblige authorities to relocate the communities facing them. PICT Governments have started introducing such strategies (Gerrard, 2008). Gradual, facilitated international and internal population relocations have already been suggested within the region. One can point to a number of examples of planned internal relocations undertaken recently, including a handful within Fiji (Vunidogoloa, Narikoso village and Denumanu Village, Vuya), where 800 coastal and river bank communities are becoming inundated and 45 communities will need to be relocated within the next 5 to 10 years (Chandra 2015).

Section 4 addresses the concept of sustainable development in relation to relocation strategies mooted in current debates. Three protective dimensions are important in the concept of sustainability, defined at the 1992 United Nations Conference on Environment and Development (UNCED): environmental protection, economic growth and social development (Bruntland Commission, 1987; UNCED, 1992). Sustainable relocation could therefore be defined as “a process by which a number of […] people from one locale come to live together in a different locale” (Lieber, 1977: 343) whilst simultaneously ensuring protection of the environment, economic growth and social development for the present and without compromising the ability of future generations to do the same.

2.3.3 Limits to Adaptation, Cultural Cohesion and Land in the Pacific

In this thesis, “limits to adaptation” will be defined as: “the point at which an actor’s objectives or system’s needs cannot be secured from intolerable risks through adaptive actions” (Klein et al.,
This thesis explores the limits to adaptation through relocation when an “unacceptable measure of adaptive effort is required, to maintain societal objectives,” referring to cultural cohesion among such objectives (Klein et al. 2014). For Pacific Islanders, a cultural component must be central to adaptation efforts. This was reaffirmed in the 2008 Niue Declaration on Climate Change, which emphasises that the peoples of the Pacific have the strong desire to live in their own countries if possible, in order to contribute to the preservation of their social and cultural identities (Nansen Initiative 2013).¹⁹

The research project “Promoting human security and minimizing conflict associated with forced migration in the Pacific region,” led by the Pacific Islands Forum Secretariat, revealed some of the main challenges that people forced to migrate report experiencing when arriving in new communities. In selected case studies in the Pacific (Fig. 2), 25% of the challenges reported are cultural issues (the largest portion) and 12% are climate change related (Corendea et al., 2015:12).

![Figure 2.2. Main Challenges faced by migrants when arriving in new communities (Corendea et al. 2015:12).](image)

Pacific communities, who must choose to relocate in order to adapt to climate change, are facing the challenges associated with the loss of their traditional lands embedded by their cultural cohesion. The loss of sense of place and cultural identity associated with migration (Adger et al., 2009) could limit adaptation to climate change. Preston and Stafford Smith have observed in this context that “the feasibility of transformational adaptation may therefore be dependent in part on whether it results in outcomes that are perceived to be positive versus negative” (Preston &
Stafford Smith, 2009). John Campbell, in his study of historical cases of community relocation in the Pacific, also argued that “the sense of loss [associated with among other things relocation from traditional lands] is especially pronounced in the wake of environmental disasters that damage local land and resources” (Campbell et al., 2005).

Within Pacific communities, culture and place attachment are among the most decisive factors in household decisions, including the decision to migrate (Barnett & Webber 2010: 62). Such a depth of attachment to place and to land is evident in Papua New Guinea as reflected by results from the study of PNG community relocation deriving from desk research including discussions with key informants and practitioners in Port Moresby, Madang and in Europe – in particular, from local staff of the International Organization for Migration (IOM) – all of which were made in the framework of research for the Migration, Environment and Climate Change: Evidence for Policy (MECLEP) programme which was funded by the European Union and led by IOM. Within the framework of the six-country project, a key informant interview grid was developed and intended to be adapted to the context of each case study. Interviews derived from these interview grid/guidelines, as well as the surveys developed according to the framework of the MECLEP project methodology\textsuperscript{20}, were carried out in care centres populated by Manam islanders known as Potsdam, Assuramba and Mangem in Madang province outside of Bogia in Papua New Guinea, and on Manam island itself. Research for the PNG case study of the MECLEP project culminated in an assessment report in May 2015 led by research partners of the project.\textsuperscript{21} In this research, it was reported that many of the Manam interviewees continued to carry out burial practices on their home island after over ten years of living in another location, the physical resting place of their ancestors. The islanders interviewed insisted that the coconuts will always be sweeter, the fish more plentiful, and the soil richer on their island (Connell & Lutkehaus, 2016).

### 2.4 Fostering “Sustainable Relocation”

#### 2.4.1 Examination of Contextual Definition (UNCED, 1992)

The 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro defined ‘Sustainable Development\textsuperscript{22} as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” UNCED goes
on to describe it as having three protective dimensions; “Environmental Protection, Economic Growth and Social Development.”

Sustainable Relocation will therefore be defined and assumed to refer to “a process by which a number of … people from one locale come to live together in a different locale” (Lieber, 1977: 343) whilst simultaneously ensuring protection of the environmental, economic growth and social development for the present and without compromising the ability of future generations to do the same.

This literature review will critically engage with this definition and attempt to understand the different positions with respect to the following observation: “climate change continues to be viewed primarily through an ecological or economic lens, with the social and human rights implications of climate change receiving little recognition” (Von Doussa, 2008). Therefore, arguments around traditional land rights will be identified and analysed under the scope of “social development” that “offers a comprehensive and dynamic approach to promoting social well-being today” (Midgley, 1995: 13-14). Arguments reflecting on climate change being perceived “through the economic lens” will also be identified and developed. The theoretical framework will be tested through this section to assist in analysing literature on Land Rights and their role in forming a sustainable, adaptive response to climate change in the PICTs. The following section will focus on Sustainable Relocation to develop a deeper understanding of the concept through examination of key debates concerning relocation strategies.

2.4.2 Relocation Categories and Approaches

Relocation strategies may take various forms and can be organised differently according to varying priorities. Local relocation or “on-site” relocation (ADB, 1998), takes place within national boundaries. In the context of the Pacific, where relocation could be closely related to sea levels in coastal areas, local relocation could imply relocating communities to more elevated land positions close to their existing locale (UNHCR, 2008: 15). National relocation takes place within the same country. Both local and national relocation can occur within or beyond the affected population’s land tenure boundaries (Campbell et al., 2005: 39) These are critical to the social, economic and political structure of Pacific communities and reflect “the relationship, whether legally or customarily defined, among people, as individuals or groups, vis-à-vis land” (FAO, 2002). The affected individuals in national and local relocation can be compared to internally displaced persons (IDPs), who share the same legal status as any other citizen and for
whom the State has an obligation to respect, protect and fulfil the realisation of rights. A durable solution is defined as a situation in which a displaced person is no longer in need of any specific assistance and protection related to their displacement and can enjoy their human rights without discrimination (IASC, 2010). Regional relocation occurs beyond the national borders but within the region, and still presents an opportunity for affected communities to relocate within similar land tenure systems. For this reason, it has been categorised by some authors as internal relocation (within the same land tenure boundaries). Finally, international relocation relates to relocation taking place beyond the national and regional boundaries. Proponents of international relocation occasionally assign the responsibility and burden of compensation to those states responsible for historical emissions (c.f. Conisbee and Simms, 2003: 36), with limited success.

2.4.3 Debates Around Internal versus International Relocation: International Protection and Polluter State Responsibility

Academic and policy debates on relocation approaches include proponents of international relocation who suggest this option as a form of compensation by states responsible for historical emissions for their “ecological debts” to climate-affected peoples, independent of the actions of their own governments (Conisbee and Simms, 2003: 36). Relocation beyond national borders raises questions concerning the determination of an international status for affected peoples, which is currently lacking. Fundamental contestations of an “environmental refugee” status surfaces among policymakers and international institutions such as the UN High Commissioner for Refugees (UNHCR). The mobile people in question fail to meet the criteria for refugee status laid out in the 1951 Convention Relating to the Status of Refugees (Tsuchida, 2008). The majority of people affected will furthermore remain within national borders, if the dilemma at hand is not adequately addressed (Lopez, 2007). Scholars and practitioners argue inclusion of environmental factors in an international status is politically unviable, fearing such discussions will lead to sensitive debates around sovereignty, state responsibility and security of receiving states. A separate protection category may also weaken the treatment of convention refugees, undermining state adherence to the existing protection regime, which is relatively well defended in the international community (UNHCR, 2007; Guterres, 2009). In addition to placing additional pressure on already overstretched capacities to address current protection needs, a new category
would lead to difficult issues of priority treatment of new persons and current *de facto* refugees (Biermann & Boas, 2007).

Parallel to this debate, a number of Pacific-based scholars argue against international relocation in most cases, suggesting the option is not viable given the costs and problems associated with relocation are directly linked with distance and boundary crossing. In addition, they argue, “current social, political and economic conditions hinder relocations across international boundaries.” (Campbell et al., 2005).

**2.4.4 Debates Around Staggered versus Whole Community Relocation**

In the debate around so-called *staggered* versus *whole community* relocation, we will detail the perspective of proponents of staggered relocation first. In support of staggered relocation, the statistical relocation approach developed by Zahir, Sarker and Al-Mahmud infers that the relocation strategy should target a selected and restricted portion of the affected community whilst proposing a local adaptation approach for the rest of the affected people (Zahir et al., 2009: 226-350). The argument for this approach is that in focusing on a minimum number of members of the community, it diminishes human and financial costs engendered by full-scale community relocation. However, this statistical approach can be criticised for not taking into account the cultural and sociological elements of the region vis-à-vis community cohesion. Campbell, for example, states that “community disarticulation is arguably the most complex part of the displacement and reconstruction process” (Campbell, 2010). The emphasis on social aspects of relocation was already exhorted years before by Perry and Lindell (1997), emphasising the importance of preserving social structure and cohesion by stating that “special attention should be given to social and personal needs of the relocatees {…} (and that) social networks need to be preserved” (Perry and Lindell, 1997).

Lieber presents a more historical critique of staggered relocation, concluding from a comparison of ten colonial-era relocations in the PICTs that preservation of cultural and community cohesion in any relocation of population in the PICTs is paramount (Lieber, 1977; UNFCCC, 2005: 14).

The aforementioned debates underline the importance of community cohesion in various positions on relocation strategies particularly in the context of the Pacific region. The preservation of community cohesion in the Pacific is strongly dependent on the preservation of
land tenure systems, which are central to the social structure of Pacific societies. Land tenure boundaries, discussed in detail below, could therefore serve as the main borders to be considered when planning for relocation of communities.

2.5 The Specifics of Land in the Pacific Islands

Property restitution and access to land are the predominant areas of rights affected by environmental degradation (IASC, 2011). Discharging the government’s responsibility to protect these rights requires consideration of factors such as existing settlement patterns (plot size of the current and future settlements); land-use habits (current and future settlement basins); and the right to use land (ADB, 1998). These factors vary for local, national, regional and international relocations.

2.5.1 Customary Law, Land Ownership and Land Tenure in the Pacific Islands

Commonalities in the practice of values and customs can be found across the Pacific region (New Zealand Law Commission, 2006). Customary laws are central and govern many aspects of Pacific communities’ lives and are essential in building their identity and “world view,” conduct of spiritual life, maintenance of cultural heritage and knowledge systems.” (Tobin, 2008).

Customary Law was used as a means of governance in the pre-colonial era. Zorn (2003) notes that during this period, the legal systems used existing social, political and economic systems to govern the lives of Islanders. Customary laws were functional, had effective methods for ensuring that the rules would be followed and outlined workable procedures for settling disputes (Zorn, 2003: 96). Today, the custom is still the prevailing jurisdictional base for determining the rights, use and boundaries of customary land (Fitzpatrick, 2013). Given the importance of land rights to the success of relocations in the PICTs, an understanding of customary law and collective practices is needed as a precursor to planning sustainable relocations.

*Land tenure* refers to societal rules defining how rights to land are allocated, how control and access is granted, specifying conditions and rights for usage, rules for transfer in addition to limitations of use and responsibilities (FAO, 2002: 7). In the PICTs, over 80% of land is ruled under various forms of customary tenure (Farran, 2011: 65). Two concepts are of key importance; *Vanua* and *Dela Ni Yavu* (that are Fijian terms and have various versions in other
Vanua means both the land and the social system and Dela Ni Yavu concerns the physical embodiment of the land that is part of the Pacific Islander’s identity.

Land tenure systems can both facilitate or provide barriers to relocation according to the context. On one hand, the literature presents traditional land tenure includes mechanisms for coping with migrants in the PICTs whereby they are accepted on the condition that they become part of the community (Ward 2000: 80). Arrangements can be made between the landholders, land controllers and the newcomers; these typically imply community involvement and asset-based contributions. Whilst rarely formerly recorded, the customs around these agreements are very strong, binding and have long-standing affects. Such customary agreements have facilitated land accessibility to a considerable number of migrants in the PICTs.

On the other hand, some of the literature presents land tenure as particularly problematic. Despite state claims to property, occupants retain ownership legitimacy via residual rights which are customarily linked. Potential allocations of state land relocating communities may result in violent disputes for many years to come, given that the customary land holders are likely to have social and political relationships to the land (Ward, 2000: 82). These links form part of their ethnic identity. It should not be assumed that governments can make independent decisions around land rights and transfer land to relocatees. Consideration of customary rights holders is critical given that overlapping rights may exist where multiple rights-holders exist over the same land.

It is worth emphasizing that in Pacific Island communities, land is an important source of a sense of security. Land is described as: “an extension of the self; and conversely the people are an extension of the land” (Ravuvu, 1988). Customary practices also have critical implications on managing the use of land, forest, and marine resources as well as on food security (AusAID, 2008). Collective local practices, inscribed in customary law, are a “shared way of living of a group of people, which includes their accumulated knowledge and understandings, skills and values” (Thaman, 2000: 139). As land is the traditional embodiment of islanders’ wellbeing, relocation is thus feared to be a potential catalyst for land conflicts and social conflict (Weir et al. 2010: 10).
2.5.2 Debates over Land Rights: Collective versus Individual Rights

The diversity of customary land rights in the Pacific region contributed to the complexity of the relocation process. Some stakeholders, ambitious youth and private development projects face contention to replacing collective land rights with individual land rights.

A “non-western” concept of human dignity, among the manifestations of which is communal ownership of land, refers to “societies and institutions that aim to realise human dignity entirely independent of the idea or practise of [individual] human rights” and where collective rights predominate (Donnelly, 2003: 58). In comparison, international human rights (IHR) are based on “the idea and practice of human rights - equal and inalienable rights held by all individuals against the state and society” (Donnelly, 2003: 2).

Scholars argue that collective forms of ownership do not allow individuals to be entrepreneurs, make profit with their land through investment or savings, better attribution of resources, allow for development that improves the overall standard of well-being (Midgley 1995: 13-14)\textsuperscript{26}. Gosarevski, et al. (2004) postulate, for example, that customary forms of land tenure are the principal causes of poverty in Papua New Guinea (Gosarevski, et al., 2004: 137). Shifting to an individual form of property would purportedly improve living standards, so that poor and marginalized communities can be better included and supported (Gosarevski, et al., 2004: 134). Others suggest customary systems have thus far “not been successful” (Lea, 2009:63).

Collective forms of land rights may deny certain individual economic and political rights and reinforce inequalities. Customary land-owning groups’ maintain a “culture of violence, {…} notably against women” (Gosarevski et al., 2004: 134). Dividends of the system may be counted in social deprivation, marginalization of groups, reproducing discriminations and gender deprivation.\textsuperscript{27} For some authors, these concerns challenge the very notion of international human rights. Arguments presented by the proponents of Individual Rights defend the implementation of individual Land Rights in the region in the name of Human Rights protection and via two main dimensions: ensuring that ‘individual economic rights’ are established thereby avoiding social deprivation and economic stagnation in the region by improving land productivity, profitability and standards of living, the ability to cope with poverty and finally creating a more equitable society based on the defence of the Universal principles of justice. Addressing the Individual Rights proponent themes around social deprivation, and reproducing discriminations and gender
deprivation\textsuperscript{28}, Kelly Haines-Sutherland highlights their tendency to assert that the very notion of IHR, based on a concept of rights of the individual, contradicts Customary Law and the implication that Collective Land Rights are potentially discriminatory. She contends that this reflection on Human Rights ignores many dimensions of human dignity relative to non-Western Societies and PICTs, and indeed that Collective Land Rights is a non-western conception that must be understood and not ignored (Haines-Sutherland, 2009: 2).

“Logistical” approaches to relocation focus on economic growth and development. On the other hand, proponents of collective rights align more with a “sociological approach,” supporting internal, cohesive relocation and collective land rights. Proponents of collective rights defend a different understanding of the sense of duty which should be respected (Follesdal, 2005; Haines-Sutherland, 2009: 2).

2.5.3 Debates over Cultural Relativism versus Cultural Universalism

Cultural relativism\textsuperscript{29} is in tension with universalism, described by Galtung (1971) as: “the problem of conflicts between Universal Human Rights norms and indigenous social practises that rest on alternative conceptions of human dignity” (Galtung, 1971: 83). “Reality” only relates to a social construction in accordance with the prevailing discourse of society (Winch 1964). Human value systems are considered by many to not in fact be culturally universal (Ayton-Shenker 1995). The New Zealand Law Commission supports these perspectives arguing that the prevailing concept of individual rights “ignores alternative conceptions of rights in non-Western societies, such as Pacific Nations” (NZLC, 2006: 31).

Thaman (2000) argues that individual rights are protected by customary law but are more largely contextualised via collective rights. He asserts that “Pacific societies have long recognized the collective rights of groups and have traditionally protected individual rights in the context of these groups,” (Thaman, 2000: 393).

Hunt argues that cultural rights have fallen victim to an uneven international system which privileges civil and political rights (Hunt, 2000: 25). The core conflict is conceived to be tensions in current power relations in the international community, in which the hegemonic Western approach to defending rights is built around the global economy (Smith 2007: 67). Rights are not
only culturally specific but politically and economically oriented (Treanor 2004). Notions of group rights in IHR take their origin from an individual standpoint, in the context of “modern” societies³⁰. Proponents of collective land rights argue that an imposition of human rights, including individual economic rights, is a politically motivated ideology entrenching the spread of a Universalist vision of economy which does not reflect on the local and cultural specificities of each society.

In addition, some question the very foundation of the argument that a system based on individual rights helps to defend individual economic and political rights. There is little evidence linking the existence of an individual property rights system and increased agricultural productivity and wealth (Gosarevski et al., 2004: 134). Hauffman (2009) argues that a radical deviation from traditional land administration would lead to devastating land poverty (Hauffman, 2009: 15). An intermediate stance exists that advocates for a balance between the two positions. In this scenario, communities choose between traditional forms of land tenure or an individual system (Gosarevski et al., 2004: 135). The discussion above illustrates that proponents of collective rights have a culturally sensitive focus based on cultural relativist theory. This is in contrast to proponents of individual rights in accordance with IHR theory, a focus based on Universalist theory, which defends merit propagated through economic growth and social development. Furthermore, the debates illustrate the possibility of pursuing an intermediary position that would improve current practices and build on existing customs. This intermediary position is developed through a “middle ground approach to relocation” that is reflected in Figure 2.3. This approach suggests that it is essential to combine logistical and sociological approaches when addressing planned relocation.

The approach suggests that this would allow PICTs to align with “modern” discourse to deal with the new challenges posed by climate change while involving customary leaders with sensitivity to cultural norms and values. In order to ensure socio-economic wellbeing, the approach suggests including the population concerned through consultation and negotiation concerning their land rights and options. These notions are further discussed in all through the thesis as the study focusses on the role of customary authorities, local (impartial) land experts and affected communities during the relocation process. As key players in land negotiations, this study questions the role of these actors in preventing land tensions in planned relocation based on the
hypothesis of "Combined approach of relocation" or "Middle-Ground approach to relocation" (Gharbaoui, Blocher 2016). The next chapter (3) describing the thesis methodology will explain how this approach will be tested through our field study.

Figure 2.3. Logistical and Sociological approach to relocation revealed by an exploration of the literature (Middle-Ground approach).
Chapter 3: Methodology

3.1 Introduction

The methodology has been organised in different steps: First, we shall synthesise the existing body of knowledge on climate change and human mobility in the Pacific region as a whole including case studies on planned relocation (chapter 4). The following chapter (5) focuses on the particular context of Fiji including land tensions in the context of climate-induced mobility. Synthesis will be based on a review of the literature by exploring the concepts of adaptation and resilience, human mobility and land governance in the context of climate change. A comprehensive review of data will also be included in those chapters including data provided by different organizations in the region and will include both climate change data (from IPCC, national governments and others) and demographic data (from IOM, Internal Displacement Monitoring Centre -IDMC-, national governments). These data will be supplemented by our own body of research in the region, drawing in particular from field study at community and institutional levels in Fiji (chapter 6). In parallel, we will also review the different policies and practices that address human mobility or planned relocation as adaptation strategy to climate change in the region (chapter 7). Displacement risks and mobility management will therefore be addressed at the regional, national and local levels. This review will be conducted on the basis of a systematic desk study, as well as meetings with key stakeholders and officials from regional, national and local institutions in the region. Following these meetings and this review, we will provide a series of observations, trends and policy recommendations that will also serve to provide key insights to answer our main research question. Indeed, on this basis, we shall answer our main research question; How to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land tensions? To answer this question, we shall build on the methodology developed in the present chapter that will first present the Literature Review Methodology (1). Secondly, the key approaches addressing the research questions will be developed (2). Thirdly, the methodology used for the field study will explained in detail including the criterion used for sites selection and the methods used for data collection. Both community and institutional interviews were used based on qualitative and indigenous methods. Through this approach combining community observations and policy analysis, the thesis will
finally attempt to provide lessons on how to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land tensions. Since this is the first time this is done, it will hopefully provide research material that could be used as tool to support climate change and mobility governance in the Pacific region. This integrated approach, based on the principle of "hybridity" has a holistic and inclusive component that can easily adapt to the local culture while allowing exportation to other regions facing similar challenges related to land ownership, land tenure security and climate-induced relocation.

### 3.2 Literature Review Methodology

The review process undertaken was based on a cross-disciplinary thematic approach involving a systematic search of literature with specifically relevant keywords (Figure 3.1) in key academic journals and book chapters from various academic disciplines including geography, social and political sciences and economy. Figure 3.2 provides an overview of the criteria used for the literature review. Databases on grey literature have also been assessed including policy-oriented reports produced by international organizations, think thanks and NGOs. Furthermore, the review includes country-specific searches within the Pacific Region.

<table>
<thead>
<tr>
<th>Climate-related Mobility driver Land</th>
<th>Type of Human Mobility</th>
<th>Location</th>
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<tbody>
<tr>
<td>Slow-onset</td>
<td>Human Mobility</td>
<td>Pacific Region</td>
</tr>
<tr>
<td>Rapid-onset</td>
<td>Migration</td>
<td>Small Islands Developing States Pacific</td>
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<tr>
<td>Flooding</td>
<td>Displacement</td>
<td>Pacific Region</td>
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<tr>
<td>Typhoons, Cyclones</td>
<td>Relocation</td>
<td>All Pacific Island Countries</td>
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<tr>
<td>Sea Level Rise</td>
<td>Resettlement</td>
<td>Fiji</td>
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<td></td>
<td>+Internal/International</td>
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<td></td>
<td>+Temporary/Permanent</td>
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Figure 3.1. Keywords used for systematic search
Resources were found using an online research on the basis of keywords such as: “relocation” “Land management” “Resettlement” “Pacific Islands State”. Papers were selected from various academic disciplines including geography, social and political sciences, and anthropology. Bibliographies from the selected papers have been a useful tool to deepen the research.

The time frame for the search includes articles from 1977 to 2018. Papers identified for the review were selected within both English and French literature. The selection process was based on the following criteria: Literature on environmental migration, displacement and planned relocation in the Pacific region specifically tied to slow and rapid-onset environmental changes with a particular focus on land degradation, land tensions and customary land ownership based on:

- **Land degradation** as defined by UNCCD (UNCCD 2012, 2014)
- **Human mobility** (including “migration”, “displacement” and “planned relocation”) and **slow, rapid-onset events** as defined by the Cancun Agreements (UNFCCC 2011, 2012)

The literature review presented on Chapter 5 has a specific focus on Fiji (our main case study). It has been carried on through a selection process that was based on the following two criteria:
(1) Literature on resettlement and relocation in Fiji, or (2) in others Pacific Island Countries (PIC) when their focus was conflict management. The time frame for this specific search includes papers from 2003 to 2016. Only English articles were analysed.

3.3 Key Approaches Addressing Research Questions

An overall research framework including qualitative methods of data collection was developed to address the key research question: how to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land tensions? Two major approaches were used in order to address the research question that have been conceptualised individually as well as collectively since they are all related:

**Approach 1: An examination of community-based governance of environmental relocation and land-based tensions in the Pacific**

The study intents to draw upon local practices (taking the particular case of customary land management and practices) and combine it with the existing state-based frameworks and policies on human security and forced migration induced by environmental events.

The field-work was based on ethnographic interviews as well as interviews with national and regional institutions in Fiji with the aim of evaluate the potential role of integrating both local culture (customary land system and its related governance structure) and legal/formal mechanisms in framing regional approaches to human security and adaptation to climate change through migration in the Pacific.

The main case study for the research is Fiji. This is where the field work has been taking place. However, other Pacific countries will be examined all through the thesis with a particular focus on Papua-New-Guinea that has 97% of customary based land. The field study therefore aims at exploring land tenure and resettlement practices in Fiji and identify the conditions for potential land-based tensions in relocation as adaptive response to climate change taking into consideration customary land tenure systems.
The methodology includes evaluating the dynamics within the affected communities in terms of adaptation to climate change through relocation using first the focus group discussion method and transect walking. After surveying the general situation, the narrative and semi-structured interviews have been used to help identify the extent to which customary land tenure systems are key in forming relocation decision and what the implications of those local systems are on coastal retreat through migration. In this context, an attempt to identify land-based tensions and the role of the custom in those tensions will be used. The targeted population for interviews included local chiefs, local owners, decision makers and leaders, representative of local courts and institutions as well as any member of the clan.

Using participant observation over other methods of data collection is crucial in the context of this research particularly interested in understanding the role of customary land tenure in environmental relocation and how it is related to tensions over land. It would allow detailed description of behaviors, perceptions and intentions as perceived by informants.

**Approach 2: An examination of state-based governance of environmentally-induced relocation and land security**

This would include the combination described in above to the broader framework of regional security approaches addressing environmentally-induced migration. This insertion would allow regional governance of security in the particular case of climate-induced migration to include local mechanisms of resilience, promoting approaches to security based on Pacific culture and avoid tensions occasioned by migration caused by environmental events as well as backlashes occurring when customary land tenure is not considered in relocation processes.

An analysis of state-based and regional cooperation on land and resettlement in the context of climate change will be presented identifying the gaps in regional adaptation strategies in terms of customary land tenure and land security. This would include first the study of existing state-based and regional cooperation frameworks related to climate change adaptation strategies, land and resettlement. Secondly, an analysis of institutional policies based on interviews at institutional level (SPC, PIF, SPREP) will be presented with an attempt to identify; (1) Relocation frameworks that are being currently developed at the regional and national level of governance; (2) The role of community leadership in current relocation frameworks; (3) How land security is
considered in relocation planning.

The great challenge of translating local knowledge into policy has been questioned with an attempt to understand whether regional institutions in the Pacific were best placed to address this gap and find ways to merge traditional knowledge and scientific best practices in environmental governance. As underlined in the literature review, locally-based expertise isn’t valued, and supported enough in the context of climate-induced relocation. The interviews aimed at understanding whether this was currently considered in political frameworks or whether a shift must be operated towards recognition of locally-based experts. The data collected at the institutional level also aimed at understanding how efforts should be put together by governments and regional entities to expand current initiatives aiming at coordinating, publicizing and expanding local expertise to give a sense of ownership key to long term sustainability of relocation.

3.4 Hypothesis Tested in this Thesis

The study focuses on the role of customary authorities, local (impartial) land experts and affected communities during the relocation process. As key players in land negotiations, this study questions the role of these actors in preventing land and water tensions in planned relocation based on the hypothesis of "Combined approach of relocation" or "Middle-Ground approach to relocation" (Gharbaoui, Blocher 2016) that is a theoretical framework based on a literature review and historical case studies analysis in the PICTs.

This hypothesis tested all through the research emphasises the central role of land tenure and historical processes while arguing that customary authorities and institutions are legitimate governance actors that would facilitate the relocation process. In the Pacific region in particular, these leadership structures and traditions form their own governance mechanisms that may be external to those of the ‘modern’ state and legal systems (FAO 2002; Tobin 2008; Farran 2011). Figure 3.3 below illustrates the concept of ‘Middle-ground approach to relocation’ (Gharbaoui & Blocher 2016) revealed after an exploration of ‘Logistical’ and ‘Sociological’ arguments found in the literature on planned relocation as an adaptation strategy to climate change in the Pacific. This approach critically engages with the UN definition of sustainable development focusing on social, economic and environmental components. While this definition proved insufficient to address ‘successful relocation’ in the region, it framed an exploration of various perspectives in
the academic literature on the collective notion of land rights versus individual land rights applied to current discussions on relocation strategies. Results of this study emphasised the following conclusion central to this research (Gharbaoui & Blocher 2016):

“... arguments around social development, community well-being based on land cohesion, the preservation of collective land rights and ‘cultural relativism’ on one hand, and neoliberal arguments on economic growth, the promotion of individual land rights and logistical aspects of the relocation process on the other hand. ... We show that consensual notions of land management in market approaches to land value are artificial and inappropriate in the context of the Pacific region where the concept of communal ownership prevails over the notion of individual responsibility. Ultimately, we propose an intermediate position, reflecting on the possibility for the two approaches identified above to be complementary. This middle ground entails elements of cultural relativism along with defenders of aligning the Pacific to neoliberal doctrines of land management as a means to deal in an efficient way with new challenges posed by climate change. This would translate in a combined ‘sociological and logistical’ approach that includes negotiation at early stages of the relocation process including governments, local leaders and both relocatees and hosting communities.”

Figure 3.3. The ‘Middle-Ground Approach to relocation’ revealed through an exploration of ‘Logistical’ and ‘Sociological’ arguments in the literature (Gharbaoui Blocher 2016)

The field study conducted as part of this research tests this hypothesis and goes further by examining perceptions related to land tensions in the context of climate change-induced
relocation. The inclusion of traditional knowledge in this project is crucial as Pacific Island communities have a wide range of mechanisms that have helped cope with adverse environmental conditions for millennia of adaptation. Collective and individual strategies for managing risks and dealing with shocks, as well as a deep understanding of environmental variability, are integrated into the collective knowledge and practices of Pacific communities. The traditional structures and methods of governance of traditional chiefs reinforce these strategies and are at the origin of collective decision-making. The methodology used for this study includes an overview of existing academic literature and exploration of historical relocation cases caused by environmental events in Fiji.

This overview is followed by an analysis of data collected through a qualitative study based on semi-structured interviews and questionnaires with customary leaders, relocated or communities in the process of being relocated, and local land owners and experts (n = 36). A combination of western and indigenous methodologies was used to understand the complexity of an approach to relocation that would include both state-based and community-based governance mechanisms. The Vanua Research Framework (VRF) (Nabobo-Baba 2007) was used in order to ensure that the principle of Holism was fully respected. The field study continued with a series of semi-structured institutional interviews with regional, national and local representatives (n = 11) with the following goals; (i) understanding how land access issues are taken into account in relocation planning in Fiji, and (ii) the political processes at work around these issues in the region. The main purpose of these talks was to identify lessons that could be learned to inform future political processes on these issues and the role that France could hold on these processes, particularly at the regional level. The combination of research findings (including final recommendations) and existing frameworks on sustainable relocations and customary tenure governance has allowed us to develop a set of recommendations as a support tool for decision-making on planned relocations considering the fundamental aspects of customary land management.
3.5 Field Study

3.5.1 Site Selection Criteria

*Physical characteristics*

The first criterion for selection of sites was the type of environmental events, in an effort to explore analogues of forecasted outcomes of climate change, namely: flooding, coastal erosion, sea level rise, and tropical cyclones. Sites were selected according to the following criteria: Each site was affected by at least one rapid-onset environmental hazard (flood, earthquake, hurricane) attributed to climate change or slow-onset environmental change (sea level rise, saltwater intrusion, land degradation). Fiji Island will be drastically affected by sea-level rise in the coming decades and relocation is already taking place on that basis. The choice of Fiji is also based on the facilitated access to affected communities all relatively accessible despite the environmental impacts. Finding a diversity of environmental hazards among case studies was part of the criteria for site selection with the aim to comprehensively address the diversity of environmental events causing relocation to take place as adaptation strategy to climate change. There were no urban spaces entering the scope of this study available for selection and smaller villages in rural areas were mainly selected for that reason.

*Migration patterns*

The Pacific region is already dealing with population flows associated with migration, displacement or relocation as a result of climate change. Fiji Islands presents the most important track of environmental relocation in the Pacific that is also well documented. The sites selected for the semi-structured interviews at community level were spread out across various location in Fiji and included villages at different stages of the relocation process as well as sites affected by climate change at different degrees. The main aim of the field study was to evaluate the role of customary chiefs and traditional land governance systems in land negotiation before and after relocation takes place and identify a potential link with post-relocation tensions associated to land. Fieldwork was based on the observation of examples of climate-induced community relocation that recently took place in Fiji and some that are either ongoing or will take place in the future.
**Customary Land Tenure and Water security**

Fiji Islands was also selected because customary land tenure makes up 84% of the total land area in Fiji, ideal to evaluate land-based conflicts and the role customary land tenure holds in relocation process. The focus was on cases involving community relocation within national boundaries, firstly, because it is the type of movement that allows a study of the role of customary land tenure in a more comprehensive manner as it is based on collective land rights and community-based conflict resolution mechanisms. Observing cases that took place within national boundaries is interesting as most countries will at first seek to adapt within national boundaries as it is the preferred option that benefits from more protection (Internally Displaced Persons -IDPs-) and in the particular case of the Pacific, emotional, social and cultural “costs” increase with distance. The main purpose of the fieldwork was to understand the context in which relocation took place, how customary land tenure has been considered in this process, whether customary land tenure provided barriers or facilitated the relocation process, whether land security was achieved at the post-relocation phase, whether land-based tensions were still major in post-relocation vulnerabilities and what is the perception on water tensions before and after relocation.

The Matawalu and Tukuraki villages were chosen as they were accessible sites at different stages of the relocation process and engaging different stakeholders. The choice of sites was also based on the Fiji Second National Communication to the UNFCCC including potential relocation and a “list of vulnerable communities per sector affected”. The villages of Suvavou, Lami and Qauiya were present in the list and foreseen for potential relocation in the future. Those three villages are also interesting as they presented challenges associated to land and water access. Also, they reflect the reality of many vulnerable sites threatened by climate change in Fiji but not yet considered for relocation.

**Institutional focus**

The positioning of the country at the regional governance level is also an important reason behind my selection. Indeed, the methodology includes semi-ethnographic interviews at relocation site and at site of origin as well as interviews with regional institutions (SPC/SPREP) as one important aim of the research project is to draw lessons and recommendations focusing mainly on
land (including cultural affinity with land) for future relocation projects anticipated in the future more specifically at regional level of governance. Fiji is therefore ideally located to access for this purpose.

### 3.6 Methods of Data Collection

#### 3.6.1 Qualitative Methods

Data was collected through qualitative semi-structured, narrative interviews and focus group discussions with the affected communities, landowners, customary chiefs, institutional interviews (at national, regional and international levels), as well as interviews with land experts, academics and representatives of civil society. This method used semi-structured and narratives interviews with the aim to cover the multi-causal and complex view of human mobility while addressing the best way possible the communities ‘way of life. Qualitative data were collected in order to capture land tensions and the role of customary authorities in relocation processes as adaptation to climate change in Fiji.

The first part of the study included data collection based on semi/ micro-ethnographic field study of communities affected by land degradation following extreme environmental events (cyclones, flooding, etc.) that have been or will be forced to adapt to climate change by relocating within the country in Fiji. A semi-ethnographic study was conducted before relocation took place with the aim to evaluate the role of land ownership and tenure security in the relocation process. Field research was also carried out at the post-relocation phase in order to assess post-relocation vulnerability associated with land-based tensions and the loss of customary land systems. One major focus was on the consequences and implications of relocation in terms of conflict, resources distribution and power relations. The second part of the study involved another set of interviews carried out at the institutional level using semi-direct interviews directly addressed at decision-makers and stakeholders at international, regional, national and local levels.

The snowball sampling included the identification of potential participants through the following partners:

- The help of a guide and cultural advisor was crucial as the Fijian traditional protocol was used to ask for permission to visit communities and get clearance. In the Pacific a written
consent is not a practice, building of trust with communities is crucial, engagement with communities is therefore critical as it defines trust-based relationships. His presence allowed me to follow a traditional Fijian presentation to introduce myself while being culturally sensitive by observing cultural ways such as respect to the customary chief. His role as translator also ensured that it was possible to ensure that interviews and any requests would be based on informed, free and prior consent by participants;

- Customary chiefs were consulted prior to the interviews and discussions. Consultations with relevant participants have been taking place before interviews to ensure that errors are minimized and that there is no misunderstanding on the purpose of the research;

- NGO point of contact “350” and the Conference of Churches (PCC) were helpful in providing information to access communities and participants.

The Focus Group Discussion and Transect Walking helped then identify and recruit participants as it helped me define the profiles that are willing and happy to cooperate and those that have key roles in the village in terms of subsistence patterns and in relation to customary land tenure structures. The local guide was again present to explain who will be conducting discussions with participants and all relevant information about the research (Figure 3.4).
At the community level, selection criteria used for the interviews included gender balance and the diversity of roles within the community (selecting at least one leadership figure). The field study included participant interviews within the affected and hosting communities and their traditional authorities, including customary chiefs, landowners, relocates and hosting communities. Traditional knowledge held by these categories was crucial to capture in order to identify perceptions of the environment and of environmental change that all have social and cultural elements linked to land tenure.

The use of semi-structured and narrative interviews (n=36) in Matawalu and Tukuraki in Ba, Viti Levu and in the villages of Lami, Suvavou et Qauiya near Suva was based on a participatory
approach aiming to capture perceptions on tensions related to land. This study attempted to specifically assess participants' perceptions of (i) the degree of involvement of the community and customary leaders (at origin and destination sites) in the relocation process; (ii) issues likely to cause conflicts / tensions over the management and use of customary land (based on points of tension identified following a review of the land management and conflict minimization project - LMCM- )^{32} and for Lami, Suvavou et Qauiya (iii) any major impact land tensions would have over water resources (access, quality and quantity) in the sites of origin and destination based on "the scale of aggressive and passive approach to water conflicts" (Zeitoun & Warner 2006) described in figure 6.

![Aggressive and Passive approach scale to water conflicts, Zeitoun Warner (2006)](image)

Figure 3.5. Aggressive and Passive approach scale to water conflicts (Zeitoun, Warner 2006).

The community study was based on “perceptions” of the interviewees. The attempt to capture « perceptions » in this study was crucial, as estimates of future climate-induced mobility in the region often do not systematically consider the central concept of ‘perceptions’. Any assessments of human mobility in the context of climate change in the Pacific must also include the unpredictable dimension of perceptions in order to reflect the complex and nuanced reality of the phenomenon. Mortreux and Barnett (2009) argue, for example, that the decision-making process in response to climate change is highly shaped by perceptions of the affected population, which are in turn reflective of their social circumstances. Furthermore, the decision to migrate is based on a multi-causal and complex process that is directly influenced by socioeconomic factors at the
place of origin and perceptions of opportunities at place of destination (Connell and King, 1990). Perceptions and intention to migrate in the Pacific within the context of climate change should be contrasted with concerns about trapped populations, that "(...) some people who do not intend to migrate may not have a choice in the future and may have to use migration as a survival strategy. Conversely, the intention to migrate may not translate into actual movements: people who intend to migrate may find themselves unable to do so, lacking the necessary means (for example, financial, social, and human capital)" (Zickgraf 2016 :17). Barnett and Chamberlain (2010) argue that there will be large numbers of people unable to move away from the impacts of climate change in the Pacific, lacking the social and financial means to do so.

In order to understand perceptions related to land tensions at different phases of the relocation process, the study focused on environmentally-induced relocation cases (i) that are almost finalized or had recently been held -Tukuraki, category 1- (ii) relocations that are under way or will take place soon - Matawalu, category 2- and (iii) villages considered by the government as "at risk" and "likely to be relocated in the future"- Lami, Suvavou, Qauiya, category 3-4-. The categorization on planned relocation is based on the ‘typology of planned relocation’ has been developed following both community and institutional interviews (see chapter 6).

In order to identify perceptions on water tensions, we have firstly reviewed the literature including Chand et al. (2011), Naidu and Morrison (1994), Gangaiya, Tabudravu et al. (2001), and Singh and Mosley (2003). Following this review, we carried out semi-structured interviews with the aim to identify perceptions of tension at pre-relocation phase. The Zeitoun and Warner (2006) framework on water conflicts was used to assess and rate perceptions on water tensions in the context of planned relocation as an adaptation strategy to climate change at various phases of the relocation process. The questionnaires used the Zeitoun and Warner scale, asking participants to evaluate: (i) current tensions related to water (access, quality and quantity) in the village; (ii) tensions related to water (access, quality and quantity) at the pre-relocation phase (cat. 3); and (iii) tensions related to water that could arise (access, quality and quantity) in potential future relocation (cat. 4).

The field study continued with a series of semi-structured institutional interviews with regional, national and local representatives (n = 11). Key people from these organizations were interviewed with the aim to understand the current frameworks on relocation, as well as how
access to land and customary leadership are considered in the process. Those data were collected in order to understand the frameworks and process currently being developed on relocation in the region and understand how lessons and the conceptualization of planned relocation deriving from the thesis results could be framed within those processes. More details about those interviews and results will be presented in chapter 7.

3.6.2 Indigenous Methods

This research has been framed and field study was based on the five main principles used for Pacific research based on the Pacific research, Guidelines and Protocols 2017 developed by the Massey University in 2017;

- “Respect for relationships: Ensuring that cultural protocols and processes are followed throughout the research process. Respect for research participants is exercised and grounded in humility, the roles of gatekeepers and elders are appropriately acknowledged, and confidentiality is respected.”

- “Respect for knowledge holders: Ensuring that Pacific knowledge, aspirations and wellbeing are integral to research design, research processes, outcomes and outputs. Both research partners and research participants are prioritized as knowledge holders and a participatory approach is adopted in seeking informed consent.”

- “Reciprocity: Ensuring that reciprocity is an integral part of the research process and participants and communities benefit from the research. Reciprocity can encompass gifts, time and service and extends to accessible dissemination of research findings.”

- “Holism: Ensuring the interconnected nature of the physical, social, environmental, cultural and spiritual aspects of research with Pasifika and Pacific communities is understood and acknowledged.”

- “Using research to do good: Ensuring that the wellbeing of Pasifika and Pacific communities and their environment is of central importance in why and how
research is conducted, at the same time as ensuring that the research is rigorous and scholarly. The goal of research beneficence applies to both the integrity of the research process and the potential research outcomes and impact.” (Pacific research, guidelines and protocols 2017)

A combination of western and indigenous methodologies was used in order to understand the complexity of an approach to relocation governance that would include both state-based and community-based governance mechanisms. The Vanua Research Framework (VRF) (Nabobo-Baba 2007) was used in order to ensure that the principle of Holism was properly respected including “a balanced and integrated relationship between social life, the environment, spiritual world, and cosmology” (Health Research Council of New Zealand, 2014: 7). The field study was based on a deep understanding of Nabobo-Baba’s framework while considering at all stages “the interconnectedness of people to their land, environment, cultures, relationships, spirit world, beliefs, knowledge systems, values and God(s).” (Nabobo-Baba, 2008: 143). All traditional protocols were respected, and as mentioned above, a local translator was present during the field study, the VRF was applied all through the research in order to gather and analyze stories from affected, hosting communities and traditional chiefs involved in the relocation process.

This research approach also involves three underlying principles developed by Nainoca W.: « The interconnectness of all things in the bula vakavanua (traditional Fijian way of life), talanoa (to tell a story) as dialogue and negotiation to facilitate adaptation of the bula vakavanua to external factors; and veiwekani (kinship) through which {...} social capital actions and behaviour are lived out » (Winifereti Ubianalaca Nainoca 2011). It was crucial to value this approach in this study as research among indigenous peoples of the Pacific in the 21st century faced challenges associated to research frameworks that did not consider languages and Indigenous knowledge protocols, philosophies and principles (Nabobo-Baba, Unaisi 2008). It was assumed all through the study that, in order to address their own knowledge and perceptions especially on attachment to land, the research framework needed to respect their view of the world.

Those principles are reflected in the methodology chosen in the field. Indeed, the semi-structured format followed for the interviews allowed for the interviewees to respond with their own words which was more suitable to reflect on their view of world and their own perceptions. Also, the
A semi-structured interview was used to be able to deviate from the initial question and have an open discussion that would make the whole process more natural and less formal which also helped building trust and the sharing of information. For most interviews, I was transcribing people stories with key words and sometimes, I have not taken notes straight away. I made sure to not record or write extensively while sitting in front of the interviewee when she/he was talking. I have rather opted for a more natural form of discussion driving by my questionnaire while encouraging the interviewee to be flexible in her/his answers. I also made sure to maintain eye contact, focus on the story, the person in front of me and the story that was revealed to me. After each interview I made sure to summarize the answer and by the end of each day I have transcribed each story in detail. This decision was made intentionally to avoid any barriers to a natural flow of discussions that would also have prevented building trust with interviewee. The lack of resources and time spent in the field did not allow me to develop an ethnographic study. However, the field study was based on ethnographic principles as it aimed for an immersion with the interviewee’s way of life. I have made sure to respect the traditional protocols and my time spent in the country was mostly through residing at local guest houses in nearby location to the villages. I have also made sure to learn the Fijian basic vocabulary. All this was made intentionally with the aim to be immersed in the local culture within the short time frame. Using semi-structured interviews in a study based on ethnographic principles was best fitted for a study trying reveal perceptions while respecting the interviewee’s view of the world.
Chapter 4: Human Mobility as Adaptation Strategy to Climate Change in the Pacific

4.1 Introduction

After providing an introduction to the thesis underlining the main research attributes in Chapter 1; Chapter 2 presented a review of the literature and the main themes of the thesis in academic literature. Chapter 3 presented then an overview of the methodology used in the thesis including the literature review and the field study methodology. This chapter presents a critical review of the current trends related to human mobility as adaptation strategy to climate change in the PICTs. Within the broader scope of the thesis, this chapter provides the Pacific regional context for climate change and human mobility in the Pacific with the aim to put the Fiji case study (Chapter 5 and 6) in perspective. We also chose to provide a regional perspective within the framework of this chapter as Fiji shares similar challenges as other regional states. Extreme environmental events such as cyclones which hit Fiji also hit other Pacific States such as Vanuatu, Papua New Guinea, Tonga, Samoa, etc, making regional comparative context central in order to put things in regional perspective. Without addressing every Pacific Island Countries and Territories, the regional review addresses selectively the Pacific countries most relevant to a study of climate change and human mobility within the region while drawing a broad overview of the region as a whole on vulnerability to climate impacts.

Desktop research and exploration of the latest scientific literature including technical and policy reports is used in this chapter to understand the current challenges and impacts of climate change in the Pacific region including an analysis of human mobility and planned relocation as adaptation strategy to climate change in the Pacific. The chapter will assess the existing body of knowledge on migration, displacement, and planned relocation induced by slow and rapid-onset environmental drivers present in both academic and technical reports. Climate change is affecting Pacific Peoples in complex ways and human mobility as adaptation strategy to climate change is increasingly positioned by international agencies, policymakers, and governments in the Pacific as having an important role on other development challenges faced by the region. In order to be exhaustive in our analysis, it was therefore crucial to address academic literature along with an overview of the important body of policy and technical reports present in the field. Climate change is further exacerbating the natural features of the Small Islands, which are by nature
already extremely exposed and sensitive to extreme environmental events. Mobility has been used by Pacific Peoples for generations in order to cope with the adverse environmental impacts. This chapter aims to review the past and recent trends of human mobility in the context of climate change in the Pacific region while illustrating recent examples of planned relocation in the region. Finally, the chapter provides a set of lessons learned from examples of planned relocation that took place in various countries in the Pacific including Kiribati, Tuvalu, Solomon Islands and PNG. These lessons will be useful to use in the comparative analysis including examples of planned relocation taking place in Fiji illustrated in Chapter 5. Indeed, Chapter 5 provides an identification of some trends by drawing out some commonalities and differences and whether or not these can be generalized across the Pacific, including Fiji.

4.2 Intraregional Differences in Vulnerability to Climate Change in the Pacific

The earth’s climate is changing faster than expected and sea levels are rising at a faster rate than envisioned. This poses challenges to Island States, coastal regions and SIDs in particular, which are by nature already extremely exposed to extreme environmental events. Pacific Island Countries and Territories (PICTs) share common features such as a high dependency on the Pacific Ocean and its resources; a relatively high exposure to natural disasters; high vulnerability to exogenous environmental and socio-economic changes; and, a relatively low capacity to adapt to changes in climate (SPREP 2009). However, PICTs are often considered as a homogenous category of states as they share common vulnerabilities to climate change mostly attributed to their unique natural features. This should be nuanced as there is all through the PICTs a considerable diversity in terms of population, size of economy, culture and geography that highly influence the outcome when addressing Human Mobility as adaptation strategy to climate change. The Pacific region can be, in fact, divided in three main zones (Figure 4.1). As the purpose of this section is to understand the impacts of climate change on the Pacific region, it was useful to move away from the classic sub-regional classification “Melanesia, Polynesia and Micronesia” that could be problematic. Indeed, those terms could be controversial and associated to negative and positive outcomes with geographic but also cultural and political referents. The literature reflects on arguments amongst scholars around the use of those terms mainly because of their historical associations with European colonisation and the racism embedded in these (Lawson 2013). Therefore, as it is more relevant to the purpose of our thesis, we have rather
focused on how each zone in the Pacific are affected differently by climate change according to “resource endowments, size, and the state of economic development.” (ESCAP 2000).33

Figure 4.1. Pacific Island Countries (Barnett and Campbell, 2010: 6).

The first zone, described as *Large High Islands* or *Melanesian Countries* (includes Papua New Guinea, Solomon Islands, New Caledonia, Vanuatu, and Fiji) experiences a range of challenges that include rapid population growth, land degradation, deforestation, mining (often leading to water pollution), invasive species, and deterioration of fisheries due to coastal reef decomposition. The second zone, the *Mid-Sized High Islands of Polynesia and Micronesia and the Small High Island Territories of the United States* (includes Tonga, Samoa, French Polynesia, Palau, Federated States of Micronesia, Guam, American Samoa and the Northern Mariana Islands) is characterised by scarcity of land, extreme deforestation, loss of biodiversity, degradation of coral reefs and fisheries, and pollution of ground water and coasts by agriculture chemicals. Islands in this area are also prone to volcanic eruptions, earthquakes, droughts, and other disasters. Residents of the third zone, the *Small Islands* (includes Cook Islands, Kiribati, Tuvalu, Federated States of Micronesia, the Marshall Islands, Niue and Nauru are especially vulnerable to the effects of climate change. These primarily low-lying islands are highly exposed to storms, droughts, and limited fresh water access, but residents also have to cope with the
consequences of ground water pollution from salt and agriculture, and consequent food insecurity. High rates of population create additional challenges including rapid urbanization in coastal areas and agricultural land unavailability.

### 4.3 Slow-Onset Environmental Events: Rising Sea Levels

The 21st century will have to expect a significant rise in sea levels in all regions (Figure 4.2-4.3) (UNFCC 2005, 2014). However, global warming causing rising sea levels and flooding might cause inundation in low-lying areas such as the SIDS in the Pacific Islands, with significant effect such as coastal erosion and land loss (UNHCR 2010: 8).

![Global average sea level change](image)

**Figure 4.2.** Evolution of the Global average of Sea Level Rise in the Past Source: (IPCC 2014).
Rising sea levels pose a range of challenges to low-lying and coastal regions around the world. Small Island Developing States (SIDS) are particularly threatened by inundation in low-lying areas with significant consequences such as substantial loss of territory (Fig. 4.4). Many SIDS countries, due to their size, geography, and relative isolation and remoteness, have their very existence threatened. Key conclusions on the impacts of climate change on Small Island Developing States from the IPCC’s Fifth Assessment Report (IPCC 2014) recognized as “virtually certain” that the rate of global average sea level rise has been accelerating since the 1950s, with the western Pacific experiencing a sea level rise up to four times the global average.

The Malé Declaration on Global Warming and Sea Level Rise acknowledged already in 1989 that sea levels would still continue to rise even if climate change was having no more impacts on the Islands (Preamble para. 2). Climate change is affecting the essential ecosystems on which the economic stability of the SIDS depends, posing risks to livelihoods, coastal settlements, infrastructure, ecosystems, and economic growth in the region. SIDS are especially exposed and vulnerable to sea level rise given that most socio-economic activity takes place in low-lying coastal areas (IPCC 2014: 1625).
Furthermore, coastal erosion is particularly sensitive in the context of the Pacific region as land ownership is predominantly customary-based and predominantly located in urban areas (Figure 4.5). In Fiji 88% of the land is customarily-based and 97% in PNG (GoPNG 2007; AusAus 2008). 52% of the population of Fiji lives in urban areas that are mostly coastal, while 11.4% of the total land area below 5 meters of elevation. 11% of the population is living in those areas where elevation is below 5 meters (UN Habitat 2015). In PNG 61% of the population live within 100 km of the coastline (ADB 2012), while the population living in (mainly coastal) urban areas is 12.6%, one of the lowest rates in the region (United Nations 2014: 152; UNDP, 2014). PNG has four large islands and 600 smaller ones (GoPNG 2012). Approximately one fifth of the land in PNG is subject to regular inundation, as low-lying areas are increasingly experiencing frequent storm surges due to sea-level rise (Australian Bureau of Meteorology and CSIRO, 2014: 220).
<table>
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<tr>
<th>SIDS country</th>
<th>Customary/ Communal/ Family lands (%)</th>
<th>Urban Population (thousand)</th>
<th>Total Population (thousand)</th>
<th>Percentage urban</th>
<th>Average Annual Rate of Change of the Urban Population 2010-2015 (in %)</th>
<th>Population in the largest city (% of urban population)</th>
<th>Largest city by inhabitants</th>
<th>land area where elevation below 5m (% of total land area)</th>
<th>population living in areas where elevation below 5m (% of total population in 2000)</th>
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<td>141</td>
<td>274</td>
<td>51,4</td>
<td>1,07</td>
<td>97,3</td>
<td>Papeete</td>
<td>37,6</td>
<td>19,8</td>
</tr>
<tr>
<td>Kiribati*</td>
<td>&gt;45%</td>
<td>44</td>
<td>101</td>
<td>43,9</td>
<td>1,83</td>
<td>101,9</td>
<td>Bairiki</td>
<td>96,7</td>
<td>95,2</td>
</tr>
<tr>
<td>Maldives*</td>
<td></td>
<td>132</td>
<td>320</td>
<td>41,2</td>
<td>3,91</td>
<td>97,1</td>
<td>Malé</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>MarshallIslands</td>
<td></td>
<td>99</td>
<td>39</td>
<td>55</td>
<td>71,8</td>
<td>2,03</td>
<td>Majuro</td>
<td>99</td>
<td>99,4</td>
</tr>
<tr>
<td>NewCaledonia**</td>
<td></td>
<td>157</td>
<td>255</td>
<td>61,7</td>
<td>1,24</td>
<td>94,1</td>
<td>Nouméa</td>
<td>8</td>
<td>34,2</td>
</tr>
<tr>
<td>Niue**</td>
<td>98,5</td>
<td>1</td>
<td>1</td>
<td>37,9</td>
<td>-1,63</td>
<td>-</td>
<td>Alofi</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Palau</td>
<td>Some</td>
<td>17</td>
<td>21</td>
<td>84,2</td>
<td>1,67</td>
<td>74,4</td>
<td>Koror</td>
<td>21,4</td>
<td>55,6</td>
</tr>
<tr>
<td>PapuaNewGuinea</td>
<td></td>
<td>97</td>
<td>874</td>
<td>7,014</td>
<td>12,5</td>
<td>2,73</td>
<td>PortMoresby</td>
<td>1,8</td>
<td>2</td>
</tr>
</tbody>
</table>

Figure 4.5. Percentage of customary, urban land area and population below 5 metres in SIDS countries (Source: UN-HABITAT, 2015).

Significant variations of sea level are particularly important in the Pacific region. Low-lying Islands of Tuvalu and Kiribati are threatened by their very existence with land rarely exceed 3 meters above mean sea level (GoT NAPA, 2007: 13, GoK NAPA, 2007: 4) making cross-border retreat inevitable in the future. The graph below (Figure 4.6) illustrates the example of Fiji and shows sequential increase in monthly average sea level in Lautoka provided by the National Tidal Centre and the Bureau of Meteorology (2018). The Bureau of Meteorology estimates the rate of rise to be in the range of 3.4 to 11.6 mm/year and explains that the effect of the El Nino of 1997 was followed by a world-wide temperature increase.
Although rising sea levels in the SIDS are being generally driven by climate change, non-climate factors also play a role, including volcanic activity, subsidence, \textit{El Niño} cycles, population growth, and sand mining (Balinuas and Soon 2002, Connell 2003). The table below (Figure 4.7) summarize the observed and projected change of extremes at global scale including temperature, \textit{El Niño} and floods particularly relevant to the Pacific.
<table>
<thead>
<tr>
<th>Variable/phenomenon</th>
<th>Observed changes since 1950</th>
<th>Attribution of observed changes</th>
<th>Projected changes up to 2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Very likely decrease in number of unusually cold days and nights. Very likely increase in number of unusually warm days and nights. Medium confidence in increase in length or number of warm spells or heat waves in many regions. Low or medium confidence in trends in temperature extremes in some subregions due either to lack of observations or varying signal within subregions.</td>
<td>Likely anthropogenic influence on trends in warm/cold days/night globally. No attribution of trends at a regional scale with a few exceptions.</td>
<td>Virtually certain decrease in frequency and magnitude of unusually cold days and nights. Virtually certain increase in frequency and magnitude of unusually warm days and nights. Very likely increase in length, frequency, and/or intensity of warm spells or heat waves over most land area.</td>
</tr>
<tr>
<td>Precipitation</td>
<td>Likely statistically significant increases in the number of heavy precipitation events in more regions than those with statistically significant decreases, but strong regional and subregional variations in the trends.</td>
<td>Medium confidence that anthropogenic influences have contributed to intensification of extreme precipitation at the global scale</td>
<td>Likely increase in frequency of heavy precipitation events or increase in proportion of total rainfall from heavy falls over many areas of the globe, in particular in the high latitudes and tropical regions, and in winter in the northern midlatitudes.</td>
</tr>
<tr>
<td>El Niño and other modes of variability</td>
<td>Medium confidence in past trends towards more frequent central equatorial Pacific El Niño-Southern Oscillation (ENSO) events. Insufficient evidence for more specific statements on ENSO trends.</td>
<td>Anthropogenic influence on trends in North Atlantic Oscillation (NAO) is about as likely as not. No attribution of changes in ENSO.</td>
<td>Low confidence in projections of changes in behaviour of ENSO and other modes of variability because of insufficient agreement of model projections.</td>
</tr>
<tr>
<td>Droughts</td>
<td>Medium confidence that some regions of the world have experienced more intense and longer droughts, in particular in southern</td>
<td>Medium confidence that anthropogenic influence has contributed to some observed changes in drought patterns. Low</td>
<td>Medium confidence in projected increase in duration and intensity of droughts in some regions of the world, including southern Europe and</td>
</tr>
<tr>
<td>Variable/phenomenon</td>
<td>Observed changes since 1950</td>
<td>Attribution of observed changes</td>
<td>Projected changes up to 2100</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Europe and West Africa, but opposite trends also exist.</td>
<td>confidence in attribution of changes in drought at the level of single regions due to inconsistent or insufficient evidence.</td>
<td>the Mediterranean region, central Europe, central North America, Central America and Mexico, northeast Brazil and southern Africa. Overall low confidence elsewhere because of insufficient agreement of projections.</td>
<td></td>
</tr>
</tbody>
</table>

Floods
Limited to medium evidence available to assess climate-driven observed changes in the magnitude and frequency of floods at regional scale. There is low agreement in this evidence, and so low confidence at the global scale regarding even the sign of these changes. High confidence in trend towards earlier occurrence of spring peak river flows in snow melt- and glacier-fed rivers. Low confidence that anthropogenic warming has affected the magnitude or frequency of floods. Medium to high confidence in anthropogenic influence on changes in some components of the water cycle (precipitation, snow melt) affecting floods. Low confidence in global projections of changes in flood magnitude and frequency because of insufficient evidence. Medium confidence that projected increases in heavy precipitation would contribute to rain-generated local flooding in some catchments or regions. Very likely earlier spring peak flows in snow melt- and glacier-fed rivers.

*Likelihood assessment: virtually certain, 99–100%; very likely, 90–100%; likely, 66–100%; more likely than not, 50–100%; about as likely as not, 33–66%; unlikely, 0–33%; very unlikely, 0–10%; and exceptionally unlikely, 0–1%.

### 4.4 Increased Frequency and Intensity of Extreme Rapid-Onset Events

There is a strong correlation between the frequency and intensity of extreme environmental events such as cyclones, hurricanes, typhoons, and climate change (IPCC 2007a). The Pacific region is particularly exposed to these phenomena (Hay, et. al 2003). Forecasts estimate that climate variability, global average temperature rise, and sea warming will intensify and increase
the frequency of natural disasters such as cyclones from 5 to 20% in the region (Bettencourt et. al. 2006). Evidence suggests the frequency of natural hazard events has increased in the region since the 1950s, and notably accelerated in the last decade. Increased intensity and frequency of tropical cyclones is a considerable concern in the Pacific. Cyclone Pam in 2015 and Cyclone Zoe in 2002 are examples of particularly destructive storms that have hit the region in recent decades (Shultz et al 2016:41), with Cyclone Winston, which hit Fiji in February 2016 ranking as one of the most powerful storms to ever strike the Pacific Islands region.

Since 1950, extreme environmental events have affected around 9.2 million people in the Pacific, with 9,811 reported deaths, and estimated damages of USD 3.2 billion (Framework for Resilient Development in the Pacific 2016:17). The economic consequences of extreme natural disasters are expected to grow, but the scale of the impacts will vary by country. For example, a World Bank study (Bettencourt et. al. 2006) estimated that annual damages from climate change and sea level rise could, for the state of Kiribati, could be equivalent to 17–34 percent of the country’s GDP, but that for a high island as Viti Levu (Fiji) the average annual economic impact is expected to be much lower (about 2–4 percent of GDP by mid-century). During the last decade, some countries have experienced disasters and losses that have approached or exceeded their Gross Domestic Product (GDP). Estimates are that future economic loss and damage to key economic sectors, including agriculture, fisheries, and tourism could reach 34% of GDP in some countries (ADB 2013). In terms of economy, the Pacific countries will experience net negative impacts by 2050 in all climate change scenarios commonly used by climate scientists (ADB 2013). The costs of hard infrastructure needed to protect shorelines from future damage are not yet being fully accounted for in SIDS (SPREP 2011). In addition to economic risks, there also needs to be considered the non-economic implications of loss of family and community livelihoods, damage to housing and land, damage to cultural practices (such as burials), and the undermining of traditional governance system (Monnereau I. and Abraham S. 2013, Cantieri 2016). The livelihood and adaptation strategies of Pacific Islands residents often depend to a high degree on mobility, (UNFCCC 2010, UNHCR 2014), making it an important component of future socio-economic futures for the region. The next section will discuss in more depth mobility as adaptation strategy to climate change in the Pacific.
4.5 Human Mobility and Adaptation to Climate Change in the Pacific

As observed in the previous section, there is a broad consensus in both research and policy on the impacts of climate change on the region. Climate change will increasingly force Pacific peoples to use adaptation strategies to cope with rapid and slow-onset environmental degradation of their lands. The Pacific Islands region is characterised by having a low adaptive capacity as highly dependent on sectors considered as “climate-sensitive” including agriculture, fisheries and tourism (IPCC 2014a: 1626) Indeed, sub-regions of the PICTs, such as SIDS, have weak infrastructure development, poor human resources, and economies based on restricted resources with direct dependence on marine resources, which makes them particularly vulnerable to external factors such as change of trade patterns or migration patterns of fish. Nurse and Moore have highlighted the need to urgently design and implement comprehensive and adaptive measures in vulnerable areas such as the SIDS in priority (Nurse, Moore 2005). At the Governmental level, it is increasingly recognised that sustainable development policies need to simultaneously include adaptive strategies and focus on Risk Management of Natural Hazards (RMNH) as a priority, so far “regional efforts have not translated well into mainstreaming hazard risk management at the National level” (Barnett & Webber 2010:15). In the Pacific, disaster management and reconstruction which are reactive measures have been until today the main focus of adaptation programmes. However, as underlined by the last IPCC report, adaptation to the adverse effects of climate change should be coordinated in priority along with disaster risk reduction activities and community-based approaches to development and must be cautiously planned to avoid increasing risks of vulnerability (IPCC 2014). Adaptation to climate change translating into practical measures have been few and fragmented with little focus on how Pacific peoples can adapt to climate change while continuing living lives they value (Campbell, Barnett 2010). Gradually, anticipative measures including retreating from coastal areas and development of population relocation preparedness strategies have become a priority for the region (SREP 2010: 5). Anticipative measures and preparedness strategies in the Pacific, essentially translates to planning for community relocation (Lieber 1977: 343) and rehabilitation (ADB 1998: 3). Rehabilitation is critical for all affected communities, whether movement is temporary or permanent, and whether they find themselves in a new or familiar context. Resilience-building efforts must furthermore address the causes of forced migration in the region, including ensuring
sustainable subsistence of the population and reducing the risk of subsequent displacement (GoJ 2002).

At the regional level, relocation has been identified as a main priority for climate change adaptation since 2012 alongside food security, crop improvement, water security, and resilient infrastructure (AUSAID 2012). Climate change is exacerbating pre-existing development challenges in the Pacific creating long-term and immediate risks forcing the Pacific Peoples to use retreat as coping method. Gaffin and Nurse suggested already in 1997 that migration caused by permanent inundation of islands and social instability related to in-migration are direct consequences of climate change and sea-level rise (Gaffin, Nurse 1998). President Anote was the first one in the region to refer to Human Mobility as main adaptation strategy to climate change as well as gradual, facilitated international or internal mobility and declaring that “even a marginal increase in sea level would be disastrous… Warning signs are already appearing… The reality is that we have to find alternative homes. The levels already in the atmosphere cannot be reversed” (Solomon Times 2010). However, Human Mobility as adaptation strategy to climate change should be a last resort solution as underlined by the 2011 Nansen Principles stating that all efforts should be directed towards preventing affected people to move, failing which, towards assisting and protecting the people displaced (Nansen Conference, principle 4). The Pacific regional consultation under the Nansen Initiative concluded that it was particularly the case in the Pacific and planned relocation should be considered if no option is left to the affected population. The Nansen Initiative was undertaken following the adoption of paragraph 14 (f) of the Cancún Outcome Agreement in December 2010 (COP16) recognizing climate change-induced migration, displacement and relocation as an adaptation challenge. The Nansen Initiative was developed based on the outcome of the June 2011 Nansen Conference on Climate Change and Displacement in Oslo with the aim to address the need for a more coherent approach to the protection of people displaced across borders in the context of disasters and the effects of climate change.

Human mobility in PICTs, as everywhere, is based on a complex decision-making process involving multiple factors. Renaud & al. (2011) have devoted a study to the conceptual framing of the “decision to move” in the context of environmentally-induced mobility and have described this complexity as follows:
Determining the exact extent that environmental stresses play in forcing people to move is complex for at least two reasons. First, deciphering which of several push and pull factors influence a decision to move is difficult as multiple factors (e.g., social, political and economic factors) often act simultaneously. Second, environmental degradation processes are often a consequence of the degradation of social, economic and political conditions and vice versa (Renaud & al. 2011 :14)

Mobility patterns in the Pacific, including those influenced by environmental factors, reflect complex decision-making processes involving multiple drivers (Shenn and Gemenne 2011). Highly dependent on sectors considered as “climate-sensitive”, the consequences of climate change on PICTs’ economies would contribute to population movement making the boundary between forced and voluntary movement difficult to define with various legal implications (Mc Adam 2010). UNHCR responded to this argument that climate change seen as catalyst is a threat multiplier and not the unique cause that may trigger Human Mobility that wouldn’t have happened in the absence of climate change (UNHCR 2011, para. 2). In that case, as defined by Guterres (2007), climate change induces Human Mobility when leaving is not an option, but a necessity.

Any assessments of human mobility in the context of climate change in the Pacific must also include the unpredictable dimension of “perceptions” in order to reflect the complex and nuanced reality of the phenomenon. Mortreux and Barnett (2009) argue, for example, that decision-making process in response to climate change is highly shaped by “perceptions” of the affected population, which in turn are in turn reflective of their social circumstances. The decision to migrate is based on a multi-causal and complex process that is directly influenced by socioeconomic factors at the place of origin and perceptions of opportunities at place of destination (Connell and King, 1990). Further, perceptions and intention to migrate in the Pacific within the context of climate change should be contrasted with concerns about trapped populations, that “(…) some people who do not intend to migrate may not have a choice in the future and may have to use migration as a survival strategy. Conversely, the intention to migrate may not translate into actual movements: people who intend to migrate may find themselves unable to do so, lacking the necessary means (for example, financial, social, and human capital)” (Zickgraf 2016:17). Barnett and Chamberlain (2010) argue that there will be large numbers of
people unable to move away from the impacts of climate change in the Pacific, lacking the social and financial means to do so.

Another way to address the complex and multidimensional nature of human mobility in response to environmental events has been addressed by several authors by taking lessons from history and past cases of population movement in the Pacific (Farbotko & al. 2018, Connell 2010, Campbell 2008, Hoffmann 2015). The next section will discuss environmentally-induced mobility in the Pacific through an historical perspective particularly tied to customary land tenure as central to the cultural context of the Pacific region.

4.5.1 Mobility in the Pacific: Historical, Cultural Context and Customary Land Tenure

Estimates of future climate-induced mobility in the region often do not systematically consider evidence about how traditional and emergent forms of adaptation might minimize the impacts of climate change and therefore warrant consideration (Barnett and Webber, 2009; Kniveton et al, 2008). Adaptation has always been an important part of the Pacific Island communities’ methods in protecting themselves from natural disasters but most of those methods have been lost with the time. There are important cultural dimensions to how societies respond and adapt to climate risks (Adger & al. 2013) and Pacific peoples have always used culture and land arrangements to mediate changes in the environment.

Environmental variability and extreme events have always been a reality of life in Pacific Island communities. In historical studies on planned relocations due to the environment in the Pacific, most scholars rely on past case studies in a historical perspective trying to analyse the cause of relocation and understand the reasons for failure or success. Current explorations of relocations due to the effects of climate change take rather on a long-term perspective. Campbell (2008) has been quite influential in studies taking an historical perspective on climate change and Human Mobility in the Pacific. He distinguishes four types of relocation in the Pacific and was one of the first scholar to strongly emphasis on the central role of land in planned relocation in the Pacific (see Figure 4.8): (i) local relocation within customary lands, (ii) proximate relocation beyond customary lands, (iii) relocation within national boundaries but at some distances from traditional lands and (iv) international relocation.
Figure 4.8. Cultural, social, political, psychological, and economic costs of community relocation based on differing thresholds of relocation. Source: J. Campbell, “Climate Change and Population Movement in Pacific Island Countries”, Climate Change and Migration South Pacific Perspectives, Institute of Policy Studies, School of Government Wellington, 2010.

These categories have inspired several authors in their works and have consequently been further developed. Gharbaoui and Blocher (2016a) have been interested in the regional relocation category, which is beyond national borders but within similar land tenures and focuses on social and cultural rights in the Pacific that are strongly embedded into land tenure systems and land rights. There is a lack of study on current and future islands migration patterns related to land tenure, regional relocation trends and land-based conflicts in the context of increasing environmental pressure. The concept of “transformative mobilities {…} where mobility, adaptation, and development intersect to achieve the best possible outcomes for cultural identity, human rights, adaptation, and human development goals across scales and in origin and destination sites” has been developed recently placing, historical stories, place of attachment and cultural identity at the centre of the study of climate-induced human mobility in the region (Farbotko & al.: 2018). Traditionally, Pacific Islanders have used a wide range of coping measures to sustain themselves in the face of the adverse effects of their environment, and Pacific cultures are embedded with a deep understanding of climate variability and patterns. Campbell (2010) has identified four main coping methods inherent in the long traditions of Pacific Island cultures: the maintenance of food security through surplus production, food storage, crop
diversity, and food preservation; inter and intra-community cooperation; environment-adapted settlement patterns and housing design; and the use of traditional environmental knowledge systems (Campbell 2006). These local adaptation strategies have been eroding over time, and disaster relief operations have contributed to this decline (Campbell 2010). Nonetheless, recent studies of adaptive capacity in the Cook Islands, Fiji, Samoa, and Vanuatu indicated that traditional coping methods are still used to deal with the environment hazards, with strategies that are still in use focusing on traditional methods; faith and religious beliefs; traditional governance and leadership systems; family and community involvement; and agriculture and food security (Fletcher et al. 2013).

Within this context, migration has been traditionally used as a coping method used to deal with environmental risks. As one study notes:

Migration has always been an adaptation strategy to climate change in most [Pacific Island] countries and can become part of the solution in the face of climate change. {…} Seasonal and circular migration has always been used as adaptation strategy to cope with the natural annual change of seasons. This is particularly the case in rural areas at early stages of environmental degradation in reaction to slow-onset changes. (Kniveton et al. 2009).

For generations, Pacific Island communities’ traditional adaptive strategies, culture, and practices have included retreating from coastal zones following extreme environmental events. Historical case studies on environmentally-induced Human Mobility in the Pacific region have been well covered by the Asia-Pacific Network for Global Change research project (APN) (Figure 4.9) revealing that out of the 86 assessments of community relocation, 37 were caused by natural hazards, 13 by environmental degradation due to human actions (mining, nuclear testing, etc.) 9 by conflicts and 9 by development projects (Campbell, 2005).
Numerous studies have shown the importance of historical processes in order to better understand and address current and future climate-induced migration in the Pacific (e.g. Edwards 2013, McAdam and Ferris, 2015, McAdam, 2014, Campbell et al., 2005, Campbell, 2010). Recent literature on Human Mobility as adaptation strategy to climate change in the Pacific emphasis on the role of place of attachment (land) and the need for mobility to create opportunities engaging with histories and existing patterns of mobility among Pacific Peoples (Farbotko & al., 2018, Gharbaoui & Blocher 2016, 2017). Many traditional risk management and response strategies, such as customary land ownership structures, have been lost in the post-colonial era, leading in turn to the loss of shared social and cultural identities, spaces and meanings. At the same time, historical colonial ties help shape current patterns of migration, such as shown in mobility research in Tuvalu and the importance of trade agreements (Shen and Binns, 2012). The adverse effects of climate change are likely to increasingly motivate islanders to migrate in order to cope with threats to their livelihoods. Therefore, human mobility in the Pacific in a changing climate needs to be understood in the context of both traditional and modern approaches to adaptation, and include consideration of traditional knowledge, cultural attitudes, values and practices, and local expertise on community relocation as adaptive responses to extreme environmental events.
Translating traditional knowledge into policy and finding ways to merge it with the best practices on planned relocation should be urgently addressed (Gharbaoui and Blocher 2016).

Culture, place attachment, and customary land arrangements are other important factors often described in the literature on climate change and human mobility in the Pacific region (Barnett and Webber 2010). The concept of “transformative mobilities {…} where mobility, adaptation, and development intersect to achieve the best possible outcomes for cultural identity, human rights, adaptation, and human development goals across scales and in origin and destination sites” has been developed recently placing place of attachment and cultural identity at the centre of the study of climate-induced human mobility in the region (Farbotko & al.: 2018: 4). In a study of climate and migration in Tuvalu, Mortreux and Barnett (2009) found that migration decisions are shaped in a significant way by families’ and communities’ spiritual and social ties to their land. Land has been described by Pacific Islanders as, “an extension of the self; and conversely the people are an extension of the land” (Ravuvu 1988). The importance of customary land tenure including in its historical form is increasingly analyzed in studies on the human mobility and climate change nexus in the Pacific. However, its influence on mobility outcomes in the Pacific varies according to the context, as customary land systems are diverse in the region. A continuum of land rights arrangements that span from freehold to informal settlements may be found across Pacific Islands, and authors such as Mitchell (2016) highlight the importance of accounting for such arrangements when assessing migration and relocation possibilities and outcomes under climate change. Looking ahead to the need for possible planned relocations due to climate change, Barry and Augustinus (2015) note that future tenure arrangements need to be found that best suit the cultural and economic need of communities and of the larger state authority. Others highlight the importance of developing a “middle-ground approach” that includes negotiation at early stages of the relocation process including governments, local leaders, land owners, the communities being relocated and the hosting communities (Gharbaoui and Blocher 2016). This recognizes the inherent tension in Pacific Islands of collective versus individual land rights.
4.5.2 Environmental Migration and Displacement in the Pacific Region: Current Trends

There is varying evidence with respect to the role of environmental factors, including climate change and sea level rise, currently play as drivers of migration in the Pacific Islands. Research done in 2015 by the Pacific Islands Forum Secretariat and United Nations University-Institute for Environment and Human Security (UNU-EHS) found that land degradation, deterioration of water conditions and infrastructure, combined with new economic and social challenges directly or indirectly linked to climate change represent 17% of the reasons for which people migrate. A far more important driver is unemployment, cited by two-thirds of participants in that study (Corendea et al. 2015: 12). In a different study, the Pacific Climate Change and Migration (PCCM) project identified migration patterns and top international destinations for people living in Kiribati, Nauru, and Tuvalu between 2005 and 2015. It found that slow-onset environmental events have affected most households living in those countries (94% in Kiribati, 97% in Tuvalu, and 74% in Nauru), leading to migration either to ensure income or to find an alternative to land. However, it found that only 23% of migrants in Kiribati and 8% in Tuvalu named climate change as being a reason for migrating. In a practical sense, international migration is at present not a widely available option for responding to climate risks. International migration opportunities for residents of Tuvalu, Kiribati and Nauru are mostly limited to seasonal worker schemes in Australia and New Zealand, newly developed semi-skilled worker visa programs in Australia, educational or skilled labour migration to Australia, Fiji, and New Zealand (PCCM 2015). Although references are often made in the media to special migration programs that allow residents of Kiribati and Tuvalu to move to New Zealand, these add up to about 75 people per year (PCCM 2015). Although it is regularly cited as being highly exposed to the impacts of climate change and sea level rise, international migration from Kiribati is quite low: from 2005 to 2015, 1.3% of the population moved abroad. International migration rates are higher in Nauru and Tuvalu, where 10% and 15% respectively of people had migrated abroad. 10% in Nauru and 15% in Tuvalu.

Most documented examples of migration in the Pacific Region for climate-related reasons is internal, not international. Natural disasters and adverse impacts from strong El Niño Southern Oscillation (ENSO) events already lead to population displacements in many parts of the Pacific,
and the scale of harm and number of people affected tend to be disproportionately high. In Papua New Guinea, for example, cyclones, flooding and earthquakes regularly cause internal displacements IOM (2015). Statistics from the Internal Displacement Monitoring Center (IDMC) suggest that 151,000 people were displaced in Papua New Guinea during the period 2008–2013, two-thirds of them by natural hazards (IDMC, NRC, 2014: 5). As noted earlier, population growth and urbanization rates in many Pacific Island nations are already high and are expected to increase as a result of climate change. Modelling exercises carried out for PCCM (2015) that assume a medium climate change scenario (IPCC RCP 6) suggest that, in the 2050s, internal migration for Kiribati and Tuvalu will increase by 100% and 70%, respectively.

Recent ENSO-related weather events provide insights into the scale of vulnerability of Pacific small island states to climate-related disasters. An ENSO event in late 2015-early 2016 led to increased drought and food insecurity in parts of Fiji, Vanuatu, the Solomon Islands, and Papua New Guinea. In February 2016, a state of emergency was declared in the Marshall Islands as drought caused severe water shortages (Radio New Zealand 2016). The frequency of cyclones in the Pacific tends to go up during ENSO events; this was observed in 2015 with 21 storms of category four and five in the North Pacific, four more than the previous record of 17 in 1997 (Becker, 2015). It is thus not surprising that the latest Global Report on Internal Displacements (GRID) 2016 that reports on internal displacement caused by sudden-onset disasters stated that:

As in previous years, south and east Asia and the Pacific regions were worst-affected by displacement associated with disasters, and the vulnerable, coastal populations of small island developing states (SIDS) were disproportionately affected again. (IDMC 2016:7)

Tuvalu, Vanuatu, Micronesia and Kiribati often figure in the top five most affected countries when it comes to disaster-induced displacement relative to population size. IDMC (2016) statistics for 2015 estimated displacement rates of 54,800 people displaced per 100,000 inhabitants in Tuvalu; 41,700 in Vanuatu; 6,500 in Micronesia; and 2,200 in Kiribati. Much of this was attributable to Cyclone Pam, a category 5 storm that struck in March 2015. Ten thousand people were displaced in Tuvalu, more than half its population. In Vanuatu, a quarter of the population was forced to move, and around 166,000 people required emergency assistance including 65,000 IDPs requiring emergency shelter and 15,000 homes destroyed or damaged.
Internal migration and displacement due to climate change displacement will generate growing challenges to land and food security, state-sovereignty, and culture preservation. There is no strong evidence linking climate change directly to conflict but increasing human insecurity could conceivably act as a “threat multiplier” (see Kita and Raleigh, this volume) in countries such as Papua New Guinea, which has experienced past events of inter-community violence and consequent displacement (Corendea et al. 2015: 29). Competition over scarce socioeconomic and natural resources could lead to increased levels of violence and conflict between groups in the absence of adaptation measures.

Among Pacific islands the limits to adaptation are a concern of significant weight in PNG, where nearly all natural hazards co-exist, most of which will be exacerbated by climate change. PNG’s volatile environment and geographic location on the so-called Pacific Ring of Fire (Ramakrishna and Bang, 2015:68) makes its people vulnerable to many hazards, such as volcanic eruptions, tsunamis, earthquakes, tropical cyclones, floods, landslides, El Niño and droughts (NDC, 2015; Australian Bureau of Meteorology and CSIRO, 2014:220; Government of Papua New Guinea, 2010:13). According to the Internal Displacement Monitoring Center (IDMC), a total of 151,000 people was newly displaced by disasters in PNG between 2008 and 2013, two thirds of which were due to natural hazards. Another 50,000 people were reportedly internally displaced by conflict and violence during the same period, further contributing to a cycle of vulnerability to shocks and stresses (Ibid).

4.5.3 Are Planned Relocations an Answer?

As underlined in preceding sections of this chapter, Human Mobility is not something new in the Pacific region, it is particularly the case for planned relocation. Before the mid-20th century, relocation was perceived as an anticipatory response to overpopulation, resource scarcity and conflicts (McAdam, 2015). After World War II, several cases of planned relocation have been recorded in the region. The reasons for these movements of population were diverse including mining, infrastructure projects and environmental pressure. Today, many countries in the Pacific region have actively considered planned relocation as an adaptation strategy to climate change and sea level rise (Gharbaoui and Blocher, 2016). The relocation scenarios can take various forms. Local relocation that takes place within national boundaries is the most obvious option. In the context of the Pacific, the most likely scenarios would entail relocating coastal populations to
more elevated land positions close to their existing locale (UNHCR 2008: 15). Doing so, however, would in many countries require moving people outside the boundaries of their traditionally held lands, which would raise a whole suite of social, economic, cultural and political challenges, and potentially generate conflicts over land use (Campbell et al. 2005, Looide et al. 2008). Negotiation and access to land in planned relocation could therefore be crucial in determining whether relocation is sustainable or not. In the literature review (Chapter 2), we have acknowledged the difficulty of defining “successful or unsuccessful” relocation. Rather than discussing planned relocation in those terms, we have rather chosen to consider relocation as sustainable or unsustainable (see Chapter 2). Furthermore, we have discussed the blurred boundaries between relocation and resettlement and have mentioned that we will be using relocation and not resettlement for several reasons (see Chapter 2). Finally, as discussed in the literature review, planned relocation has been mostly defined and discussed in the literature referring to development-induced relocation. Criteria usually taken from the development-induced relocation and resettlement literature are that relocation should be a development opportunity and that relocated population should not fall into the multiple risks discussed in Cernea’s Risk and Reconstruction Model (see Chapter 2). Relocation as adaptation strategy is conceptualized differently in national policy all over the region but at the global scale, the Pacific has been showing leadership in developing unique and precursor frameworks on relocation as adaptation strategy to climate change. As will be further developed in Chapter 5, Fiji has been a pioneer in developing guidelines for planned relocations while Kiribati has introduced the “moving with dignity” framework allowing relocation to be an option providing development opportunities for its population. Pacific States are struggling to deal with well-managed, “sustainable” internal relocation of communities within their own boundaries (Haines and McGuire 2014). Fiji, at the core of our analysis presents an interesting case study of internal planned relocation as more than 600 villages have been identified as particularly vulnerable while 40 villages will be relocated within the next 10 years (Piazza 2014). The next chapters 5 and 6 will be devoted to past and recent planned relocation in the Pacific tied to the Fijian context more specifically. However, in other Pacific Nations, examples of planned relocation such as those described below have been accelerating in the last decade and present a series of lessons interesting to discuss in the framework of this study. Those examples will also be interesting to
use in our comparative analysis of past and recent examples of planned relocation that will be illustrated in Chapter 5 that will include examples from Fiji in pre- and post-colonial context.

**Kiribati and Tuvalu**

Kiribati and Tuvalu and the foreseen inundation and destruction of their entire land forcing its population to relocate are very well-documented case raising issues around self-determination, statelessness and forced international relocation with no possibility of return (Wyett 2015). In this case, normative gaps exist as there are no legal tools allowing to consider the relocated population as migrant workers or refugees and it is uncertain whether provisions on statelessness would apply as discussions on maintaining a symbolic presence in the Pacific Ocean through a human built-up island platform didn’t materialize into any concrete decision so far (Kalin 2010: 90-91). However, the government of Kiribati has highlighted that all efforts will be put in keeping Kiribati as a sovereign state, relocation would be in any circumstances considered only as a last resort, confirming the Nansen Principles (as explained in the previous sections, the Pacific Regional Consultation organised by the Nansen Initiative suggested that relocation should be considered as a last resort option to be used only after other adaptation or mitigation measures have been considered) and the Niue Declaration Climate Change, 2008, preamble para. 5 reaffirming that Pacific peoples prefer to remain *in situ*, decide for their own future by themselves as they wish to continue living in their countries where possible. Indeed, in some Pacific countries a majority of the population does not wish to relocate; it is the case in Kiribati, where 65% of the population has expressed not wishing to relocate if possible (Leckie, 2016: 247).

At the same time, the State of Kiribati has decided to preventively develop a relocation strategy to not leave its population of 110,136 people (Kiribati National Statistics Office, 2017) with no options if no other adaptation strategy would be possible. The aim of Kiribati Government is also to ensure that relocation is made “with dignity” and that the receiving countries have less burden to bear associated with the relocation. The relocation strategy of the Kiribati Government is based on two main factors. Firstly, the creation of opportunities to enable the smooth transition of those willing to relocate through the foundation of a support network for expatriate communities. In the middle-term, this would also benefit those who stay by increasing the level of remittances. Secondly, the standard level of qualifications available in Kiribati will be raised to the Australian
and New Zealand’s Qualification Authorities (NZQA) levels to ensure people moving from Kiribati are attractive to the hosting countries education and job market. This “win-win” configuration is key to the concept of “migration with dignity” developed by President Anote as the Government consider it as central to the effectiveness of the Government's relocation policy. President Anote considered as crucial to develop a policy that would place its population in a position enabling them to offer the needed skills to receiving countries while benefiting from the relocation by getting more options in the job market (Office of the President of Kiribati 2018).

The Niue Declaration is crucial when addressing climate-induced mobility in the Pacific as representations, perceptions and portrayals of Pacific Islanders as “climate refugees” willing to migrate have been subject to heavy criticism from academics (McNamara and Gibson 2009). Farbotko (2010) provides a critical evaluation of debates on sea level rise, which she says have been dominated by Western mythologies of islands being little more than laboratories and experimental spaces. Along these lines, Shen and Gemenne (2011) point out the critical need for population of the Pacific concerned by climate change to speak for themselves and, citing the case of Tuvaluan migration to New Zealand, point out that the reality of that migration is more complex than how it is portrayed in the media. Rather than view themselves as refugees, Pacific Islanders increasingly call for the possibility of “migration with dignity” as the impacts of climate change take hold, which would allow for greater labour migration from SIDS to wealthier economies (McNamara 2015). “Migration with dignity” has been an important framework for the region and was replicated by other Pacific leaders as it helped creating a scission with the contested narratives of “climate victims” and the SIDs referred to as “canaries in the coal mine” or as “laboratories of climate change” home to the “first climate refugees” used first to refer to Tuvalu and its capital, Funafuti, that are facing similar challenges then Kiribati and are also forced to consider relocation as adaptation strategy. The small population of 10,000 living on Tuvalu atolls will similarly be affected by the loss of their territory. The Government of Tuvalu has also been considering adaptation in situ first and then have approached other neighbouring states to re-establish their Nation once under water with no concrete output until today. Gemenne (2010) highlighted that the contrast between the Western perception of Tuvalu as symbol of future climate change impacts, the “canaries in the coalmine” and the perception of the Tuvaluan population presents a risk for local adaptation processes in the region.
**Solomon Islands**

In Solomon Islands as it is the case in many other Pacific Nations, relocation is mostly not facilitated by the government that doesn’t have the capacity to undertake relocation projects and no political framework to protect the relocated population. Solomon Islands has rather interesting cases of community-driven relocation based on the use of flexible land tenure systems enabling the community to adapt to sea-level rise and coastal erosion without waiting for governmental support or external budgets. A small number of relocation initiatives led by the government have been restricted due to limitations related to land tenure systems, relocation planning, governance framework and financial support (Albert & al. 2018). The relocation of Choiseul township in the Solomon Islands is another type of recent relocation driven by external stakeholders that started in 2015 and planned for 2030 aiming to relocate infrastructure and population of 900 people from the capital of Choiseul province in Taro Island to a new location not subject to low-lying inundations. This relocation is financed by an Australian-based private consulting company (BMT WBM) in partnership with the Australian government’s Pacific Australia Climate Change Science and Adaptation Planning program. A climate change risk and adaptation plan has been developed (Haines and McGuire 2014) but the relocation as such has not been finalised mostly due to a lack of funding.

**Papua New Guinea (PNG)**

Many comparisons have been made between case studies in Fiji and other Pacific Islands Countries having customary land tenure systems that may, however, differ from one country to another and within countries. Fiji is also often compared with PNG in studies on environmental human mobility as customary rights mainly rule the country Carteret Islands and Manam relocation in PNG are often cited as an example or used as comparative case studies of environmental human mobility.

The ongoing Carteret integrated relocation project in Papua New Guinea was initiated by a local NGO “Tuele Peisa” instigated by the Council of Elders of the Carteret Islands in 2012 with the aim to relocate infrastructures and around 1,700 people from Carteret Islands, threatened by inundations to a safer land donated by the Roman Catholic Church in Bougainville Island. Half of the Carteret Islanders should be relocated by 2020 (Ferris 2011). This project is ongoing but very
slow due to the lack of budget (around US$5.3 million). In the end of the 1960s, intense storms started causing coastal erosion and affecting natural resources and agriculture (Connell 1990). Discussions amongst researchers underlined the possible volcanic origins of this erosion while others linked the phenomenon to climate change (Edwards 2013). However, coastal erosion of Carteret Islands has been recognised as exacerbated by climate change (IOM 2015: 34).

Within Pacific communities, culture and place attachment are among the most decisive factors in household decisions, including the decision to migrate (Barnett & Webber 2010: 62). Such a depth of attachment to place and to land is evident in the case of the Manam relocation. Manam relocates, after over ten years of living in another location continued to carry out burial practices on their home island, the physical resting place of their ancestors. The local islanders interviewed insisted that the coconuts will always be sweeter, the fish more plentiful, and the soil richer on their island (Connell & Lutkehaus, 2016). Results from the Manam case study derive from desk research, discussions with key informants and practitioners in Port Moresby, Madang and in Europe – in particular, from local staff of the International Organization for Migration (IOM) - and observations during site visits, all of which were made in the framework of research for the Migration, Environment and Climate Change: Evidence for Policy (MECLEP) programme all deriving from Gharbaoui, Blocher (2017). After eleven years living in protracted displacement away from their ancestral lands, a small but critical brick has been laid in the foundation of the future for the displaced Manam people (Figure 4.10). This group of communities from different villages of Manam Island, located in the northeast of PNG, have been living in protracted displacement in government-supported “care centres” on the mainland in Bogia district since they were evacuated due to an impending volcanic eruption in 2004-05. In April 2016, much to the satisfaction of local and provincial leaders alike, the Manam Resettlement Bill was passed in PNG’s parliament (Shisei 2016). The law authorizes the legal basis for the main authority in Bogia District charged to seek viable options and use government funds for a resettlement plan for the Manam groups.
Young Manam men in a care centre boil fish, yams and local greens in coconut milk for their visitors using traditional cookware as others look on. Traditionally women and girls prepare meals. In recent years, according to Manam residents, they have had more difficulty fishing and are often finding smaller and smaller fish between the mainland and Manam Island. This is likely to be a result of overfishing as well as the destruction of corals due to dynamite fishing, cyanide fishing, and the harvesting of coral to make powdered lime (which is chewed with betel nut, a popular stimulant). (Photo © Julia Blocher, 2015).

4.6 Conclusion

This chapter provided an exploration of the latest scientific literature with the aim to understand the current challenges caused by climate change in the Pacific region including an analysis of the concept of “human mobility” as adaptation strategy to climate change in the region. Both slow and rapid-onset events are gradually affecting the Pacific with intraregional specific challenges affecting each country differently according to their size, geographic location, political context, resource endowments, and state of economic development.

Population moves as result of adverse environmental events can be traced in Pacific history back to the colonial period. Pacific Peoples for generations used this adaptation strategy in order to cope with the adverse environmental impacts. Historical perspectives are well documented in studies on the environment and mobility nexus in the Pacific context. Authors such as Campbell, Farbotko, Ravuvu are to be cited to illustrate this type of studies and are prominent in providing comprehensive analysis on the role of customary land tenure in past cases of planned relocation. The central role of customary land tenure, place of attachment and cultural identity have all been identified as central in studies taking an historical perspective on human mobility as result of
extreme environmental events in the region.

As defined in the section on terminology of our chapter 1, “Human mobility” as adaptation strategy to climate change includes migration, displacement and planned relocation. The present chapter presented an overview of recent data and research relevant to all those three forms of Human Mobility. Data mostly showed that migration and displacement as result of environmental events have been accelerating in the last decades with land degradation, deterioration of water conditions and infrastructure, new economic and social challenges directly or indirectly linked to climate change representing 17% of the reasons for which people migrate (PIF, UNU-EHS 2015). Displacement numbers have been particularly prominent in the case of Tuvalu, Vanuatu, Micronesia and Kiribati that are the top five most affected countries when it comes to disaster-induced displacement relative to population size (IDMC 2016). Those types of population movements will create a growing number of challenges associated to land and food security, state-sovereignty, and culture preservation. Here again, customary land tenure is of central importance when observing challenges associated to land in the context of climate-induced migration, displacement and planned relocation. Internal migration, displacement and planned relocation is the most important category of human mobility in the Pacific as it is the case for most “south-south” population movements. Indeed, data reveals that international mobility in the context of climate change is minor in comparison to internal mobility and movements are mostly intraregional rather than international making “south-south” mobility the most important form of mobility after “south-north” and “north-south” mobility.

Finally, the last section of this chapter illustrated recent examples of planned relocation in the region including Kiribati, Tuvalu, Solomon Islands and PNG. Firstly, the cases studies revealed that relocation can be either state-based, community-based or led by external stakeholders such as private groups, Foreign Governments, International Organisations or NGOs. The relocation outcomes seem to vary in part according to the way relocation has been approached and by which stakeholder. Funding the relocation process is a crucial aspect of these outcomes and cases such as Carteret relocation clearly reflects on issues related to the lack of funding. This is particularly the case in community driven relocation that is undertaken in some cases after a lack of involvement and funding from the State. The following chapters will provide an analysis of case studies in Fiji and will attempt to shed the light on more specific characteristics tied to each
category of relocation (State-led, Community driven or externally funded). Another observation from those case studies all through the Pacific is the crucial role attachment to place holds in the relocation process. Attachment to land is central and reflected through different means according to the various contexts. At State level, the cases of Kiribati and Tuvalu show that relocation should be only a last resort solution as the population is strongly attached to its land and wish to remain in situ where possible. The Niue Declaration reaffirms this principle and the Pacific values around attachment to land and cultural identity. In the case of the government supported Manam relocation, villagers have expressed their strong attachment to land by keeping a strong bound with their home land.

Lessons drawn from this chapter will help providing contextual background to the Fijian case studies present in the following chapters and allow a comparative analysis with the aim to put in perspective those examples of relocation with the Fijian case studies. We will then attempt to identify some commonalities and differences while drawing conclusions that will help provide information on our main research question; how to best conceptualize planned relocation as adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated to land in the Pacific region? For this purpose, we have chosen cases of planned relocation taking place in Pacific countries with various political and geographical contexts.

Ultimately, this chapter provided a broad introduction to the concept of “Human Mobility” as adaptation strategy to climate change including the Pacific regional context as a whole while introducing the next chapters of the thesis focusing on the particular context of Fiji.
Chapter 5: Climate Change, Planned Relocation and Land Tensions in Fiji

5.1 Introduction

The preceding chapter presented a critical review of the current trends related to Human Mobility as adaptation strategy to climate change in the PICTs region as a whole while this chapter examines the Fijian context. Many of Fiji’s climate policies are drawn from regional initiatives on climate change and Human Mobility such as the Strategy for Disaster and Climate Resilient Development in the Pacific (SRDP) that is the overarching regional policy framework for integrated action on climate change. Fiji is also seen in the region as leader in climate action as former chair of COP23, for offering to provide sanctuary for possible climate migrants from Kiribati and Tuvalu and for hosting regional institutions such as the Pacific Islands Forum (PIF) which are mandated and central to address climate change challenges in the region.

The example of Fiji used in the thesis through this chapter and the field study (see chapter 6) is useful to provide a reflection; firstly, on how customary land tenure systems and legitimate traditional authorities are considered throughout the relocation planning and implementation processes. Secondly, it seeks to propose a reflection on how to optimize land governance and tenure security and create the conditions for a more inclusive environmental relocation framework adapted to the local customary land tenure governance mechanisms. The hypothesis tested through the thesis argues that customary authorities and institutions are legitimate governance actors. In the Pacific region in particular, these leadership structures and traditions form their own governance mechanisms that may be external to those of the “modern” state and legal systems (FAO 2002; Tobin 2008; Farran 2011).

This chapter aims first at providing a critical review of the literature available on land tensions induced by planned relocation in Fiji and addressing the question of how customary land should be addressed in the process of relocation. In order to document and analyze the available literature on the land-human mobility nexus, three key areas are of interest: (1) Land degradation as migration driver, (2) Land-induced displacement and (3) Land ownership and planned relocation. However, the chapter will focus on (3) Land ownership and planned relocation, risk related resettlement and land conflict management in Fiji as central to the thesis research
question, topic and main objectives. Then, will be presented an overview of challenges faced in planned relocation as adaptation strategy to climate change in the particular context of Fiji as well as post-relocation vulnerabilities related to land tensions through two historical cases of planned relocation induced by the environment that took place during the pre-colonial and colonial period in Biausevu and Solodamu villages and two recent cases of planned relocation in Narikoso and Vunidogoloa villages described in recent studies by Charan et al. (2017) and Cleaver and Hutt (2017).

The concluding section will put in perspective common challenges and lessons learnt from these examples of planned relocation in Fiji with examples from chapter 4 that took place in different period and various geographic locations in the Pacific including Kiribati, Tuvalu, Solomon Islands and PNG. This comparative analysis will allow an identification of some trends by drawing out some commonalities and differences and whether or not these can be generalized across the Pacific, including Fiji. This analysis will be useful in providing a contextual background to the next chapter exploring data collected through field study in Fiji. It will also be very useful to draw some lessons at policy level explored in our concluding chapter 7.

5.2 Climate Change, Planned Relocation and Land Tensions in Fiji

5.2.1 Overview of Past and Recent Case Studies

As already introduced in our precedent chapter, historical case studies on environmentally-induced Human Mobility in the Pacific region have been well covered in the study of the Climate Change and Human Mobility nexus. Authors such as Mc Adam & Ferris (2015) emphasized on the relevance to insert historical case studies to inform future policies; “In particular, historical cases of relocation in the Pacific, whether for environmental or other reasons, provide insights and analogies that may be useful for contemporary policy deliberations.”

The table below summarizes the case studies that are often cited in the literature on climate change, planned relocation and land tensions in Fiji. However, until today, little fieldwork has been carried out. In Fiji, there are four case studies on which the theories and concepts of the researchers are based. The table below shows the type of relocation that was used, whether there was land or water related tension and how it had been managed. This table will be useful to address our review of case studies in Fiji analysed later in this chapter.
<table>
<thead>
<tr>
<th>Case study</th>
<th>Type of relocation</th>
<th>Land and water resources induced tensions</th>
<th>Relocation Planning</th>
<th>Central to the case study</th>
<th>Research</th>
</tr>
</thead>
</table>
| Biausevu (1875, 1881, 1950, 1983) | Within land boundaries | No tensions mentioned | - Community leadership critical  
- Community based leaders are central to the decision-making process  
- Cooperation between the communities → shared leadership, culture and land tenure system | - Availability of sites  
- Technology can be helpful for water supply | - Campbell et al. (2015) |
| Solodamu (1970) | Beyond land boundaries (neighbouring village = Natuma) | No tensions for relocates on the new village site/ no formal deed | - Negotiations between traditional chief  
- Courts on land issues: customary claims | - Compensation mechanism  
- Inclusion of all compensation groups (including inter-generational) | - Cagilaba (2005) |
| Nakiroso (2013) | Beyond land boundaries | No tensions mentioned | - Cooperation between Fijian government and Secretariat Pacific Community  
- Community | -Cooperation between Customary Land Owners and the Community was central | Gharbaoui et al. (2016a) |
5.2.2 Findings and Main Trends Arising from the Literature

Pieces reviewed in this chapter have been critically evaluated with a particular focus on their hypothesis, methodology and conclusion. The evaluation of sources was divided by themes but also considering disciplinary perspectives as well as geographical and chronological elements. The results have been framed in the discussion below identifying potential trends, inconsistencies, areas of controversies, methodological challenges and possible gaps justifying the need for future research.

Pressure on lands as a conflict driver

In the context of migration and relocation, conflict and tensions over lands can occur. According to Loode et al. (2009), there are three types of land disputes: land administration disputes, land tenure and ownership disputes, and disputes over boundaries. Land disputes are between customary landowners, customary owners and the government, or between customary owners and foreign or local investors. In the context of Fiji, Mitchell et al. (2015) found that conflicts can arise between the village site land owners, the head of the mataqali (chief of the clan) and the chief of the village. Many conflicts rise in a context of lack or abundance of resources on a land (Barnett 2003). According to Connell (2012), resources are necessary to ensure stability. Some cases of relocation have been a failure because of water and land scarcity (Connell 2012). The loss of access to the sea or the restriction of fishing on the new land for populations that used to

<table>
<thead>
<tr>
<th>Vunidogoloa (2014)</th>
<th>Within land boundaries</th>
<th>No tensions mentioned</th>
<th>- Community initiated the decision</th>
<th>Higher ground available</th>
<th>- McNamara et al. (2015)</th>
</tr>
</thead>
</table>

Trainings organized by SPC and govt
- Community initiated the decision
live on the seashore might become a source of tension (Edwards 2013). The relocation of Biauvesu proved that relocation is not sustainable when access to water is lacking due to a bad geographical position (Campbell et al. 2015). Research insists on the cultural importance of land and the strong relationship people have with their place in Fiji and in general in Pacific island communities. To that extent there are several concepts related to lands that are paramount to understand this social bound. Vanua represents the land and the social system of dela ni yanu, the physical embodiment of the land. On vanua, each family have yavu on which they are building their home, bure. As a consequence, relocations impact vanua, which can lead to a strong feeling of loss and vulnerabilities from the communities. Ravuvu (1988) describes land as “an extension of the self; and conversely the people are an extension of the land”. The loss of lands represents in a way a loss of culture (Gharbaoui et al., 2016b) The feeling of belonging (vanua) overlaps issues of tenure relationships on land. The customary land tenure and the western tenure overlap in Fiji, with 88% of lands being under customary tenure. It means that community leaders allocate lands to the community’s people according to different criteria. Customary land tenure is based on a collective mindset, where the well-being of the community predominates the individual rights and the collective ownership does not allow individual entrepreneurship or attribution of resources (Gharbaoui et al. 2016a: 10).

**Risk of conflict increases with the distance of the relocation**

Scholars have observed that the risk of conflict increases with the distances of relocation. Conflicts are less likely to appear when the relocation is within community land boundaries, whereas international relocation may cause a lot of troubles for relocates. While the land tenure might be the same, the capacity of negotiation of the community is lowered. The land tenure might be the same and the capacity of negotiation of the community is lowered. As most of the lands in Fiji are under customary rights, problems can occur if Fijian people relocate to a place with a capitalistic system (Campbell 2008). Finally, there are, in the literature, a few recommendations on land leadership and the way land and water should be managed in the context of planned relocation.
Recommendations for sustainable relocation present in the literature

Few recommendations have been made to manage land-induced conflict. However, most scholars address some key points for a sustainable relocation. It involves the promotion of a local leadership in the decision-making process, a possibility to create compensation mechanisms to fund the relocation, and to provide land tenure security for relocatees:

(1) **Local leadership within government framework**: Scholars emphasize the importance of customary leadership (land owners and chiefs) in the relocation process. Most lands in Fiji are under the authority of a traditional chief who decides who should benefit from the land. Land owners can also participate in this process. Customary chiefs have the power to negotiate with hosting communities and their chiefs. This offers flexibility and facilitates the arrival of relocatees in the hosting community. Origin and hosting community should also be involved in this process. Relocation should be a bottom-up decision (Campbell et al. 2015), meaning that decisions regarding the when, how or where, should start with the community. While the government of Fiji is taking a proactive role, national relocation guidelines are currently still being developed (Gharbaoui et al. 2016). Yet, it shows a forward-thinking approach from the state to improve relocation policy. The state should frame the relocation, but let the community decide the ‘when, how and where’ (Campbell 2015). According to Mitchell (2016), “customary groups therefore need to be key stakeholders in disaster risk reduction and climate change adaptation decision making”.

(2) **Funding and compensation mechanism**: When the relocation is beyond land boundaries, it should go along with a compensation mechanism for the hosting community. The relocation process represents a huge cost for the community and the government. Sometimes, international organizations such as UN Habitat are involved in the funding. In order to address a fair compensation, social, cultural, spiritual and even environmental costs need to be taken into account (Campbell et al. 2015).

(3) **Providing tenure security**: The relocatees often meet tenure security issues. In Fiji, most relocatees refer to the lack of formal land deeds. It is important to negotiate land for relocated community and ensuring that this land benefits that community in the long run. According to Mitchell et al. (2016), “tenure security is linked to resilience”. In order to have a good relocation
process, the community and the government should work together to provide coherent tenure security frameworks.

Key areas of controversies in the literature

Land tensions related to the relocation process in the context of climate change are still understudied. As a result, controversies between scholars are low. However, a major area of controversy in the literature presents, on one hand, local leadership as key for sustainable relocations using land tenure as an opportunity to address land acquisition and other challenges associated to land. On the other hand, formal institutions and national entities seem to be the main focus of some authors when addressing solutions to those challenges. In both cases, few authors enounce the stakeholders clearly. Local leadership can refer in some publications to the chief of the village, the head of the mataqalii and in others to the village site land owners or the community itself. They do not have the same function and the same knowledge; there is a lack of nuance in defining local leadership in many publications on climate change, planned relocation and land tensions in Fiji. There is also a lack of precision on formal and national stakeholders that should be involved in the process.

5.2.3 Research Gaps and Main Recommendations

- Lack of qualitative and quantitative data

There is a significant gap in the current data on conflict management in the context of relocation and more qualitative and quantitative data are needed to assess land conflict related to relocation.

Most of the research was based on the available literature. Some studies were carried out using qualitative data from NGOs, state actors or International Organization’s interviews. No quantitative studies are available on the subject, except for one (Mitchell et al, 2016), which was, however, more on informal resettlement in Fiji. Even though qualitative approaches are paramount to understand the kind of interactions within or between communities, quantitative studies could help to make a classification of risk for the future relocations.
• **Lands and water availabilities**

Data about the availability of land and water access are paramount to know if relocation is possible or not, taking into account the minimum needs of each community. Such data might also assess if the tensions are a matter of perception or not. Sometimes, scarcity is more a feeling than a reality. Therefore, scientific field surveys assessing the physical risk or the local possibilities for adaptation (before relocation) can turn out to be very useful.

• **Lack of comparative case studies within Fiji**

There are only 4 case studies on Fiji available in the literature. This is not sufficient for good comparative studies, either quantitative or qualitative. Scholars used to take other Pacific island cases to fill this gap. In order to develop further recommendations on planned relocation in Fiji, more fieldwork is needed to assess the role of customary chiefs and communities in both origin and hosting sites.

• **Precision in the terminology**

As mentioned in the introduction, relocation and resettlement as well as conflict and disputes are not to be confounded. For better research, a clear terminology is needed. In order to prevent conflict, one should know what type of conflict arises and what it involves. Tensions between communities can be both passive and aggressive, declared or hidden. Scholars should not neglect the local words used to describe the different types of tension and the wide range of local conflict management from dialogue to informal meetings to ritualised ceremonial activities (Loode and al., 2009).

• **Lack of nuance in the study of the relocation process studies**

Further research should also focus on the different steps of the resettlement processes. Tensions and conflicts can occur both at pre- and post-relocation phases. One should not neglect tensions with communities that want to be resettled but that are not considered for relocation. The role of each stakeholder must be defined at each step of the process for a sustainable management scheme.
• **Mixed knowledge**

Land conflict raises transdisciplinary issues. Most research on the issue derives from Political and Social sciences as well as Geography and Anthropology. There is a need to combine the knowledge and improve the collaboration between disciplines.

• **Non-western research**

Most of the literature comes from westerners and western institutions. Non-western research needs to be fostered for a better understanding of local knowledge of institutions, of the land, as well as of the language and its meanings.

5.3 **Overview of Past and Recent Examples of Planned Relocation in Fiji**

This section provides some examples of village relocation in Fiji. It consists of two past cases (Figure 5.1) and two very recent examples of environmentally-induced community relocations in Fiji with a particular focus on the role that customary land holds in these processes. The final aim was to put those case studies in perspective with the examples of relocation taking place all though the Pacific described in chapter 4 in order to decrypt potential similarities or common challenges faced in different period of time and geographical contexts within the Pacific region.

![Historical Case studies: Fiji Islands](image)

Figure 5.1. Historical case studies in Fiji as independent states and under colonial administration
5.3.1 Biausevu Village

The first example illustrates the community of Biausevu, a village of approximately 150 inhabitants located in the South of Viti Levu Island which was repeatedly relocated between 1881 and 1983 by colonial authorities (Campbell et al., 2005). Relocations occurred following devastating environmental events such as tropical cyclones and heavy rain fall. Initial movement started from Tilivaira to Teagane in 1875, then the community relocated to Biausevu in 1881 and in 1940 from Biausevu to Busadule. The fourth relocation in 1983 was to the elevated site called Koroinalagi (Campbell et al., 2005).

The Biausevu community is linked to several sub-clans (*mataqali,*) and the seat of the high chief of the clan (*yavusa*). The clan’s territory extends around the Biausevu River, including some areas inland and on the coast. The land and its people also called the “Vanua” for Fijians (Tuwere, 2002: 33) is the foundation of the traditional order (Tomlinson, 2015) and relates to a communal form of land ownership based on the custom.

The Biausevu community original site was at Tilivaira fortified settlement located inland on high elevation (ridge). Missionaries following “pacification” of the area advised the first move closer to the coast in lower land at the Teagane site that belonged to the original population of Tilivaira. In 1881, floods following a tropical cyclone led the community to move East uphill to the Biausevu site. Almost sixty years later, a tropical cyclone devastated the western part of Viti Levu in December 1939 forcing the community to relocate in 1940 to the Busadule site, struck again by a severe cyclone (Cyclone Bebe) in 1972. The community was again the victim of flooding, with homes and crops drowned by the storm. While struggling to rebuild Busadule, another, less hazardous and fertile site uphill called Koroinalagi was identified as a potential relocation site. Very heavy flooding in the aftermath of Cyclone Oscar in 1983 precipitated the relocation to take place (Campbell et al 2005).

Figure 5.2 follows the community relocations over 130 years in the Biausevu area where the community relocated several times, within the same clan’s land tenure boundaries and a few kilometres from initial site; this may be referred to as “local relocation” (Campbell et al 2005: 39). Relocating within the same land tenure boundaries simplified access to land and facilitated the relocation process. The role of the community leadership proved critical in negotiating land
acquisition, while the support of community-based leaders proved central to the decision-making process. As Biausevu was the seat of the clan chief (yavusa), cooperation and assistance to relocation was provided by the surrounding villages belonging to the same social structure. The cooperation of the other communities assisting in resettlement effort was mainly possible thanks to shared traditions, culture and land tenure systems. This observation supports the hypothesis in the preceding section that relocations commence as close as possible to the community’s original home, subsequently moving further away as closer options become intolerable.

A key lesson to be drawn is the positive effect of relocating within the same land tenure boundaries, which simplified access to land and facilitated the relocation process; this may be referred to as “local relocation” (Campbell et al., 2005: 39). The multiple community relocations over 130 years in the Biausevu area still occurred within the same clan’s land tenure boundaries and a few kilometres from the initial site. The role of the community leadership proved critical in negotiating land acquisition, while the support of community-based leaders proved central to the decision-making process. As Biausevu was the seat of the clan chief (yavusa), cooperation and assistance to relocation was provided by the surrounding villages belonging to the same social structure. The cooperation of the other communities assisting in resettlement effort was mainly possible thanks to shared leadership structures, culture and traditions, economic ties and land

Figure 5.2. Biausevu Relocation. Initial movement started from Tiliivaira to Teagane in 1875, then the community relocated to Biausevu in 1881 and in 1940 from Biausevu to Busadule. The fourth relocation in 1983 was to the elevated site called Koroinalagi (Source: Campbell et al 2005).
tenure systems. Relocations commenced as close as possible to the community’s original home, subsequently moving further away as closer options became intolerable. However, a number of threats were not alleviated in relocation planning. All attempts were unsuccessful because relocation areas were as hazardous as the origin areas.

Another observation is that all relocation attempts were unsuccessful because relocation areas were as hazardous as the origin areas. The core lesson to be drawn is the importance of site selection; the relocation site should not be another flood-prone area. In today’s context, the PICTs should incorporate climate prediction instruments, land use and environmental data as much possible into such assessments. In addition, the outcomes of this case study suggest the need to consider the role of gender in community relocation. Poor inclusion of gender-specific concerns in the planning process resulted in considerable pressure on women. Daiana Taoba emphasized on some of the issues faced by women in the context of Biausevu relocation with the following observations:

At the initial stages access is often very difficult and often there are no roads and only rudimentary tracks. Often firewood, water, food supplies and children have to be carried up hill, another burden that often falls on women. {… } there is often a lack of infrastructure such as toilets, electricity and water supply which impact on women’s activities. {…} Lack of roads makes transport to markets, often a task conducted by women. (Campbell et al. 2005: 37)

In the context of the Pacific region, women suffer a low status because of their minimal role in relation to land tenure, land management and access (Stege et al. 2008). More attention is merited to develop means to ensure the inclusion of women in relocation decision-making processes.

### 5.3.2 Solodamu Village

The second example of relocation took place in the village of Solodamu, composed of about 100 people divided in 20 families and located on a narrow strip of coastal land on Kadavu Island, the fourth largest island in Fiji. Following a devastating storm in 1959 and several tropical cyclones in the 1970s that caused the inundation of their home site (Cagilaba, 2005), the local chiefs decided to relocate the village onto a hill located two kilometres inland. Access to land had to be negotiated, as part of it was owned by the neighbouring village of Natumua. In contrast to the
example above, the independent and relatively autonomous communities involved in the Solodamu relocation were not from within the same clan and customary land boundaries. Negotiations to obtain permission to relocate were done according to traditional customs and led by the traditional chiefs (Rokocoko, 2006).

On a positive point, the example underlines how traditional methods of negotiation to obtain permission to relocate conducted between hosting and relocated communities can often allow the relocation to take place smoothly (Rokocoko, 2006). However, the relocation of the Solodamu village has since caused several land access issues with some inhabitants.

Tensions grew over time between the two communities. The host community contested the possibility for the relocatees to extend land limits of the Solodamu new village site. To accommodate their growing population, the Solodamu villagers were compelled to search for other land parcels elsewhere. In addition, the younger generations from the hosting community challenged the relocatees’ right to reside in the site of their ancestors, threatening to re-obtain the land through litigation (Cagilaba, 2005). Because land disputes involving customary land are frequent in the region, courts have flexible mechanisms to allow customary claims to be inserted in court cases involving land issues. According to Farran (2011), procedures must accommodate customary claims by allowing “informal” evidence based on hearsay, oral evidence and narratives of genealogies (Farran, 2011).

In the Solodamu example, the claim against the relocatees was based on the lack of formal deed. Such conflict underlines the possibility of inter-generational backlashes between proponents of individual land rights (relying on formal deeds to own land) and proponents of collective land rights (relying mainly on oral ownership). The situation underlines need to profoundly consider the long-term protection of the hosting communities’ land rights, as well as compensation for the previous land holders. The inclusion of all stakeholders, including inter-generational groups, is needed to avoid conflicts over land and to ensure the long-term security of tenure of relocatees.

5.3.3 Vunidogoloa, Fiji (2014)

The village of Vunidogoloa, located in the province of Cakaudrove, was relocated in February 2014, the first village to be relocated under Fiji’s Disaster Risk Reduction Programme. Several decades of gradual coastal erosion had made the site increasingly uninhabitable. In 2006, the
Fijian government, after having been approached by the head of the Vunidogoloa community, confirmed that relocation would take place as an adaptive response to sea level rise. A new site for the village was found 1.5km away, inland and uphill; the process of consultation and negotiation took several years and was finally confirmed in 2012. Attachment to land was a major element that had to be considered in the relocation process. Sailosi Ramatu, head of the Vunidogoloa village observed: “It was not easy for the village community to relocate {…} especially true for older people that had lived in the village all their life, because the land is part of their culture and identity” (United Nations Office for the Coordination of Humanitarian Affairs 2014). The new site, (illustrated in figure 5.3), named Kenani (the Promised Land) by the relocated community, was built to have approximately 30 houses, some fish ponds, farms, and a copra drier (Edward 2013, RTCC 2014). It is notable that community members agreed to move to the new site only once the site was almost finalised and all the houses were completed, as it was crucial for the villagers to move all together as a community (Edward 2013).

Figure 5.3: Vunidogoloa Relocation Project (2014) Source: Hannah Entwisle (Nansen Initiative 2011)

5.3.4 Nakiroso Village (2013)

This example reveals a case of relocation that also took place recently in 2013; the community relocation of the village of Nakiroso, a coastal community of 27 households on Ono Island in Kadavu in Fiji. The community was forced to relocate as sea level rise had severely affected the
area, despite the construction of a rock seawall shoreline in 1960s. The seawall has been gradually eroded, leaving the village under threat of gradual inundation. In June 2011, the relocation option started being considered as sustainable solution after the Nakirso villagers expressed their will to relocate during the Prime Minister Commodore Voreqe Bainimarama’s visit in Kadavu; “While most villages in Fiji were asking for assistance to build sea walls, Narikoso was the only village to request money for resettlement,” said the then Kadavu Provincial Council deputy leader, Jesoni Kuruwaya”(Edwards 2013). The first steps of the relocation were carried out by the Fijian government with the support of several ministries, development partners and regional institutions, led by the Secretariat of the Pacific Community (SPC). Special measures ensured active participation from the Narikoso community (SPC, 2014). Furthermore, land tenure and its implications were seriously considered from the first steps of the relocation assessment phase in April 2013; “A series of surveys and site visits were carried out by the RFMF Engineers and consultations continued with the village community on aspects of relocation like land tenure and emotions arising from displacements.” (Fiji Government 2013). Furthermore, land tenure and its implications were demonstrably considered seriously from the assessment phase, following which a list of recommendations was drawn up in order to facilitate relocation (Pareti, 2013). Among the considerations: Narikoso villagers are furthermore involved in community trainings conducted by the SPC and government experts around integrated farming systems, plant propagation and sustainable land (SPC 2014). The case provides an interesting example of building villagers’ capacities to adapt to climate variation and natural disasters, in recognizing that land management and food security are strongly interrelated.

5.4 Lessons Learnt from Examples of Planned Relocation in the Pacific and Fiji

By putting in perspective some examples of planned relocation in Fiji and cases of relocation all through the Pacific (chapter 4) including Kiribati, Tuvalu, Solomon Islands and PNG, we have identified in this section some trends by drawing out some commonalities and differences and whether or not these can be generalized across the Pacific. These lessons could be used to inform future relocation processes in the Pacific. A number of positive outcomes merit repetition while certain risks to sustainability of these strategies can be avoided to the extent possible. Lessons learnt below will support the main purpose of this thesis that aims to conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy
responses that would address challenges associated with land tensions in the Pacific region.

**Centrality of attachment to place and customary land tenure in the relocation process**

The cases demonstrated the extent to which land tenure and land management are central to relocation processes, in both colonial and post-colonial contexts. Customary land tenure and respect for traditional negotiation processes represent both the key to planning and executing a successful relocation as well as the primary risk to the sustainability of the project.

The example of Fiji provides a reflection firstly on how customary land tenure systems and legitimate traditional authorities are considered throughout the relocation planning and implementation processes. Secondly, it seeks to propose a reflection on how to optimize land governance and tenure security and create the conditions for a more inclusive environmental relocation framework adapted to the local customary land tenure governance mechanisms. As a pre-condition for our primary recommendation, we posit that customary authorities and institutions are legitimate governance actors. In the Pacific region, these leadership structures and traditions form their own governance mechanisms that may be external to those of the “modern” state and legal systems (FAO 2002; Tobin 2008; Farran 2011). Strategies addressing climate change adaptation in the Pacific should include both state-based governance mechanisms combined with customary non-state institutions. In order to combine those two forms of governance, it is necessary to include traditional authorities in the relocation decision-making process. This cannot be done without a deep respect for their view of the world, a profound understanding of how they represent the climate and migration within their belief systems and how traditional knowledge directly addresses those questions.

Customary land tenure systems and governance structures are sometimes presented as constraining factors. As a social system undermined by contemporary government-supported economic and social developments in the context of a globalized world, customary tenure presents barriers to development, cultural and economic integration, citizenship and, implicitly, to the ability of customarily based communities to adapt to ‘modern’ life, its challenges and its opportunities (Fien, Sykes & Yencken 2003: 173). Customary land systems are associated to community cultural cohesion and social norms could therefore potentially be constraints to adaptation in the Pacific region; constraints to adaptation defined as “factors that make it harder
to plan and implement adaptation actions. {…}. Types of constraints to adaptation include {…} social norms, identity, place attachment, beliefs {…}” (Klein et al. 2014: 923).

On the other hand, customary relationships and systems may offer flexibility and solutions to face contemporary challenges. Customary partners provide safe refuge and a support system in case need, in the aftermath of a natural hazard, for example. Land tenure systems may also provide greater flexibility to approach land negotiations when occurring within the same system of tenure, by embedding traditional chiefs and landowners at the centre of the decision-making process (Gharbaoui & Blocher 2016a).

**Loss of culture and community cohesion is a key challenge in planned relocation**

The concerns illustrated above are of particular importance for community cohesion in communities governed by customary leadership and land ownership structures. The relocation of whole communities may be more likely to preserve community cohesion and cultural integrity, implementation of relocation plans is challenging and costly (Bronen & Chapin 2013; Lopez-Carr & Marter-Kenyon 2015). Our analysis shows that loss of culture are unavoidable results of relocation if customary land tenure is not considered at very early stage at the planned relocation process. Considering the positive aspects of migration as ‘way of life’ for Pacific nations as stated in the 2008 Niue Declaration, includes also protecting community resilience that is part of the Pacific cultural heritage. Opportunities to preserve cultural cohesion despite fundamental changes exist when disequilibrium of societal structures adapt by coming back to equilibrium through self-regulation mechanisms as part of cultural heritage (Campbell 2010).

**Traditional channels central in the process of land negotiation**

A key argument presented in the case studies is that traditional channels - with the support of the government, at the numerous relevant levels, and impartial land experts - must be central in the process of land negotiation if there are to be positive relocation outcomes. Sustainable relocation is more likely achieved while land-based tensions related to loss of cultural heritage are likely to be limited and better managed when customary land owners and chiefs are at the first line of negotiations over land with hosting communities and chiefs (c.f. Gharbaoui & Blocher 2016a). We suggest that inserting customary leadership and governance structures (i.e. land owners and
chiefs) at the centre of the relocation process may provide a promising avenue towards overcoming challenges associated with loss of land and cultural heritage.

**Relocation as a last resort solution**

In all case studies including Fiji, the crucial role attachment to place holds in the relocation process is central. The type of land tenure and ownership is therefore central in planning for relocation. The Niue Declaration reaffirms this principle and the Pacific values around attachment to land and cultural identity. In the case of the government supported Manam relocation, villagers have expressed their strong attachment to land by keeping a strong bound with their home land. The adverse effects of climate change are likely to increasingly incite islanders to migrate to cope with threats to their livelihoods however, risks associated with relocations are well established, and it should therefore be considered as a last resort strategy. This is particularly the case in the Pacific where the communities have shown a strong will to remain in situ has been reaffirmed in the Niue Declaration (Barnett & Webber 2010; UNHCR 2014; Lopez-Carr & Marter-Kenyon 2015).

**Funding mechanisms in place for the relocation is critical**

Whether the relocation is led by the State, the community or external stakeholders have implications in terms of funding. Relocating beyond land boundaries implies a compensation the hosting community and land owner(s). The relocation process represents a huge cost for the community, the government or external stakeholders (sometimes, International organizations such as UN Habitat or regional organisations such as European Union or the Secretariat of Pacific Community -SPC- are involved in the funding). However, it is crucial to underline that along with financial costs; social, cultural, spiritual and even environmental costs need to be taken into account.

Because land disputes involving customary land are frequent in the region, courts have flexible mechanisms to allow customary claims to be inserted in court cases involving land issues. According to Farran (2011), procedures must accommodate customary claims by allowing “informal” evidence based on hearsay, oral evidence and narratives of genealogies (Farran, 2011).
The relocation outcomes seem to vary in part according to the way relocation has been approached and by which stakeholder. Funding the relocation process is a crucial aspect of these outcomes and cases such as Carteret relocation clearly reflects on issues related to the lack of funding. This is particularly the case in community driven relocation that is undertaken in some cases after a lack of involvement and funding from the State. The following chapters will provide an analysis of case studies in Fiji and will attempt to shed the light on more specific characteristics tied to each category of relocation (State-led, Community driven or externally funded).

**Relocating to safe sites**

On the other hand, the case studies and the literature demonstrate that care needs to be taken to avoid placing the community somewhere at a similar, or even greater, level of exposure to natural hazards. In today’s context, the PICTs can incorporate climate prediction instruments, land use and environmental data as much as possible into such assessments. Historical cases, such as in Biausevu, showed that it might take years to be able to achieve the sustainable resettlement of communities. Relocation as a strategy to adapt to climate change must therefore begin early and in concertation with all implicated communities. In the cases of Narikoso for example, the relocation was initiated by the affected communities that have approached the Fijian government asking for relocation support. It was also the case for the village of Vunidogoloa located in the province of Cakaudrove that was relocated in February 2014 following several decades of coastal erosion that gradually made the site inhabitable. After a lengthy consultation and negotiation process, a site 1.5 km inland and uphill was confirmed in 2012. Here again, the relocation was initiated in 2006 by the head of the Vunidogoloa community that requested support to the Fijian government. There is an urgent need for Pacific governments to anticipate and identify sites most “at risk” in their country in order to start planning relocation as early as possible.

**Historical perspective on planned relocation is key**

Past examples of planned relocation include examples from Fiji in colonial and post-colonial context. Both the literature and case studies illustrated that for generations Pacific Island communities’ traditional adaptive strategies, culture and practices have included retreating from coastal zones following extreme environmental events. One can point to a number of cases of
significant out-migration, as well as environmentally-induced partial and staggered community relocations, which exist outside of “normal” migratory patterns. Furthermore, many traditional risk management and response strategies have been lost in the post-colonial era, due in part to today’s pre-eminence of “modern” strategies. This loss also applies to strategies of risk-sharing with traditional trading and kinship partners, who are now found across artificial international borders. It leaves exposed communities and specific vulnerable groups with fewer capacities to respond to extreme weather events and the (gradual but permanent and assured) loss of habitable and arable land (as in the case of land subsidence, volcanic eruptions, as well as, for low-lying coastal areas in particular, sea level rise, coastal erosion, saltwater intrusion, and frequent or recurrent meteorological hazards). The result may be the loss of shared social and cultural identities, spaces and meanings; the creation of bifurcated, altered or hybrid identities. Those who migrate find themselves in tension with those who remain and are treated as outsiders or deserters. Some migrants remain anchored to the physical source of a shared heritage, contributing to barriers to integrate elsewhere and perpetuating deep attachment to a literal home that may be disappearing.

Cooperation between relocating and hosting community

The importance of cooperation between the relocating community and the customary land owners of the resettlement site stands out among the points for emulation in the future. Cooperation, collective rehabilitation efforts and longer-term community cohesion are often an extension of existing clan ties or trade relationships. Overall, the sharing of similar institutions of leadership and social structures between origin and destination communities served to facilitate the relocation process. However, conflicts in similar cases are not uncommon. The existence of multiple legal and customary systems today creates vagaries that complicate the decision-making processes around customary land claims. Caution must be exercised when undertaking land negotiations, first to ensure a peaceful process and second to give respect the entrenched practices. Doing so will add to the security of the relocated community’s position. Ultimately cooperation as well as integration of communities are possible and can be facilitated through traditional ties. Communities’ needs must be more implicated in the post-colonial current context that venerates customary land, given the comprehensive and multi-faceted consideration of all parties, in concertation with all implicated communities and with consideration to environmental
and inter-generational effects such as young generations questioning collective land rights of their ancestors. This reality of customary relationships is important to take into account in promoting rights and sustainable development in the region (Campbell et al., 2005). Hosting communities should be studied as much as the community of origin. Researchers must integrate the impacts of movement on the adaptive capacities of both the communities of “origin” and communities of “destination” in their assessments. Lessons from PNG provide an interesting counterbalance to the research carried out in Fiji, primarily due to the trajectory of approach. In order to fully represent the role of mobility (broadly encompassing displacement, migration, relocation and resettlement) as a strategy to adapt to the nefarious impacts of climate change, researchers must integrate the impacts of movement on the adaptive capacities of both the communities of “origin” and communities of “destination” in their assessments (Gemenne & Blocher 2016, 2017). The analysis provides practical insights to substantiate this conceptual foundation. The research carried out in PNG was primarily from the viewpoint of communities originating from Manam Island, over ten years after their evacuation due to a volcanic eruption and ensuing displacement. While this case supports the thesis that integrating traditional leadership structures into relocation and resettlement planning is key, it furthermore shows clearly the limits to this approach under certain conditions. The research was primarily aimed at understanding what adaptive measures have the Manam islanders been more or less able to employ successfully in the context of environmental stress before and since their relocation and displacement. To explore this question requires comparing the strategies of the islanders, a diverse collection of community groups themselves, to those of the “host” community (customary land owners), as well as those that were transferred or are shared.

**Hybrid form of governance** (combining state-based and customary non-state institutions) is key to address challenges associated to land in planned relocation

Strategies addressing climate change adaptation in the Pacific should include both state-based governance mechanisms combined with customary non-state institutions. In order to combine those two forms of governance, it is necessary to include traditional authorities and affected communities to the decision-making process on relocation. Post-relocation vulnerability associated to land-based conflicts, loss of customary land systems and associated culture need to be considered by decision-makers when planning for relocation as adaptation to climate change
in Fiji. It is crucial that more efforts and strategies are developed by the government to ensure the participatory and leading role of customary authorities, local landowners and land experts in the relocation planning and along the relocation process from conception to finalization including monitoring and follow-up. Flexible approaches to land governance are key for dealing with security of tenure. Developing policies optimizing registration of customary lands would be an example of measure that would help to protect the land rights of communities forced to move as result of climate change. Unsecure tenure and issues around customary land titles and ownership including unclear villages boundaries demarcation can increase the vulnerability of relocatees and provide fertile ground for post-relocation land-based conflicts.

**Flexible approach to land governance in planned relocation**

As we demonstrate above, a central constraint in decisions to relocate is strongly linked to the potential for land-disputes at the new site (Mitchell et al. 2016: 60). Participatory approaches to relocation planning are central to overcome this challenge and “disputants are more likely to engage positively with dispute resolution processes, when they have participated in their design” (Constantino & Merchant 1996: 66). Hybrid systems based on both Western and traditional approaches of conflict prevention in Melanesia are increasingly recognised and encouraged to engage with conflict management. Research in conflict management systems is mostly not inclusive of customary processes but mainly uses Western style processes, however, scholars suggest that “customary and Western systems can work together to effectively manage land-related conflict” (Loode et al, 2009:63). In modern-day governance of Pacific Islands and Territories, the administrative boundaries established by nation-states rarely correspond to those of customarily owned and demarcated land. Insecurity of land is often very high following displacement, while land grabbing and eviction has been shown to among the primary fears of affected peoples in the region (Mitchell et al., 2016). Large-scale and long-term funding required for a project such as the Manam resettlement may not always be accessible.

Clear government policies that combine both modern and traditional approaches, informed by regular and extensive consultation with affected communities, are paramount. Before disasters, risk reduction and management strategies must target not only physical safety but must also place emphasis on community cohesion and the preservation of Pacific people’s identity, culture, social and belief systems. Following and in anticipation of displacement risk, protection and assistance
strategies should be sensitive to land tenure boundaries. In many cases, they should be the main borders of relevance when planning for local integration, temporary relocation of communities, and longer-term resettlement. In addition to avoiding loss of cultural heritage as well as conflicts associated to land ownership, this direction will imply much-needed sensitivity to community-based leadership and governance structures necessary for buy-in and the long-term success of any solution to displacement.

In the context of the Pacific, and potentially other customary land tenure systems, protecting and assistance policies should place emphasis on community cohesion and the preservation coherent with customary systems. Given the existence of customary boundaries that cut across modern day states, regional cooperation may be a key fit-for-purpose approach. UN-HABITAT and others in the international community have developed guidance on frameworks for land governance that can be turned to, as they consider the combination of the spatial, legal and institutional frameworks and include key principles such as Good land governance preventing bureaucratic barriers.

Figure 5.4. Manam Island, still spouting smoke regularly, is visible from the beach at Potsdam care centre in Madang Province. The island serves as the cultural, spiritual, and economic centre of gravity for the Manam communities. The inhabitants of the care centres travel there by canoe to bury their dead, to fish, harvest coconuts, and gather timber. (Photo © Julia Blocher, 2015).

5.5 Conclusion

This chapter draws a number of conclusions that could be beneficial to research-based policy making on planned relocations in the context of climate change and its impacts. The discussion attempts to contribute to the literature as an example of comprehensive work comparing different
areas under the rule of customary land tenure, although we make little attempt to directly compare very disparate contexts.

The variety of case study chosen in Fiji and other Pacific countries (in chapter 4) approach the question from different vantage points and, in so doing, expose complementary dynamics that provide insight into the longer-term feasibility of relocations in the context of deeply culturally embedded customary land tenure regimes. The present chapter was useful to provide background information on the particular context of Fiji. The comparative analysis presented in the concluding chapter also provided a series of trends and lessons useful to conceptually frame planned relocation as adaptation strategy to climate change and the role land holds in that process. Both are key to address the next chapter on the field study. The field study will provide data on some recent cases of planned relocation in Fiji at pre-and post-relocation phases in order to add more scientific variables to our conceptual framework on planned relocation with the final aim to address it at policy level in our last chapter (7). As will be further developed in the concluding chapter 7, the lessons drawn above should be used to document future relocation policies. Fiji is taking major steps in setting up such policies, which include finalising a relocation guideline in efforts to ensure cooperative and comprehensive treatment of the social, economic and environment issues of the communities concerned (Edwards, 2013; Pareti, 2013).

The last chapter of the thesis will assess whether those guidelines are inclusive of lessons revealed in our study on planned relocation and challenges associated to land. The Fijian government is also working together with the Melanesian Spearhead Group to develop appropriate strategies to address environmentally induced migration at regional level (Fiji National report, 2013). In the last decade, we have witnessed an increasing number of planned relocation of villages as result of climate change in Fiji. Amongst those, Matawalu and Tukuraki relocation, the case studies that will be the object of our next chapter devoted to the field study, are particularly interesting examples as it provides data at both pre- and post-relocation phase while addressing challenges underlined in our review of examples of planned relocation (Chapter 4 and 5) and lessons identified in our comparative analysis. Lessons from case studies underlined that participation is paramount and flexible approaches to land governance and the concept of borders are key. Locally-based expertise and traditional knowledge are valuable sources of information to develop strategies to address displacement, or, in the case of many Pacific communities, to inform planned relocations. Therefore, perceptions from the affected
community, hosting community, customary chiefs and land owners will be the main focus of our field study as they are central in a comprehensive study of land tension in the context of planned relocation in the Pacific that is the object of this thesis.

This study is particularly relevant and essential in providing more data and theoretical analysis informing policies on the making in the Pacific and elsewhere. In the next five to ten years, 34 to 45 villages are expected to be relocated as result of coastal erosion and sea level rise (RTCC, 2014; Chandra, 2015). In those future relocation projects land and conflicts associated to cultural patterns should be considered as extremely sensitive as reiterated by Colonel Apakuki Kurusiga, Deputy Head of the Ministry of iTaukei Affairs:

“For generations, a community has come to identify with the piece of land they have called home, and in these they have stored their history, their genealogy and their very being {...}. So it is by no means an easy exercise for these coastal communities to leave their “yavu” and relocate” (Pareti, 2013).
Chapter 6: Case Study of Climate Change, Planned Relocation and Land Tensions in Fiji

6.1 Introduction

The previous chapters have provided a series of lessons and reflections on planned relocation in the Pacific and Fiji with a particular emphasis on challenges associated to land. This analysis was useful in providing a contextual background to the current chapter exploring data collected through field study in Fiji in 2017. The impacts of cyclone Winston in 2016, cyclone Pam in 2015, cyclone Evans in 2012 and cyclone Zoe in 2002 have confirmed that intensification and increased frequency of disasters is a reality in Fiji. The destructive impact of cyclone Winston was decisive in making planned relocation a central adaptation strategy in Fiji. In the aftermath of the disaster, the Fijian Government has decided to carry intensive vulnerability assessments for future sites to be relocated and develop national guidelines on relocation. Today, there are 38 to 45 projects of relocation being implemented in the state. As previous chapters have revealed, Fijians have a strong feeling of belonging to their lands that are managed through a traditional customary land tenure system. Therefore, tensions related to land might easily arise during the process of relocation. Managing these tensions is of paramount importance when it comes to organising long-term relocation. By exploring some of those cases of planned relocation on the ground, our field study aims to provide more data on this parameter.

The study has been based on two types of communities in Fiji that, affected by climate change, may need to be relocated. The classification used is based on a categorization developed by Elizabeth Ferris (2012: 4): (1) those living in areas where natural disasters (sudden-onset events) have increased in intensity and frequency (floods, landslides, cyclones etc.), (2) those whose way of life is threatened in the medium-term because of the progressive but unavoidable effects of climate change (salinization water, coastal erosion ...) (Gemenne et al.: 2014) also defined by the Cancun Agreements as ‘slow onset events’ describing “sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity, and desertification” (UNFCCC 2011). Within the scope of this study, slow-onset events mostly related to the Pacific region include sea level rise, salinization, loss of biodiversity and land degradation.
Furthermore, the study focusses on the role of customary authorities, local (impartial) land experts, landowners and affected communities during the relocation process. As key players in land negotiations, this study questions the role of these actors in preventing land tensions in planned relocation based on the hypothesis of "Combined approach of relocation" or "Middle-Ground approach to relocation" (Gharbaoui, Blocher 2016) discussed in chapter 2 (Literature review) and chapter 3 (Methodology). This hypothesis tested all through the research emphasises the central role of land tenure while arguing that customary authorities and institutions are legitimate governance actors that would facilitate the relocation process. The field study conducted tests this hypothesis and goes further by examining perceptions related to land in the context of climate change-induced relocation. Those results will aim to support policy recommendations that will be provided after assessing the policy frameworks currently developing in the region (Chapter 7) and proposing key reflections on how to best conceptualize planned relocation as adaptation strategy to climate change tied to challenges associated with land while addressing currently developing political processes in the region.

The methodology used for this thesis includes an overview of existing academic literature and exploration of historical and recent relocation cases caused by environmental events in the Pacific (Chapter 2,3,4,5). This overview is followed by an analysis of data collected through a qualitative study based on semi-structured, narratives interviews and questionnaires with customary leaders, affected communities, and local land owners (Chapter 6). A combination of western and indigenous methodologies was used to understand the complexity of an approach to relocation that would include both state-based and community-based governance mechanisms. The Vanua Research Framework (VRF) (Nabobo-Baba 2007) was used in order to ensure that the principle of Holism was fully respected.

After providing an overview of the ethics procedures followed (1) and the limitations of the field study (2), the sites studied will be presented (3) through firstly; an overview of the selection criteria used and, secondly, by describing the sites studied, how they have been impacted by climate change and more details on the relocation process. The next section will present the data collection in more details (4) including the methodology used and the main objectives. Finally; the community field study results (5) will be presented revealing key concepts emerging from the study.
The field study continued with a series of semi-structured institutional interviews with regional, national and local representatives that will be addressed in Chapter 7. The institutional interviews had the following goals; (i) understanding how land access issues are considered in relocation planning in Fiji, and (ii) the political processes at work around these issues in the region. The main purpose of these talks was to understand what are the current political processes linking climate change and human mobility being developed in the region and what are the gaps on land governance that should be addressed in future planning? Ultimately, data collected through chapter 6 and 7 will be analysed to help us identify lessons that could be learned to inform future political processes on these issues and finally address our main research questions by attempting to understand how to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land in the Pacific region.

6.2 Ethics

Ethical procedures under the guidelines of the University of Canterbury were followed. I have prepared an application for approval by the Human Ethics Committee (HEC) of the University of Canterbury prior to undertaking my field study in Fiji, I have received approval from the HEC on 06 May 2016.

Prior to each interview, interviewees were made aware of the purpose of the research. Discussing the research aims, data collection, expectations, confidentiality, outputs and opportunities for feedback, prior to seeking participants’ informed consent was essential. In the Pacific a written consent is not a practice, building of trust with communities is crucial, how I engaged with communities was therefore critical as it was key to engage in trust-based relationships. Therefore, I have obtained consent for carrying the study from customary chiefs after having been introduced to the communities and having presented in detail the purpose of my visit. The local Fijian interpreter and cultural expert was present to translate and explain all relevant information about the research to participants. I made sure to inform the communities that I will be sending them at the earliest my thesis’s results as well as the copy of any published article including a study of their village. They were particularly keen about this follow-up and appreciated it.

As mentioned in the ethic form, the present study is a low-risk research. “The research is a
negligible risk research with no foreseeable risk of harm or discomfort. The research involves the use of non-identifiable data. Participants will not be labelled with individual identifiers (the person’s identity will remain unknown) and no specific individual can be identified.” (HEC 2016). Therefore, each interviewee was given the option of being anonymously identified in the research or identified by name.

For interviews at community level, a few participants have requested to remain anonymous while others have provided their name and were even happy to be photographed for the purpose of the research. Some participants, especially the customary chief of Matawalu village, requested their photos to appear in the research for “people to realise how bad the situation is and how the world should react quickly” (Josaia Rakoto, September 2017). On the contrary, Tukuraki villagers were more reluctant to provide their identity. It is crucial to acknowledge that Tukuraki village has had many visitors in recent years due to its exposure to media, particularly during and after the Conference of the Parties, COP23 to the United Nations Framework Convention on Climate Change (UNFCCC) as Fiji was hosting this event in Bonn, German. This level of exposure might have made Tukuraki villagers reluctant to provide their identity as most of them have expressed a strong desire to remain anonymous. Matawalu village has not been exposed as much and at the time of my field study they had received no visits related to the planned relocation of their village. The majority of interviewees from regional, national and local organizations in Fiji requested to not be cited by name in this research. It was particularly the case at Ministerial level at Ministry of Climate change and Ministry of Land where some interviewees preferred their name and position within the Ministry not to be mentioned.

The following principles have been followed all through the field study:

(a) Respect of legislation around research and cultural protocol in Fiji: With the help of a guide and cultural advisor, I have been using Fijian traditional protocol to ask for permission to visit communities and get clearance. I have also followed a traditional Fijian presentation to introduce myself;

(b) I made sure that any of my participants did not get harmed in any way whatsoever;
(c) I have tried to be fair in how I dealt with the people by paying for expenses which I incur rather than burdening them unnecessarily;

(d) I have tried to be culturally sensitive by observing their cultural ways such as respect;

(e) I have avoided any activity or behaviour which is exploitative or manipulative or construed as such;

(f) I have ensured that interviews and any requests were based on informed, free and prior consent.

Back from the field and in accordance with the ethics procedures of the University of Canterbury, the field data has been electronically stored in a password protected file on a server managed by the University of Canterbury and accessible only by the researcher.

6.3 Limitations

There were a number of limitations experienced in this study. First, the sites studied included examples of planned relocation at ongoing or almost finalised (Tukuraki in Ba province), pre-relocation phases (Matawalu in ba province) and vulnerable sites considered for potential relocation (Lami, Savouva and Quaiya village in Rewa central division). The intention at the beginning of my research was to also visit Narikoso in Kadavu province, Vunidogoloa (Cakaudrove province) and Denimanu (Bua province) villages in order to collect more data on challenges faced in relation to land at “post-relocation stage”. However, those villages were located in remote outer-islands difficult and costly to access from Viti Levu. Also, resources like translator and cultural advisor fees, the price of the Kava, (essential in every traditional ceremony when accessing villages), were costly and I had to limit the number of villages I could include in the study for that reason. Indeed, financial and time restrictions were the main reason why I couldn’t include more villages in the study. However, lessons from Narikoso and Vunidogoloa relocation case studies were observed in Chapter 5 as secondary data.
Secondly, the use of a translator can cause issue with difficulty in understanding the true meaning of some responses provided by interviewees. The translator had a strong level of English however, it is essential to mention that there might have been some discrepancies in my interpretation of answers due to the language translation.

Finally, not revisiting the villages studied to understand how the situation evolved through time is another limitation. A longer time-scale study would be essential to understand further the evolution of challenges associated to land in planned relocation. This restrict my research to a semi-ethnographic field study; engaging with the community in a longer timeframe and more extensively would have provided more exploitable data based on an ethnographic study.

### 6.4 Sites Studied

Fiji, spread over 332 islands, is today highly threatened by climate change through change in intensity and frequency of environmental disasters and accelerated sea-level rise (Gravelle & Mimura 2008). Most urban areas in Fiji are located along the coastline where communities will be increasingly vulnerable to rising sea levels and coastal erosion. Flooding is becoming a
persistent issue mostly due to the intensity and frequency of tropical cyclones. Storm intensification is becoming increasingly visible across the Pacific.

On February 20, 2016, the Cyclone Winston (Figure 6.2), classified as a “Category 5 tropical cyclone” was recorded as the strongest storm in history for Fiji and one of the most powerful storms in the Pacific Islands region, more intense than Cyclone Pam in 2015 and Cyclone Zoe in 2002 (Shultz, Cohen, Hermosilla, Espinel & McLean 2016:41).

The consequences of Cyclone Winston on communities already threatened by the intruding sea became an increasingly important issue in Fiji. The cyclone made communities more vulnerable and exposed, forcing many to leave to safer grounds. In the aftermath of the cyclone Winston, at least 63 additional villages were considered as « in need to relocate » following the assessments carried out by the iTaukei Affairs Board, Lands and Mineral Resources Department, Water Authority of Fiji and Fiji Roads Authority officials (Bolatagici 2016).

The Fijian government has identified 830 coastal and riverbank communities at risk of climate change including 45 communities that will need to be relocated within the next decade (Chandra 2015). Some of those communities including Matawalu, Tukuraki, Lami, Qauyia and Suvavou villages have been approached for the field study that aims to collect data at various stage of the relocation process.
**Matawalu, Ba province, Fiji**

The Matawalu village is located in the district of Lautoka in the Ba province, Western Division of the main Island of Viti Levu (Figure 6.3-6.4-6.5). Matawalu has a long history of river flooding and was severely hit by Winston cyclone in 2016 that left some homes completely inhabitable.

*Figure 6.3. Matawalu village, Located in Ba region, in Western division of the main island of Viti Levu, Fiji (Google 2018)*

*Figure 6.4. Matawalu village, located in the Lautoka district in the Ba province (Google 2018)*

The Matawalu community aims to relocate their village uphill by 2020 and, for that purpose, people of Matawalu have developed their “Five Year Development plan” (2015-2020) funded by UNDP’s Pacific Risk Resilience Program (PRRP)42. The plan focuses on seven areas, including
“{…} improving flood prevention; sourcing water with a borehole and tanks and mineral water sources; community health; establishing an evacuation center; developing roadside market stalls; youth workshops and awareness, and finally the planned village relocation.” (UNDP 2014).

Figure 6.5. Matawalu village located at the intersection of Kings Road crossing all of Lautoka and Johnson Road in Lautoka. (Google 2018)

**Tukuraki, Ba province, Fiji**

The village of Tukuraki in Ba, Viti Levu (Fiji main Island, see Figure 6.6 had already been hit by a landslide after heavy rains in January 2012, destroying 50 per cent of the village area and village access to houses, fresh water resources and roads. In December 2012, Cyclone Evan (Category 4) destroyed parts of the remaining village that were not destroyed by the previous disaster (Figure 6.7).
Figure 6.6. Tukuraki village origin site, North-East of Koroyanitu National Heritage Park in Lautoka district, North-West of Viti Levu Island, Fiji (Google 2018)

Figure 6.7. Category 4 Cyclone Evans trajectory; passing near the Ba province, December 2012 (ABC News 2012)

The Tukuraki village Chief, Simione Deru explained that a temporary site was allocated at this time for the affected community that moved to a temporary shelter, but the Fiji Government
labeled the village as subject to future permanent relocation of the whole village due to the risks associated with natural hazards and landslides.

Still recovering from previous disasters, the Tukuraki village was again struck, this time by the devastating Cyclone Winston (category 5), which forced the Tukuraki community to take emergency shelter in nearby caves during the cyclone.
Fiji’s National Disaster Management Office (NDMO) is in charge of the relocation, which is funded in part by the European Union through the Building Safety and Resilience in the Pacific Project (BSRP), supporting the Fiji NDMO to reduce disaster impacts, and is implemented by the Pacific Community (SPC).

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Figure 6.9. Tukuraki villagers take refuge in cave shelter after devastating landslides (Photo: Janet Lotawa).
Lami, Suvavou et Qauiya, Rewa province, central division

The Fiji Second National Communication to the UNFCCC including potential relocation and a ‘list of vulnerable communities per sector affected’ was used to identify the villages of Suvavou, Lami and Qauiya present in the list of ‘vulnerable to water issues’ and foreseen for potential relocation in the future (Figure 6.11).
Vulnerable Communities | Sector
--- | ---
Suvavou | Disaster, Risk, Water, Coastal (relocation?)
Lami | Disaster, Risk, Water, Coastal (relocation?)
Qauiya | Disaster, Risk, Water, Coastal (relocation?)

Figure 6.11. List of vulnerable communities per sector affected in the The Fiji Second National Communication to the UNFCCC including potential relocation.

Suvavou, Lami and Qauiya villages went through a vulnerability assessment from the government in 2003 that identified the sites as potentially needing to be relocated. The sites were also assessed as particularly vulnerable to disasters, risks, water and coastal issues. Different land tenure systems prevail in each village. Informal agreement with land owners is prevailing in Quaiya, in order to occupy and build on the land. There is a different situation in Suvavou village, where the settlement also belongs to the land owners.

Figure 6.12. Lami Village and nearby settlements (Orcheton 2015).

Lami village is subject to less coastal flooding than the other two villages as it is located higher on a hill and is more isolated from the coast with more established infrastructures. There have been tensions about the land ownership of Suvavou and Lami villages. The village of Suvavou was relocated by the colonial government, which moved the inhabitants from Nasese to its current location. Therefore, discussion on land ownership of Lami and Suvavou villages make land management more complex, as arguments on who owns the land, Lami or Suvavou people, are taking place.
6.5 Data Collection: Field Study

*Tukuraki and Matawalu relocation, Ba Province.*

Semi-structured and narrative interviews were undertaken in September 2017 with the aim to gather qualitative data on Matawalu and Tukuraki planned village relocation and land tensions associated to it. The “middle-ground approach” to relocation (Gharbaoui, Blocher 2016) (see chapter 2-3 on literature review and methodology) was used as framework in order to understand the role of customary chiefs, land owners and the community in the relocation process. In-depth interviews with Matawalu’s traditional customary chief revealed that negotiation of land with the hosting community has been initiated at early stages of the relocation process including preliminary negotiations between Matawalu customary chief (and village headman), *Josaia Rakoto* (Fig. 4) and the land owner of *Kavula*, the future hosting site. Semi-direct interviews were also conducted with the people of Matawalu (*n* = 18).

![Figure 6.13. Matawalu customary chief, Josaia Rakoto, and his family (Photo: Dalila Gharbaoui).](image)

Most Matawalu villagers are positive about moving their houses to the new site of *Kavula* that is located uphill and less than one kilometer away from the site of origin. The village headman, *Josaia Rakoto*, explained that UN-Habitat has recently informed him that they will be funding the
relocation of 25 houses. According to the village headman, UN-Habitat has requested him to negotiate the land that will be used for relocation.

The Matawalu village chief is also the customary chief of the nearby land of Kavula (Fig. 6.14) which facilitated the negotiation process with the Kavula land owner. The yaqona (price) was then traditionally presented to the Kavula community asking for their approval to allow the future relocation of 25 houses of some of the affected members of Matawalu village. The Matawalu village headman indicated that the negotiation over the new piece of land was facilitated by following the traditional protocol. The traditional protocol used was a good vessel that allowed smooth discussion on relocation. The prior good relationship between the Matawalu customary chief and the Kavula landowner was another factor that simplified the process. In fact, the Kavula landowner and community members also belong to the same Mataqali (sub-clan) as the Matawalu villagers. This is an important aspect to consider when planning for relocation as it has significantly simplified the land negotiation process according to the Matawalu customary chief that underlined «As I know that native Fijians honour traditional agreements, I believe that we will not face any problems with the Kavula landowner and community in the future». However, the negotiation resulted in a compromised agreement as Kavula landowner and community have agreed to share their land but only if the people of Kavula can occupy 12 of the 25 houses to be built, leaving the Matawalu community with only 13 houses to be rebuilt on the new site.
The Matawalu village headman is now facing the challenge of selecting the households to be moved within his community. As he perceives it, his choice will be based on his own assessment in consultation with the community with an attempt to determine the most vulnerable households that had also proved to be hardworking, reliable and who have contributed well towards the village. At the same time, villagers of Matawalu are discussing which households are the most vulnerable, this selection process is raising tensions within the community and affecting the community cohesion as only one household in the eighteen interviewed did not express the need to relocate and would rather have their house rebuilt a few meters away from their current house. Most other villagers feel threatened by flooding and have expressed that relocation would be the only way to provide their families with sustainable options in the future as protecting the village by building seawalls would be costly and not a viable option according to them (Fig. 6-15).
Figure 6.15. Palm trees described by Matawalu villagers as «seawalls» protecting their homes from flooding by the nearby river. Piles of wood are also regularly added by the community to protect their homes (Photo: Dalila Gharbaoui).

Figure 6.16. River bordering Matawalu village and causing flooding after heavy rains (Photo: Dalila Gharbaoui).
An important aspect, as underlined by people of Matawalu, which made the prospective relocation to Kavula a particularly positive move is the possibility of keeping easy access to their site of origin as well as retaining the ownership of their current houses and farming lands. For some villagers interviewed, this would improve their current living status as a house can sometimes include two households in Matawalu, the relocation would allow each family to reside in one separate house and share the new house in Kavula only when the Matawalu home becomes uninhabitable.

This case study provides some key insights on so-called “staggered” relocation, it reveals that relocating only a portion of the community can be highly problematic and can create tensions affecting community cohesion. Authors such as Zahir, Sarker and Al-Mahmud developed a statistical relocation approach inferring that relocation should target a selected portion of the affected community whilst proposing a local adaptation approach for the rest of the affected people (Zahir et al. 2009: 226–350).

In the case of Matawalu, the decision on households to be relocated has not been taken yet and it is not clear whether UN-Habitat would support this selection process. However, this selection seems to be already highly problematic as it can threaten cultural and social cohesion, at the core of the community’s collective structure.

Figure 6.17. Matawalu village coastline impacted by flooding by the bordering river (Photo: Dalila Gharbaoui).
At the time of interviews, the village chief and people of Matawalu have clearly expressed the need for UN-Habitat to be involved in the vulnerability assessment, in the hope that the challenging decision of who will move and who will stay will be made in a more “scientific” manner (Fig. 9). The chief and the villagers have also underlined that UN-Habitat have contacted the village headman by phone without even once coming to Matawalu in person. This lack of communication is creating more complexity in the relocation process as the lack of clear and regular information is leaving the village with a lot of uncertainties and questions regarding their future relocation. For that reason, both the customary chief and the affected community have stated that the timeframe and the next steps of the relocation process are not clear to them. They are urging UN-Habitat to be involved in the selection of vulnerable houses in order to avoid internal tensions.

Figure 6.18. Matawalu village member and his son in front of a village house damaged by flooding. He particularly insisted on meeting in person people from UN-Habitat to tell them about the will of the community to have a vulnerability assessment carried-out by external stakeholders in order to avoid internal tensions within his community. (Photo: Dalila Gharbaoui).

This case study provided key information on how tensions about land can emerge within an affected community despite using a « middle-ground approach » to relocation, placing traditional chiefs and the affected communities at the center of the relocation process and empowering them early on in land negotiation. Indeed, in the case of Matawalu, the customary chief and the people of Matawalu described pre-relocation tensions within the community mostly due to the lack of
clear communication and information on the relocation process from external stakeholders (UN-Habitat). It is therefore critical that the « middle-ground approach» to relocation is undertaken along with regular and clear communication, information and support from external stakeholders. Regular and personal meetings should be organized where possible in order to demystify the external actors to the community and provide on the ground information to the stakeholders. The case of Matawalu relocation also shed the light on the negative impacts of staggered relocation and the complexity of maintaining community cohesion when only a portion of the community is relocated as already underlined by authors such as Campbell (2010) arguing that “community disarticulation is arguably the most complex part of the displacement and reconstruction process”. This case study provides an overview of those challenges specifically at a very preliminary stage of the relocation process. The centrality of social aspects of relocation was already emphasized by Perry and Lindell (1997) reaffirming that “special attention should be given to social and personal needs of the relocatees {...} (and that) social networks need to be preserved” and Lieber (1977) that developed a historical critique of staggered relocation. The preservation of community cohesion in relocation is particularly crucial in the context of the Pacific region (UNFCCC 2005: 14) and it is critical that external stakeholders ensure that this element is central in any relocation planning, including associated risks resulting from the lack of information and communication. Once the relocation process is initiated, there is a strong need that all stakeholders involved in the process regularly follow-up closely on the village’s needs and support the community by carrying out vulnerability assessments if necessary, in order to avoid pre-relocation tensions affecting, in this case, community cohesion central to the Pacific people.

Tukuraki relocation provided some very interesting data that were either complementing or contrasting with Matawalu village relocation. The relocation of Tukuraki had started but was not finalized yet at the time of the interviews. The relocation was already negotiated but not finalized. The new relocation site for Tukuraki village was identified in February 2014; it was selected after a geo-technical assessment by the Fijian Mineral Resources Department. The new site, at around 60km north of Lautoka, is 10km from its site of origin, and the last 10 homes were ready to move into by July 2017.
The customary chief of the village insisted that the relocation of would allow Tukuraki villagers to be re-unified as a community again. The new site provides villagers with full access to clean water, poultry farms, new homes and infrastructures, retaining walls surrounding the village, an evacuation center and a church.

Land was negotiated first with the Yavusa Taubere (the name of the clan owning the site). The Department of Mineral Resources then conducted a geotechnical assessment of the land and discovered that the soil was flood-prone and unsuitable for building new homes; another heavy rain could make the new village inhabitable again. The Tukuraki customary chief negotiated then land of the Mataqali Yalimara (Figure 6.20- name of the tribe owning the destination site) with the community and their land owners. The site was selected as it has been assessed as “non-flood prone” after extensive testing. The relocation process has been supported by the Commissioner Western’s Office, Ministry of iTaukei Affairs, and the National Disaster Management Office.
The customary chief, Mr Simione Deruru underlined that the Mataqali Yalimara was approached through traditional protocols including talanoa sessions and kava exchange that concluded in December 2015 with the destination site’s Mataqali gifting the piece of land for relocation. The donation of this piece of land meant giving up land that was benefiting to the Mataqali Yalimara as they were getting an income from leasing the land that was used for agriculture. The customary chief expressed contentment in having successfully negotiated the land. He is also very happy that his community will finally be safe and reunified after having been fragmented and living with relatives in different surrounding areas including urban nearby areas for almost 2 years. Again here, the land was accessed and shared through traditional protocols but unlike the Matawalu relocation, this case shows a relocation that allowed to preserve community cohesion while reaffirming their “belonging” as a people to the land and its practice as the whole village was able to relocate to the new site.
The new village is located on a plateau and the old village is visible from the new site. However, the ruins have been overtaken by trees and jungle, and only the church remains almost as it used to be. Josivini Vesidrau, the chief’s wife insisted that for the community there were important emotional costs that were associated with the move by leaving their past on the land where they were born. However, the relocation of Tukuraki has been organised in an inclusive manner with the aim to move the whole affected community all at once to the new site.
Key observations from the field

Data collected for Matawalu and Tukuraki relocations confirms that a middle-ground approach to relocation should be observed in order to avoid land tensions associated to relocation. Placing traditional chiefs and the affected communities at the centre of the relocation process and empowering them early on in land negotiation is key. Indeed, data collected revealed firstly that customary arrangements can facilitate land acquisition in planned relocation as adaptation strategy to climate change. Talanoa sessions were used to negotiate the land as they are common in customary practices in the Pacific history. It is crucial to include an in-depth understanding of traditional protocols and the *talanoa process* in land negotiation and land acquisition while ensuring customary chiefs, land owners and communities are in constant dialogue through this process:

The process of talanoa involves frank expression without concealment in face-to-face dialogue. It embodies our understanding of the inner feeling and experience of who we are, what we want, and what we do as members of a shared community termed the nation. I use the words “frank expression without concealment” precisely because the meaning of talanoa is derived from two different yet related meanings in the languages of Austronesian-speaking people: tala meaning talking or telling stories and noa meaning “zero or without concealment.” Our reconstruction of the meaning of talanoa tells us that it can mean engaging in dialogue with or telling stories to each other absent concealment of the inner feelings and experiences that resonate in our hearts and minds. Talanoa embraces our worldviews of how we can and ought to live and work together collectively and relate to one another as members of society (Halapua 2000)

Furthermore, field study provided key information on how the role of external stakeholders can be highly problematic within the relocation process and how tensions about land can emerge within an affected community despite using a middle-ground approach to relocation, placing traditional chiefs and the affected communities at the centre of the relocation process and empowering them early on in land negotiation. In the case of Tukuraki, the role of external stakeholders was perceived as very positive and their support was highly appreciated by the customary chief and the community. The fact that each stakeholder communicated very well and constantly informed the community about every steps of the relocation process was key. In the
contrary, in the case of Matawalu, the customary chief and the people of Matawalu described pre-relocation tensions within the community as mostly due to a lack of clear communication and information on the relocation process from external stakeholders (UN-Habitat). It is therefore critical that the middle-ground approach to relocation is undertaken along with regular and clear communication, information and support from external stakeholders.

Questionnaires used confirmed this result. Indeed, the LMCM project framework used (see chapter 3 Methodology) on “issues with the potential to cause conflict over the management and use of customary land” was applied to the case of planned relocation through a questionnaire in Matawalu and Tukuraki villages. The aim for participants (n=18 in Matawalu and n=12 Tukuraki) was to rate each of these issues based on their perceptions in the context of planned relocation. The rating was organised as follows:

- a fear of the alienation of customary land (rate 1-10);
- a lack of information regarding the use of land (rate 1-10);
- a lack of input into decisions made regarding customary land (rate 1-10), and;
- an inequitable distribution of economic benefits from the use of customary land (rate 1-10).

Results show that the “lack of information regarding the use of land” was in both villages the issue that was underlined as the most important in their relocation context. In the context of Matawalu, it was obvious that the lack of information from UN-Habitat was causing tensions amongst the community. The use of the land in Kavula was negotiated through the customary chief and the land owner but there were some uncertainties about who will be using the hosting land and how the land could be used at the destination site. The “lack of input into decisions made regarding customary land” was also a crucial issue for Matawalu villagers. After analysing results from semi-structured and narrative interviews detailed above; the lack of input into decisions made about who will move and who will stay might be at the origin of those results. The “fear from alienation of customary land” was more important amongst Tukuraki villagers and minor in Matawalu. It wasn’t very clear to capture the exact reason behind this fear, however, in two narratives interviews, some elements revealed could lead to the conclusion their land has
been contemplated for expropriation and therefore alienation of their customary ownership in the past. Overall, Tukuraki villagers expressed relatively low numbers when rating each category. The main explanation that came up from interviews was that villagers and the customary chief felt more confident about the relocation outcome that they mostly expressed in positive terms. They insisted that external stakeholders were of great support, while Matawalu villagers and customary chief were highly critical on the role of external stakeholders in their relocation process. Something to consider here is the fact that Tukuraki relocation was almost finalised at the time of interviews while Matawalu relocation was still at very initial stage of the relocation process. If the interviews were carried at later stage, probably more unanswered questions would have been clarified with the Matawalu villagers and their chief. Another field study at later stage or a longitudinal study would have been useful in knowing more about this but as explained in the section on “limitations”; there were restrictions on time and resources that prevented the field study to be longitudinal or ethnographic.

Something to note is that both relocations have been considered around the same time, but it seems that Tukuraki relocation attracted quickly more funding, press attention and more visible external stakeholders than Matawalu. Even if it was made clear that the study was an independent and anonymous research, the exposure of Tukuraki might have biased the responses given by villagers and customary chief that understood how any information they would reveal could have been exposed through media and “break” the implicit trust between investors (external stakeholders), Fiji Government and the villagers in the future. Matawalu villagers were not exposed to the press and media; insights revealed by participants seemed overall to be more frank and critical.
Figure 6.24. Results on Average rating from 1-10 on issues with the potential to cause conflict over the management and use of customary land in planned relocation in Matawalu and Tukuraki.

Data collected also provided some key insights into so-called “staggered” relocation (see literature review in chapter 2 to have a thorough understanding of current debates around “staggered relocation” vs. “full relocation”). Results show that, in a context where the land is customary-based, “staggered” relocation is likely to cause tensions that would affect the community cohesion at the pre-relocation phase and that planning for relocation of the whole community is key to prevent those tensions.

After comparing the case of “full” relocation of Tukuraki and the partial future relocation of Matawalu, it was interesting to note that, at the pre-relocation phase, planning for a relocation that would include only a portion of the community can be highly problematic and can create tensions affecting community cohesion. The Tukuraki relocation shows that full relocation is likely to create less internal tension than planning for “staggered” relocation as it is the case for the Matawalu case study. However, Tukuraki relocation underlined that women were particularly vulnerable in planned relocation. Full relocation of the village population would allow cultural cohesion to be preserved, however, in both cases the emotional distress of leaving land behind added to the vulnerability of the villagers. In the case of Tukuraki, women particularly emphasised on that dimension while it was not the case in Matawalu. Indeed, interviews in
Matawalu revealed rather a concern about “staying behind” and not being selected for relocation at the new site.

Directly deriving from the observation above, and after observing the cases of Lami, Suvavou and Qauyia villages, our study also revealed that planned relocation as an adaption strategy to climate change could leave a portion or an entire village trapped in sites assessed as ‘at risk’.

**Three variable categories of ‘trapped communities’** in the context of planned relocation as adaptation strategy to climate change are observed: (i) populations trapped following ‘staggered’ relocation; (ii) communities that do not have the means to relocate and are ‘immobilized’ at vulnerable sites assessed as ‘hot spots’ or at risk by government but not considered for relocation; and (iii) those communities perceiving themselves as at risk but not assessed as such and not considered vulnerable enough to be relocated (see Figure X). Issues around land acquisition in planned relocations are closely tied up with challenges faced by those ‘trapped populations’ who wish to move but remain *in situ*, not being able to relocate. In regions such as the Pacific, where
collective forms of land ownership prevail, involuntary ‘immobility’ often refers to a whole community or part of it.

Semi structured interviews results for Lami, Suvavou and Qauiya show that climate change is threatening water security in their communities through floods, droughts, loss of coral reefs and extreme environmental events having major consequences on coastal areas, fisheries, agricultural production and forests, which are the primary food sources in the region. At the same time, already fragile water resources in the Pacific Islands will be affected by climate change, specifically in coastal and low-lying areas.

**Resource management is highly dependent on access to land** and, in the context of relocation, it is essential to understand how access to, distribution and use of natural resources can be organized in a way that takes into account the land tenure systems and the interests at stake for all stakeholders including the affected and hosting communities. An understanding of land tenure is crucial in planning for sustainable relocation, given that traditional ideas about land tenure and community rights can create complexity when it comes to identifying the right to take, use and manage resources.

Furthermore, starting from the observation of Young (2015) that has identified that conflicts associated with water are inter-related to economic, traditional, social, climatic and environmental changes in the area around Lami River including Suvavou, Lami and Quiya; are centered on two types of natural resource conflicts, intra micro-macro and micro-macro, but are verbal in nature; The questionnaires used the Zeitoun and Warner scale, asking participants to evaluate: (i) current tensions related to water (access, quality and quantity) in the village (Figure A); (ii) tensions related to water (access, quality and quantity) at the pre-relocation phase (cat. 3) (Figure B); and (iii) tensions related to water (access, quality and quantity) in potential future relocation (cat. 4) (Figure 6.26). The Zeitoun and Warner (2006) framework on water conflicts was used to assess and rate perceptions on water tensions in the context of planned relocation as an adaptation strategy to climate change at various phases of the relocation process.

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Scale</th>
<th>Event description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASSIVE</td>
<td>7</td>
<td>Military, economic or strategic support in monitoring and maintenance.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Non-military economic, technological or industrial agreement.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Cultural/Scientific support (non-strategic) – community involvement and engagement.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Official verbal support of goals, values, or plans put forward.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Minor official exchanges, talks or policy expressions – mild verbal support.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Mild micro – macro verbal expressions displaying discord (no action taken).</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Mild intra micro – micro verbal expressions displaying discord (no action taken).</td>
</tr>
<tr>
<td>NEUTRAL</td>
<td>0</td>
<td>Neutral or non-significant acts of conflicts.</td>
</tr>
<tr>
<td>AGGRESSIVE</td>
<td>-1</td>
<td>Strong micro-micro verbal expressions displaying discord with action (protests and lobbying).</td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td>Strong micro – macro verbal expressions displaying discord with action (protests and lobbying).</td>
</tr>
<tr>
<td></td>
<td>-3</td>
<td>Law suits and protesting in streets (mild).</td>
</tr>
<tr>
<td></td>
<td>-4</td>
<td>Use of media for strong protesting and lobbying (mild physical clashes with authorities).</td>
</tr>
<tr>
<td></td>
<td>-5</td>
<td>Rioting and hostility towards governmental ministries and municipalities.</td>
</tr>
<tr>
<td></td>
<td>-6</td>
<td>Fighting, dislocation or high strategic costs.</td>
</tr>
<tr>
<td></td>
<td>-7</td>
<td>Fighting leading to deaths and major damages to properties, infrastructure.</td>
</tr>
</tbody>
</table>

Figure 6.26. Aggressive and Passive approach scale to water conflicts (Zeitoun, Warner 2006).

### Perception on current water conflicts in selected villages

![Perception on current water conflicts in Lami, Suvavou and Qauliya](image)

Figure 6.27. Perception on current water conflicts in Lami, Suvavou and Qauliya.
Figure 6.28. Perceptions on tensions related to water conflicts at pre-relocation phase.

Figure 6.29. Perceptions on tensions related to water conflicts in potential future relocation.
Results from questionnaires show that Lami, Suvavou and Qauiya communities all fall in the rank of the lower parts of the Passive approach towards water conflicts 0, 1 and 2 (see figure 6.27-28-29). Planned relocation is only perceived by 15 percent of the interviewees as a threat multiplier on water security. Furthermore, planned relocation is perceived as an opportunity to minimize existing tensions by 82 percent of the interviewees. Semi-direct interviews revealed also that this is the case, providing that customary chiefs and land owners have a key role in the relocation process and in negotiations about land access. The roles of customary chief and land owner are perceived as central in preventing water tensions in relocation at the pre-relocation phase. The roles of customary chief and land owners are also considered central to avoid water tensions through land access and negotiation with the hosting community. Further research would be needed to determine conditions for getting into a higher score of passive conflicts and aggressive conflicts. Further research is also needed at the ongoing (cat. 1) and post-relocation phases (cat. 2).

Results show that the quality, quantity and accessibility of water are the main points of tension in the context of planned relocation at the pre-relocation phase. Results from ‘vulnerable sites’ not considered for relocation mainly show that the affected population that have current issues related to water quality, quantity and access perceive relocation as an opportunity to address those issues and improve their right to water. **Land ownership and access to land is perceived as central in addressing water issues at the pre-relocation phase** (the Chief has a central role in this).

*Tool developed from field study: “The typology of planned relocation”*

Finally, gathering all results of the thesis and the field study (including both community and institutional interviews) allowed us to develop a **“typology of planned relocation”** (Figures 6.30-31). In order to understand perceptions related to land at different phases of the relocation process, the study focused on environmentally-induced relocation cases (i) that had recently been held or are almost finalized - *Tukuraki*, category 2- (ii) relocations that are under way or will take place soon - *Matawalu*, category 3 and (iii) villages considered by the government as "at risk" and "likely to be relocated in the future’- *Lami, Suvavou, Qauiya*, category -4-.

A categorization of planned relocation didn’t exist until now and had to be framed for the purpose of this thesis. Each individual factor described in the typology needs to be carefully
addressed in studies on planned relocation as it directly impacts the outcome of the relocation process. These include; the environmental context (whether it is a disaster-induced or slow-onset relocation), the relocation approach (reactive vs. preventive relocation), institutional approach (community-driven, state-based or driven by external stakeholders), Relocation strategy (staggered vs. whole community relocation), relocation process stages (Relocation assessment, Decision, planning, implementation and monitoring) and relocation phases (Ongoing, completed, future relocation -pre relocation-, vulnerable sites not considered for relocation and trapped communities). We have only a few aspects developed in the typology; more studies are needed to consider all other aspect of relocation individually.

One of the main results of the thesis therefore includes the below categorization on planned relocation as adaptation strategy to climate change. Hopefully, observations from the field that led to the development of this categorization can be useful for researcher that would like to study planned relocation as adaption strategy to climate change in a more specific and sequential manner in the future.

![Typology of planned relocation](image)

*Figure 6.30. Typology of planned relocations (Gharbaoui 2018).*
6.6 Conclusion

Previous chapters of this thesis revealed that an important element to consider is the strong demand for more appropriate governance mechanisms by Pacific Islanders. Therefore, data collected on perceptions from affected populations and Pacific Peoples is key in this study. It allows the study to derive results directly from local perceptions of the issue. The main conclusions of the study insist on the need to insert customary leadership and ensure it has a central role in the decision-making process on planned relocation.

Partnership and discussions on land acquisition between customary chiefs and land owners should be facilitated as much as possible by the State and all external stakeholders involved in the relocation process that should ensure clear and regular information and communication about land and the relocation process is maintained at every stage of the relocation. There is little research on the land acquisition processes leading a community or part of it to be trapped or ‘immobilized in the context of planned relocation, especially within the Pacific context. Land acquisition is critical in the context of planned relocation in the Pacific, as land that is not under state control should be acquired through customary arrangements that are not regulated through formal processes. This can lead to negative outcomes, such as land disputes based on staggered
relocation leaving part of the village in a flood prone area. The field study revealed that there are many ways to acquire land, including by compulsory land acquisition by the state (also called ‘expropriation’ or ‘eminent domain’). Expropriation in relation to planned relocation and other aims is very political. The expectations are that fair compensation is provided, but often it is not and leads to conflict and court actions. Another way that land can be acquired is by purchase from those with legitimate claims to the land. On customary land, settlement can also occur by a process of agreement with the customary group where the *talanoa process* is key. The results focus on this later type of land acquisition; land acquisition is critical in the context of planned relocation in the Pacific, as land that is not under state control should be acquired through customary arrangements that are not regulated through formal processes. This can lead to negative outcomes such as land disputes based on staggered relocation leaving part of the village in a flood-prone area. The challenges of land negotiation (e.g. agreements with customary authorities), the way that land is accessed, and land acquisition can have a significant impact on planned relocation outcomes. Improving security of tenure and property rights in the process of supporting culturally appropriate relocation of affected people as an adaptation response are essential land tools and governance processes that could be useful to address gaps on immobility in planned relocation. The cases of *Matawalu* and *Tukuraki* reflect on the challenges land negotiation, land access and land acquisition can reveal in the case of planned relocation. Customary arrangements between the land owner of the hosting site and the customary chief of the affected village left a portion of *Matawalu* villagers behind, as land acquisition had been negotiated by the customary chief with the condition from the landowner to leave some of the new housing to the hosting community, which resulted in part of the *Matawalu* community not being able to move. The hosting community was not in such critical need as the *Matawalu* villagers were but improved their housing on this occasion. In this case land acquisition is considered as leading to “the arbitrary displacement of people and a lack of consultation with those who have rights to the land” (Correa et al. 2011). Both *Tukuraki* and *Matawalu* study teaches us that it is important to identify suitable sites and landholders as early as possible to ensure that both the origin and hosting communities have secure tenure. This will allow a participatory process to be followed that respects the landholders’ property rights and customary procedures. The land acquisition process for relocation has, in *Matawalu* study, created a case of staggered community relocation leaving part of the community behind and trapped in a flood-
prone site. This has created tensions among the community as to which households would be able to relocate. Some have expressed the need to have a vulnerability assessment conducted by external stakeholders or the government in order to have someone from outside the community defining which households would be more exposed, most vulnerable and therefore selected for relocation. Participants underlined that this intervention would avoid tensions and disputes over land at the new relocation site, removing the responsibility from villagers and avoiding internal tensions. In the contrary, Tukuraki relocation gave hope and created a strong community cohesion during the relocation process which shows that negotiating for the whole community to be able to access land is key to avoid land tensions. Disruption of cultural cohesion is one of the major consequences of this relocation. This illustrates how mechanisms of land acquisition in the context of customary land ownership should be improved to avoid staggered relocation as much as possible and ensure that the outcome of relocation does not lead a community or part of it to be trapped. Issues associated with land acquisition in planned relocations are closely tied up with challenges faced by those ‘trapped populations’ who wish to move but remain in situ, not being able to relocate. The field study revealed that “trapped population” in planned relocation is a crucial issue in the Pacific and three variable dimensions of ‘trapped communities’ tied to the Pacific context were revealed; (i) populations trapped following ‘staggered’ relocation; (ii) communities that do not have the means to relocate and are ‘immobilized’ at vulnerable sites assessed as ‘hot spots’ or at risk by government but not considered for relocation; and (iii) those communities perceiving themselves as at risk but not assessed as such and not considered vulnerable enough to be relocated.

This new classification has been included in the “typology of planned relocation”. Indeed, the field study also allowed us to frame a categorization of planned relocation that wasn’t present in the literature on relocation until now. A few observations can be made on the relevance of the typology for our study;

Firstly, the typology reiterates again the dual and complementary notion of hybridity constantly present in the study of planned relocation in the Pacific region. Indeed, “externally-based” and “community-based” relocation coexist in the Pacific and are often working together. The category “Institutional Approach” reflects on the various scenarios possible including community, state-based and external stakeholders-driven relocation. The case studies analysis
made in precedent chapters as well as those observed in the field study both reveal that those approaches coexist and are rarely implemented independently in the Pacific. This has implications in term of land governance as very different mechanisms of governance need to coexist. The next chapters will use this notion of hybridity to discuss land governance in the context of planned relocation in the Pacific and discuss how it can be framed in future policy.

Secondly, we have underlined in the “limitations” section that more research would be needed at various phases of the relocation process that were not studied in this thesis (including at post-relocation phase). The “typology of planned relocation” can support research on planned relocation as it distinguishes important aspects and factors that should be studied in future research. This categorization also helps understand that we have studied a very specific and small portion of what constitute the relocation process that is complex and need to be comprehensively addressed in research and policy. Indeed, our study provided interesting insights mostly on disaster-induced cases of relocation based on a “reactive” approach, driven by external stakeholders and by the state. It was also informative on the pro- and cons of using “staggered” or “whole” relocation strategy. Furthermore, the relocation stage studied was mostly focussing on the “planning” phase while the relocation phase observed was category 2 (almost finalised or recently been finalised), category 3 (relocations confirmed but not started or will take place soon) and category 4 (“trapped” communities “at risk” and likely to be relocated in the future but not yet considered for relocation). More research would be needed to study slow-onset relocation, preventive relocation, community-driven relocation, other stages of the relocation process (assessment, decision, implementation and monitoring) and category 1 completed relocation. It would be particularly interesting to study community-driven relocation, the implementation and monitoring phase, as well as the category 1 – completed relocation- that would provide more details on post-relocation vulnerabilities and lessons for future relocations at preliminary phases.

Another finding from the field study underline the extent customary land tenure is key in forming sustainable adaptive response to climate change and how it relates to natural resource management. It is particularly crucial to address this dimension, particularly in the context of the Pacific Islands, as important features such as food security, water access, and social structure directly rely on successful management of land ownership, right to land property and access to land. The study of Lami, Suvavou and Qauiya villages revealed that land ownership and access to
land is perceived as central in addressing water issues at the pre-relocation phase (the Chief has a central role in this).

This research is based on data collected through community and institutional interviews in Fiji. The current chapter presented results from the community field study. The final chapter (7) that will also serve as conclusion to our thesis, presents results from institutional interviews carried in Fiji and at conferences, workshops and seminars. It also explores a review of examples of good practice and refers to concrete processes related to climate change adaptation in the South Pacific region. Results from institutional interviews allowed an in-depth understanding of the political processes at work on climate change and human mobility in the region. Putting in perspective the community study results and those frameworks enabled to answer our main research question; how to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land? This double perspective has also allowed us to provide specific policy recommendations that could serve as a tool for future policy-making in the region while proposing direction for future research on planned relocation as adaptation strategy to climate change.
Chapter 7: Political Processes on Climate Change and Human Mobility in the Pacific Region

7.1 Introduction

The thesis has been designed to present some theoretical results that could also inform policy. Indeed, building bridges between research and policy on climate change and human mobility is crucial to address this pressing issue in a pragmatic and comprehensive manner. Having examined the micro processes on the ground in the previous chapter, this chapter aims to present the main conclusions of the thesis compounded in results from institutional interviews including a series of semi-structured institutional interviews with regional, national and local representatives (n = 11)\(^45\). Key people from these organizations were interviewed with the aim to understand the current frameworks on relocation, as well as how access to land and customary leadership are considered in the process. Those data were collected in order to understand the frameworks and processes currently being developed on relocation in the region and understand how lessons and the conceptualization of planned relocation deriving from the thesis results could be framed within these processes. This chapter also reviews examples of good practice and refers to concrete processes related to climate change adaptation in the South Pacific region. Results from institutional interviews allowed an in-depth understanding of the political processes at work on climate change and human mobility in the region. Putting in perspective the community study results and those frameworks allowed to address our main research question; how to best conceptualize planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land?

Unlike other Pacific Island countries, the Fiji Islands are not threatened by the loss of their territory due to future sea-level-rise. However, they are facing several other environmental problems, such as coastal erosion, land degradation, increased storm surges and salinization of valuable water supplies (Mitchell, D., Numbasa, G., McEvoy, D. 2016). This reaffirms the necessity of considering relocations within the scope of disaster risk reduction efforts. Previous disasters, particularly if there is a lack of anticipated relocation planning, drives post-disaster vulnerability and exposure. In Fiji, most of the population lives near coastal areas and depends on natural resources for a living (fisheries and agriculture). The resilience of coastal populations, hit by recurrent rapid-onset hazards such as typhoons and slow-onset events such as drought and...
land degradation, can be eroded over time. Planning for sustainable relocations in a proactive manner reduces the human and financial costs involved, but it also helps reduce socio-economic factors contributing to vulnerability as well as to mediate exposure to natural hazards which can culminate in life-threatening disaster events. The Cancun adaptation framework under the UNFCCC, the Sendai framework for disaster risk reduction and the work of the Warsaw international Mechanism for loss and damage have all acknowledged planned relocation as an adaptation measure for populations affected by the effects of climate change, with the understanding that it should be done as a last resort (Lindegaard, L.S., Funder M., 2017).

Data collected through institutional interviews and political analysis allowed us to frame this section. Firstly, national processes on climate-induced human mobility will be reviewed including the national initiative on planned relocation undertaken in Fiji since 2014. Based on our results from our community interviews emphasising on the central role of customary chiefs and land owners in land negotiation; we will assess how customary authorities are represented in the relocation guidelines and whether this framework can be an example of good practice at policy level. Secondly, we will review institutional frameworks and policies in place on climate change and human mobility at regional level of governance including regional cooperation with key partners such as the European Union and France. Regional frameworks on climate-induced mobility will be also presented including the Strategy for Climate and Disaster Resilient Development (SRDP) that is the main framework at regional level on climate change and human mobility. The SRDP also includes the issues around urbanisation that does not appear elsewhere in the regional policy agenda. A section on urbanisation will therefore highlight interviews that underlined the need to place discussions on urbanisation currently at the regional agenda. Indeed, political analysis and discussions have been addressing growing inequalities and social tensions emerging from poorly managed cities and rural areas. The rapid urbanisation in the Pacific Islands creates growing pressure on services and infrastructures while intensifying social tensions. At the same time, on one hand, climate change is exacerbating challenges associated with urban food and water security that is directly relying on regional supply chains and regional (as well as national) infrastructure essential to service growing urban economies in the region. On the other hand, human mobility triggered by the adverse effects of climate change is amplifying rural-urban migration directly affected by regional disparities. Finally, sectorial mechanisms on land and conflict prevention at regional level have been explored including the Principles of Land
Management and Conflict Minimization (LMCM) framework and the role of the Pacific Islands Forum (PIF) that is the regional entity leading the discussions on climate-induced mobility in the Pacific region.

The next chapter will serve as conclusion for the thesis. Results from institutional interviews allowed an in-depth understanding of the political processes at work on Climate Change and Human Mobility in the region. Putting in perspective our community study results related to land tensions in planned relocation within those frameworks enabled to provide specific policy recommendations that could serve as tool for future policy-making in the region while proposing directions for future research.

7.2 National Processes on Human Mobility and Climate Change

National political processes on human mobility (other than in the circumstances of evacuation) as a climate change adaptation strategy are at work in a number of Pacific States. We can cite the examples of the National Adaptation Plan of Action (NAPA) and the Joint National Action Plan on disaster Risk Management and climate change that have been blooming in the region over the last decade. Simultaneously, other policies and instruments relating to climate change, disaster risk management and human mobility have gradually emerged in the region: Kiribati officialised the NAPA in 2007 but a series of other policies have been developed subsequently including the National Framework on Climate Change and Climate Change Adaptation (2012), the Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management: 2014–2023 and the Kiribati National Labour Migration Policy (2015). Vanuatu also developed the NAPA in 2007 and nine years later, in 2016. the National Climate Change Adaptation Strategy and Climate Change Disaster Risk Reduction Policy 2016-2030. Cook Island implemented in 2013 the Kaveinga Tapapa, Climate Change and Disaster Compatible Development Policy: 2013–2016. Solomon Islands established the NAPA in 2008 and the Climate Change Policy: 2012–2017 in 2012. Tuvalu officialised the NAPA in 2007 but also the Tuvalu National Strategic Action Plan for Climate Change and Disaster Risk Management: 2012–2016 Tuvalu National Labour Migration Policy in 2015. In 2010, Tonga set up the the JNAP: 2010–2015 as well as the Tonga Climate Change Policy: A Resilient Tonga by 2035. Papua New Guinea only developed the Strategic Program for Climate Resilience in 2012.
Fiji, at the centre of our study, has elaborated a Climate Change policy in 2012 but there was no inclusion of the “human mobility” dimension. Despite having no mention of relocation in their 2012 climate change policy, the Fiji government has been recently showing leadership in planning relocation through the national relocation guidelines. Fiji is at the forefront of implementing concrete political processes on planned relocation and had been developing a national tool since 2014 that will serve as “guideline” for planned relocations in the country. Peter Emberson, Director of Climate Change at Fiji Ministry of Foreign Affairs, underlined at the annual Pacific Climate Change Roundtable (PCCR) (15 May 2015, Apia, Samoa), that a participatory approach in relocation planning inclusive of technical specialists, social scientist and local community experts needed to be inserted into the national relocation guidelines (Pareti in press). However, the guidelines “{…} do not appear to be done in consultation with any potential affected communities” (McNamara 2015:318). It is essential to support, facilitate and coordinate at regional level national initiatives such as the national relocation guidelines currently being developed in Fiji on the basis of lessons learned from past and recent relocations.

The guidelines include a “Planned Relocation Working Group” (PRWG) aiming to ensure the sustainable relocation of affected vulnerable villages in Fiji (Fiji Relocation Guidelines 2018). In carrying out its duties, the PRWG will ensure that a transparent and effective multiparty governance system is followed and that the rights and interests of the Fijian local community are respected. The role of the Ministry of iTaukei Affairs (MTA-) in this working group is paramount, reflecting the interests of customary authorities during three important stages of planned relocation including; Phase 1 (Facilitating Connection with Villages Consultations), Phase 3 in which “iTaukei Lands and Fisheries Commission” (TLFC) within the MTA identifies new sites and Phase 5 during which the MTA safeguards social and cultural values as well as village needs. The Ministry of Foreign Affairs and International Cooperation - MFAIC – and the Climate Change Division-CCD-) are responsible for conducting Phase 2 relocation, including an assessment of the vulnerability to climate change and the emotional well-being of the community in the context of the tensions caused by relocation.

In view of the results of this study, the role of customary authorities, local (impartial) experts and affected communities can no longer be limited to a simple consultative role. These actors must be legitimate and central stakeholders in the development of political processes on the issue of
climate-induced human mobility. National relocation guidelines such as those developed in Fiji are an example of good practices that can serve as a model for other Pacific States.

It is essential to note, however, that follow-up on this initiative would be necessary in the coming months and years in order to determine to what extent and under what conditions the representativeness of customary authorities, traditional leaders and communities will be effectively carried by the MTA and embodied in the relocation process.

As observed in the previous chapter, the case studies explored in the field revealed that Cyclone Winston had a considerable impact on communities in Fiji forcing them to relocate. For its recovery from Cyclone Winston, Fiji government followed the Sendai Framework for Disaster Risk Reduction 2015-2030. This voluntary non-binding instrument recognizes that the State has the primary role to reduce disaster risk, but it also emphasizes that this responsibility should be shared by the local government and local communities as stated in Article 19.(f) : « While the enabling, guiding and coordinating role of national and federal State Governments remain essential, it is necessary to empower local authorities and local communities to reduce disaster risk, including through resources, incentives and decision-making responsibilities, as appropriate” (Sendai Framework for Disaster Reduction 2015-2030). The central role of local authorities and customary chiefs in relocation planning was also clearly underlined by an interviewee from the Ministry of Land in Fiji when discussing an on-going relocation caused by Cyclone Winston in Koro Islands: “The Native Lands Commission (NLC) holds a key role in the relocation process as demarcation of land and maps that are key to avoid conflicts are based on land ownership knowledge. Customary chiefs and land owners hold an equal chair in the NLC” (Fiji Ministry of Lands interviewee, personal communication, 30 April 2016, Christchurch, New Zealand).

This clearly emphasises the need for relocation governance frameworks to include mechanisms allowing hosting and affected communities as well as their traditional leaders to have access to reliable information, in order to enable participation in the decision-making process in an optimal manner (Gharbaoui & Blocher 2016b). Linking this observation to the results of our field study, efforts from decision-makers should also target proactive communication on the various steps of the relocation process as well as awareness-raising on the adverse effects of climate change and induced relocations among exposed or affected communities and their leadership authorities.
Challenges such as translating “climate change” into different Fijian languages and dialects should not be neglected (Janif et al. 2016). The relocation process should also include Faith-Based Organization as much as possible as they play a crucial role in raising awareness on climate change and in convincing communities to be empowered in relocation planning and not passive to the divine will. FBOs can also play an important role in relocation planning as key informant about cultural and spiritual features associated with communities’ land (Ministry of Churches interviewee, 18 February 2016, Wellington). In the same line, involvement of local researchers and local land experts with their input in framing the agenda in terms of relocation planning should be further prioritised, encouraged and considered at the decision-making level in order to address cultural cohesion, loss of cultural heritage and associated tensions limiting adaptation through relocation (Federation of International Surveyors interviewee, June 2016). Western researchers and institutions are still taking the lead on climate-induced migration. It is crucial that traditional knowledge as well as locally-based expertise is valued when planning relocation as perceptions of the environment and environmental change have cultural elements (Gharbaoui & Blocher 2016b).

The relocation guidelines that have been developed by Fiji are another recent example that uses a regional approach at its core. Indeed, the guidelines use the following terms to explain the centrality of a regional approach to relocation;

> “These Guidelines also consider a Regional Approach, in particular when addressing planned relocation related to climate change, due to high probability of potential cross-border movement or integration of people in hosting foreign societies. The Pacific regional approach proves to be a set of comprehensive integration policies, promoting inter-state collaboration, good examples and preventing xenophobia, discrimination, and/or (violent) prejudice of native population against new–comers (migrants). {…} Regional Approach refers to bringing domestic policies in accordance with regional existing norms in order to strengthen the societal values and traditions specific to all regions in the world and to address the need for an inclusive approach for all stakeholders, including civil society, and upon the relevance of “pre-existing cultural and social beliefs about the roles, functions, responsibilities and social standing of different groups within societies, and resulting practices”. (Fiji planned relocation guidelines 2018: 9)
The next sections will focus on regional cooperation and policy on climate change and human mobility that is blooming in the region and that is considered as a model of governance in other regions facing the same challenges than the Pacific.

7.3 Regional governance of climate change and human mobility in the Pacific

7.3.1 Migration governance at regional level

Regional Governance of migration in the Pacific is crucial to create effective environmental migration and development policies that would require timely cooperation between origin and hosting countries. Bilateral, regional and multilateral cooperation is therefore central in the context of migration. The international dialogue on migration in the Pacific Region was initiated for several decades at the Pacific Forum Annual Meeting and the South Pacific Commission (Secretariat of the Pacific Community). Within the region, the SPC and the PIFS are the main regional organization tackling issues related to migration. Some initiatives on migration have already been undertaken in the region such as the increasingly active Melanesian Spearhead Group initiated in 1983 and including a “skill exchange project” between Fiji, Solomon Island, New Caledonia and Vanuatu. The Pacific Immigration Directors' Conference (PIDC) established in 1996, is a forum for Official Immigration Agencies of the Pacific Region enabling discussion between immigration with the aim to foster multilateral cooperation within the region by building and enhancing quality immigration and border management practices within the Pacific region.

Other larger regional initiatives encompassing migration and free movement governance include the Economic and Social Commission for Asia and the Pacific (ESCAP), the Asia-Pacific Economic Cooperations (APEC), the Intergovernmental Asia Pacific Consultations of Refugees, displaced persons and Migrants (APC) and the Asia-Pacific Regional Initiatives on Migration (Bali Process).

Climate change will be a decisive factor in the development of regional frameworks around migration in the Pacific region. The next section will develop in more detail regional governance of climate change in the region.
7.3.2 Climate change governance at regional Level

The Pacific Islands Forum (PIF) Secretariat through the establishment of the Pacific plan is the main regional entity supporting climate governance in the Pacific Region. The organization comprises 16 independent states and harmonizes regional positions on issues related to climate change, migration, land and conflict. Political and legal decisions are taken at the annual Pacific Islands Forum leaders’ meetings. The Pacific Regional Environment Programme (SPREP) is the major intergovernmental, regional organisation in charge of framing programmes managing and protecting the environment and natural resources over the region. The Secretariat of the Pacific Community (SPC) is another regional entity that delivers technical assistance and policy support to 22 Pacific Island countries in areas including such (as health, human development, agriculture, forestry and fisheries.) Another regional organism that supports sustainable development initiatives is the South Pacific Applied Geoscience Commission (SOPAC). Finally, the University of South Pacific (USP) is a major educational institution in the region as it provides education, consultancies and targeted research including in the area of sustainable development, migration, land tenure and the environment. The SPREP has an important role in the face of climate governance as it is the coordinating entity reflecting the region’s engagement with the United Nations Framework Convention on Climate Change (UNFCCC). The PIF has more the role of political leadership and effective resourcing in the face of climate governance in the region, the SPC engages with practical application of adaptation and mitigation measures while the regional research pole is promoted and handled by the USP.

The Pacific Forum Leaders endorsed in 2005 the establishment of the CROP agencies within the Pacific Islands framework for action on Climate Change 2006-2015 (PIFACC)\(^4\) that is the main regional and national climate change governance framework. The CROP agencies are regrouping the following organisations; FFA (Pacific Islands Forum Fisheries Agency), FSMed (Fiji School of Medicine), PASO (Pacific Aviation Safety Office), PIDP (Pacific Islands Development Program), PIFS (Pacific Islands Forum Secretariat), PPA (Pacific Power Association), SPC (Secretariat of the Pacific Community), SPREP (Secretariat of the Pacific Regional Environment Programme), SPTO (South Pacific Tourism Organisation) and USP (University of the South Pacific).
The CROP has been established in order to ensure that external stakeholders address issues related to climate change in the region to a single representative entity seen as an integrated “climate change support team”. The CROP Executives Subcommittee on Climate Change (CES-CCC) jointly chaired by PIFS and SPREP were created in 2010 with the aim to coordinate the work of the CROP agencies. The Working Arm of the CES-CCC (WACC) was set up in 2011 with the role to facilitate interaction among the CROP focal points. The CROP agencies also participate to regional climate change coordination dialogues with international development partners as well as in the biannual Pacific Climate Change Roundtable (PCCR) and the bi-monthly Development Partners in Climate Change (DPCC) meetings.

Within the framework of the CROP, the SPREP’s role is to ensure regional collaboration on needs related to climate change in the region. SPREP also has the role to mainstream climate change into national policies on sustainable development, identifying adaptation priorities and supporting other CROP’s members in carrying out adaptation programmes on the ground. It has also the role of monitoring key donors in the region such as UNDP, the Australian Agency for International Development (AusAID), US Agency for International Development (USAID) and the European Union. Through the SPREP’s 2011–2015 Strategic Plan, the SPREP reflects on the region’s climate change priorities for action to strengthen the national capacity to respond to climate change through policy improvement, the implementation of adaptive measures and enhancing resilience to the impacts of climate change with at the same time promoting initiatives aiming at achieving low carbon development.

The permanent Chair of the CROP is coordinated through the PIFS that supports Leaders’ decisions and regional policy under the Pacific Plan. The PIFS has a crucial role in coordinating the negotiation with development partners including guidance on where development assistance is allocated in the region. The Pacific Plan has been conceived by the Pacific Islands Forum in 2004 in order to strengthen regional cooperation and integration. Climate change is a key priority under the Pacific Plan. The Pacific Plan Regional Framework for Disaster Risk Management, Framework for action 2005-2015 was approved in 2005 by Pacific leaders and has been developed to reinforce the objectives of the Pacific Plan and directly support the development and implementation of policies relevant to environmental management, mitigation and
management of natural disasters. The SOPAC is the entity facilitating the Regional DRM implementation for each Pacific Islands’ country through regional and national mechanisms.

CROP agencies are implementing the Pacific Plan with the aim to improve strategic coordination and existing regional capacities and support national implementation frameworks including the context of climate change. Climate change is a key priority under the Pacific Plan. Each CORP’s agency has inter-linked responsibilities and each individual agency contributes to achieving the overarching goals of the Pacific Plan. Under the CROP mechanism we could also mention the Pacific Islands Development Programme (PIDP 2003:6) that mainly assists the Pacific Island leaders to “{…} achieve and sustain equitable social and economic development consistent with the goals of the people of the Pacific Islands region.” The PIDP support the PIFS as Secretariat for the Pacific Islands Conference of Leaders discussing issues related to climate change, it has also an important educational role by leading training developing tools on improving Pacific Island livelihoods.

Leaders recognized the security implications of climate change at the 1994 Forum meeting where they reaffirmed that “global warming and sea-level rise were among the most serious threats to the Pacific region and the survival of some island states” (PIF 1994). Leaders reaffirmed the urgency of recognizing and addressing the security implications of climate change in the 2013 Majuro Declaration for Climate Leadership and in 2015 agreed on the Pacific Islands Forum Leaders Declaration on Climate Change Action in the lead up to the Paris COP21 meeting. It was not until 2011-2015 that a work program in relation to climate change and security emerged, specifically in relation to better understanding the relationship between climate change, migration and conflict. A research policy brief, “Promoting Human Security and Minimizing Conflict Associated with Forced Migration in the Pacific Region”, was completed in May 2015.

7.3.3 Regional Cooperation on Climate change and Human Mobility

Human mobility as result of climate change in PICTs, as everywhere, is based on a complex decision-making process involving multiple factors. The increased awareness of the States to take action and consider the importance of the linkages between migration, displacement, relocation and climate change has urged the emergence of Global Frameworks and political processes dealing with Climate Change and Human Mobility with, among others, the United Nations
Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), the Sendai Framework for Disaster Risk Reduction, the Advisory Group on Climate Change and Human Mobility, the Global Migration and Development Forum (GFMD), and the UN process towards global compacts for large movements of refugees and for safe, orderly and regular migration, triggered by the 2016 New York Declaration. At the same time, the need for contextualized and differentiated action while addressing cross-border mobility within regions has brought regional consultative processes to rapidly develop in the last decade, including initiatives such as the Nansen Initiative, the Platform for Disaster Displacement, Regional Consultative Processes on Migration (RCPs). Gradually, anticipative measures including retreating from coastal areas and development of population relocation preparedness strategies have become a priority for the region (SREP 2010: 5). At the regional level, relocation has been identified as a main priority for climate change adaptation since 2012 alongside food security, crop improvement, water security, and resilient infrastructure (AUSAID 2012).

President Anote was the first one in the region to refer to Human Mobility as main adaptation strategy to climate change as well as gradual, facilitated international or internal mobility and declaring that; “even a marginal increase in sea level would be disastrous... Warning signs are already appearing... The reality is that we have to find alternative homes. The levels already in the atmosphere cannot be reversed” (Solomon Times 2010). However, Human Mobility as adaptation strategy to climate change should be a last resort solution as underlined by the 2011 Nansen Principles stating that all efforts should be directed towards preventing affected people to move, failing which, towards assisting and protecting the people displaced (Nansen Conference, principle 4). The Pacific regional consultation under the Nansen Initiative concluded that it was particularly the case in the Pacific and planned relocation should be considered if no option is left to the affected population. The Nansen Initiative was undertaken following the adoption of paragraph 14 (f) of the Cancún Outcome Agreement in December 2010 (COP16) recognizing climate change-induced migration, displacement and relocation as an adaptation challenge. The Nansen Initiative was developed based on the outcome of the June 2011 Nansen Conference on Climate Change and Displacement in Oslo with the aim to address the need for a more coherent approach to the protection of people displaced across borders in the context of disasters and the effects of climate change.
Regional governance is key for future governance of climate change and human mobility at the global scale. Climate change will be a decisive factor in the development of regional frameworks around migration in the Pacific region. In the Pacific, regional approaches will be shaped by burgeoning youth population, new political powers – China and others – increased focus on security, climate change, the Melanesian Spearhead Group and the internal politics of Australia and New Zealand. Other regional powers such as the European Union through the key role of France are expanding their cooperation with the Pacific. The next section will provide more details on this cooperation and the role of the EU as important stakeholder in some recent relocation projects in Fiji.

7.3.3.1 European Union (EU)-Pacific Regional Cooperation

We have acknowledged from the field study that the EU has been involved in some important planned relocation projects and has an important role in the region as external stakeholder. Therefore, in order to position the EU within the regional framework at work in the region, it is interesting to first understand the European Union’s relations with the Pacific in the context of climate change adaptation. In the coming decades, Pacific regional institutions will be profoundly reshaping their structure to provide an efficient response to the security threats caused by climate change. Regional and inter-state mechanisms, particularly, are experiencing major transformations that will considerably affect EU–Pacific bilateral relations and cooperation. The EU Strategy for a Strengthened Partnership with the Pacific (2006) and the Pacific Plan for Regional Integration (2005–2010) will need to be reshaped according to the new regional configuration. New approaches based on the Pacific experience will need to be framed to address development assistance but also to enhance the EU–Pacific Island Forum (PIF) political dialogue on regional security and climate change governance and the trilateral Pacific dialogue with Australia and New Zealand on climate change, peace and security in the region. In 2012, Towards a renewed EU-Pacific Development Partnership emphasized the role of the Pacific becoming an “emerging foreign policy priority” for the EU. The climate change impacts on vulnerable low-lying islands as well as its geostrategic importance are making the Pacific a priority in future EU regional cooperation. At the same time, theEU is perceived by the Pacific region as a main global leader in the area of climate change, environment and biodiversity and is also of strategic importance for Pacific regional governance (Laporte 2013). The future of
regionalism is in the making. Europe is undeniably looking at both the Atlantic and the Pacific through the lens of multipolarism and will need to strengthen its position within the EU–United States–Asia triangle, bearing in mind that the future of economic order will be local rather than multipolar, as trans-continental free trade agreements imply huge transport and environmental costs. The combination of multilateralism, localism and global governance mechanisms working in tandem with regional governance seems to be the only viable model in the coming decades. This will be a considerable challenge and Europe will need to be able to find its place in the new configuration (Van Langenhove & Gharbaoui 2015). In this context, the strategic role of the Pacific is more than ever central for the EU, as the Pacific is attracting unprecedented global attention by the emerging economies (BRICs) and the traditional global partners (United States and Japan) that are negotiating their new bilateral relations based on renewed interests, while Australia and New Zealand remain the key partners of the Pacific countries.

7.3.3.2 What Role for French Territories?

This repositioning could also be an opportunity for French members (French Polynesia and New Caledonia) to have a role in the emerging regional dynamics on climate change and relocation. This is particularly relevant in a context favourable to the immersion of French territories in the regional governance of the South Pacific since France is a key partner of the Pacific Islands Forum (PIF) that intends to take the leadership in regional governance of climate change and human mobility (see section…). New Caledonia and French Polynesia that have been associate members since 2006 are now full members of the PIF but also member of the Secretariat of the Pacific Community (SPC), the Pacific Islands Development Programme and the Regional Oceania Environment Programme. For the first time in September 2017, the FIP welcomed French Polynesia and New Caledonia as full members. The Forum now comprises 18 States and territories that will be discussing the major challenges of the coming decades at an annual meeting that puts climate change at the heart of discussions. Since 2007, for the first time, French Polynesia and New Caledonia, have a special status in these regional discussions. The PIF’s decision to integrate them as a full member is an eminently political decision; on the one hand, Pacific States and territories perceive an alliance with France as privileged access to the European Union and consider climate change and human mobilities as a considerable challenge requiring the strengthening of alliance of all Oceania States. On the other hand, at the dawn of
COP 24, it is of strategic interest for France to integrate the ongoing regional processes in order to face together the challenges of climate change. The French State has shown a growing interest to integrate its territories in the South Pacific and has supported the candidacy of Polynesia and New Caledonia within the Forum in order to strengthen France’s position and integrate these two islands into regional agreements, particularly relating to climate change.

Pacific countries are reshaping their regional collaboration to plan and implement adaptation strategies in order to increase their capacity to deal with mobility in the context of both slow- and rapid-onset disasters. There is a strong need to strengthen regional cooperation on adaptation to climate change in the Pacific Region. This cannot be done without inserting French territories in the process and ensuring that the challenges related to climate change are faced by the region with more coherent and harmonized policies to attain durable and sustainable solutions. The reshaping of the Pacific is an opportunity for both France and PICTs to develop mutually beneficial approaches in this new configuration. New Caledonia and French Polynesia are not member parties of the Alliance of Small Islands States (AOSIS) and are therefore not eligible for sufficient adaptation funds from international funding institutions. The vulnerability of SIDS will be undifferentiated, despite the political status of territories. This is of crucial importance for the future of French Territories in the Pacific that will not be spared by the significant impacts that climate change will have on the region.

It is also becoming urgent to insert French territories in the establishment of strong regional partnerships working together towards achieving the objectives of the Pacific Plan on adaptation to climate change adopted at the PIF Leaders’ Summit in Port Moresby in October 2005. Furthermore, the regional integration of French Territories is necessary in planning sustainable strategies to combat the adverse effects of climate change in the coming decades, so the diversity of the region is considered, and more coherent migration models are fostered. It is particularly relevant following the visit of Emmanuel Macron in May 2018 to New Caledonia. The President Macron, during his visit in Noumea reiterated the importance for France to develop a strategy around an “Indo-Pacific axis” and declared: “I believe (...) in the place that this territory occupies in a broader strategy that we must have throughout the region”. He added that the United States had "rather turned its back on the region in recent months” while China was "building its hegemony step by step.” (AFP 2018)
The regional, national and local political processes under development described in this study are true global precursors to human mobility issues related to climate change. To be effective, the French climate strategy must be coordinated with the Island States and Territories of the Pacific region. This action should also be part of the multisectoral regional agreements currently being developed in the region, notably on the protection of people displaced by climate change, but also part of the multisectoral agreements indirectly related to climate issues such as land agreements directly relevant to urban issues. French strategy in the Pacific should include strengthening its position at the regional level while integrating the currently developing political processes in the region. Emphasis should be placed on France’s presence in regional agreements and forums where France was previously absent. This should be done in particular through a strengthening of France’s position within the PIF that is playing a central role on these questions in the region. Therefore, it would be essential to determine how can France strengthen its position within the PIF on questions such as the adaptation to climate change and management of natural resources?

7.3.4 Regional Frameworks on Climate-Induced Human Mobility

7.3.4.1 Strategy for Climate and Disaster Resilient Development (SRDP)

Forced migration is recognized at the regional level of governance in the Moana declaration – Pacific Church Leaders, the Suva Declaration [Para 7], the Polynesian PACT and the Strategy for Climate and Disaster Resilient Development (SRDP) that is, currently, the main framework discussing regional processes on climate-induced human mobility and security in the Pacific. Indeed, the SRDP is likely to be the overarching policy framework for integrated action on climate change. The security implications of climate change and disaster are largely recognised in the document, particularly in relation to four issues: (i) energy security; (ii) food and water security; (iii) migration; and (iv) risk management. This tool is therefore central to the management of land and water resources within the framework of human mobility as adaptation strategy to climate change. For South Pacific island countries, the implementation of the SRDP also contributes to the implementation of global frameworks, including the 2015-2030 Agenda for Sustainable Development, UNFCCC Paris Agreement on Climate Change, the 2015-2030 Sendai Framework for Disaster Risk Reduction, and the accelerated “S.A.M.O.A. Pathway” modalities of action. It is also in the SRDP that the issues related to urbanization appear at the regional level.
Under Objective \{3\} “Strengthened Disaster Preparedness, Response and Recovery”, which emphasizes the importance of “paying particular attention to the resilience of urban spaces”. Urbanisation does not appear elsewhere in the regional policy agenda. In this context, multi-party partnerships can mean building coalitions between different government sectors and communities to ensure that the issue is on the political agenda. Indeed, one of the outcomes of the Pacific Urban Forum in 2015 was to use existing regional policy frameworks, such as the Pacific Regionalism Framework, as entry points to strengthen policy engagement on the importance of addressing urban challenges in the South Pacific.

### 7.3.4.2 Regional Agenda on Urbanism

Interviews underlined the need to place discussions on urbanisation currently at the regional agenda at the centre of our study. Those discussions have been addressing growing inequalities and social tensions emerging from poorly managed cities and rural areas. In the last decades, urbanisation growth rates have been important in the Pacific region; one in four people live in urban areas, and 12 out of 22 Pacific countries have higher urban than rural habitants (Mitchell, Orcherton & Numbasa and McEvoy 2016). Figure 7.1 below illustrates the urban growth all through the Pacific region. The rapid urbanization in the Pacific Islands creates growing pressure on services and infrastructures while intensifying social tensions. At the same time, climate change is exacerbating challenges associated with urban food and water security that rely directly on regional supply chains and regional (as well as national) infrastructure essential to service growing urban economies in the region. On the other hand, human mobility, triggered by the adverse effects of climate change, is amplifying rural–urban migration directly affected by regional disparities.
Figure 7.1. In Fiji and the Pacific region, there has been an important increase in urban growth over the last two decades (Mitchell, Orcherton, Numbasa and McEvoy 2016).

As underlined at the workshop on the regional implications of urbanization organised by the Australian National University (ANU) and the PIF Secretariat in December 2017:

> Local action alone cannot address urban opportunities or challenges which often range across sectors and levels of government. … Coordinated local to regional action is needed to harness the development advantages of cities. The value of considering the wider impacts of urban management is clear when examining how urban policy and programs affect national and regional resilience. … The high concentration of people, communication networks and valuable infrastructure in cities can result in extensive human and economic impacts following major climate events. Regional agencies, working in collaboration with local, national and international bodies, are well placed to leverage the convening power and resources of initiatives such as the United Nations Sustainable Development Goals (SDGs), the 2016 New Urban Agenda, international climate funds and assistance, and ADB programs aimed at moving from urban risk to national resilience (Keen & Bryar 2018:3).

Therefore, regional governance here has an essential role to play, as regional entities working in cooperation with local, national and international levels are key to addressing in a comprehensive manner growing land and water tensions associated with climate change and human mobility illustrated in this article. This approach taken through the scope of urbanisation emphasizes the urgent need to consider regional governance as key in future policies and frameworks addressing...
urban–rural challenges associated with climate-induced migration in the region. Such an approach is echoing the conclusions of some preliminary results directly derived from the most recent research on land and climate-induced human mobility in the Pacific region from both political science and law perspectives (Mayer 2013; Cosmin 2017; Gharbaouï & Blocher 2017, 2018).

Is the regional agenda on urbanism an opportunity to address climate-induced human mobility and associated land challenges? Future policies on human mobility as adaptation strategy in the Pacific must include this essential dimension and integrate the regional agenda on urbanization which is a new opportunity to respond to the challenges related to human mobility and climate change in the region.

### 7.4 Regional Cooperation on Land Security

#### 7.4.1 Principles of Land Management and Conflict Minimization (LMCM)

Evidence-based research could be a starting point to support current developments in land management and conflict in the region and ensure that it is considered within frameworks and discussions on climate change and human mobility in the region. This is particularly relevant in a context where the main initiative around land security regionally undertaken by the Pacific Islands Forum Secretariat (PIFS), “Land Management and Conflict Minimisation Project” (LMCM), endorsed by the Forum Regional Security Committee and the Forum Officials Committee in 2006, did not include the issues of climate change and human mobility and has not been inserted into regional frameworks. As a result, there is no regional framework on land governance in the Pacific that is comprehensive and inclusive of tenure security and cultural aspects of customary land tenure in the context of climate change and climate-induced human mobility.

LMCM aims at understanding inter-linkages between land management and conflict minimization combining approaches related to conflict prevention and economic development. In 2008, this initiative has resulted in 10 sub-projects reports all drawn into a synthesis report focusing on “Improving access to Customary Land and Maintaining Social Harmony in the Pacific”. The report resulted in 12 guiding principles and an implementation framework providing governance in land management and planning to the Pacific Island Forum States and at
the same time promoting an approach to land that would minimize land-related conflicts in the region. This initiative reflects on the first important regional efforts aiming at inserting concerns on customary land tenure into conflict prevention tools at an institutional level. It is also the first time that customary land tenure is officially associated with environment and conflict within a regional framework. It is essential to ensure that adaptation strategies to climate change include customary land tenure as the unique unifying cultural elements of the region inherited through ancestral local tradition. However, in the framework of this research, it is interesting to observe that the LMCM initiative includes only one report linking environment and land (“Environmental Causes of land-based conflict”). Furthermore, the review on environment and land includes only four countries in the region, namely Fiji, Solomon Islands, Tuvalu and Vanuatu. The LMCM initiative mainly takes an approach related to conflict prevention and enters the framework from a security perspective. Therefore, the land–environment–conflicts nexus started to be considered regionally but there is a strong need to develop a regional implementation framework and guidelines including the land–environment–migration nexus and incorporating human security issues associated with local adaptation strategies.

Since the Australian government developed its own “Making Land Work” framework for the Pacific, LMCM has not been extended to current issues relevant to climate change, human mobility and tenure security. LMCM was partially funded by AusAid and did not get more funding after “Making Land Work” was founded. Since then, Food and Agriculture Organization (FAO) has been working directly with countries individually though Secretariat of Pacific Communities (SPC) to promote land tenure principles existing in the “Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security”. The ANU regional meeting that took place in the beginning of 2018 on “Land and urbanization as regional issue” was an opportunity to promote LMCM’s next stage and stakeholders wanted to bring the climate change and human mobility nexus in the regional agenda at this occasion. However, it was not pushed forward, and future frameworks will need to address this dimension. Furthermore, there is a strong need to extend the scope of current similar regional efforts and to develop region-specific adaptive frameworks that will be necessary to deal with the future threat of climate change in the region.
7.4.2 The Role of the Pacific Islands Forum (PIF)

The Biketawa Declaration (2000) and the Human Security Framework for the Pacific (2012-2015) highlight the need to address the underlying causes of conflict as key conflict prevention strategy. In this context, planned relocation as a climate change adaptation strategy and associated land issues are the main underlying causes of conflict. The Council of Regional Organisations in the Pacific (CROP) and its Land Resources Working Group is the regional coordinating body on land issues. The Group, specialising in technical components related to land use policy, agriculture and forestry, still needs to improve its security and human rights axis.

The PIF aims to play a new role by strengthening the human rights and security components of the CORP Working Group on Human Rights and by introducing the link between human mobility and the environment through the creation of a multi-program internal working group (e.g., working group including conflict prevention, human rights, gender, disability, economic governance, natural resource management). This would suggest the participation of a representative of the FIP in the CORP Working Group.

Given that land reform is currently a priority for number of FIP members, it is urgent to promote and support an appropriate set of regional guiding principles to help governments prevent the escalation and emergence and emergence of land conflicts associated with climate-induced mobility. To this end, the CROP Land Resources Working Group provides an appropriate mechanism for coordination. The evaluation of policy initiatives related to land management and conflict minimization at the regional level emphasizes the preponderance of the Pacific Islands Forum (PIF). The PIF is now trying to bring land management back into the Forum’s security program while developing the LMCM project by adding new dimensions based on the current challenges facing the region.

7.5 Conclusion

An increasing number of authors argue for regional governance to be a potential successful pathway to address climate-induced human mobility in the Pacific. This argument echoes institutional interview results from this study. Indeed, results reveal that drawing a regional model of governance is challenging in the context of the Pacific region, where the level of resilience to climate change is diverse and varies according to the geographical and political
context. Furthermore, the high diversity of land tenure systems and customary-based mechanisms is particularly complex. The regional level of governance offers particularly interesting alternatives for dealing in a contextual, politically and culturally sensitive manner with adaptation to climate change and human security. There is a growing international recognition that regions are best placed to engage with culturally inclusive approaches to solving new security challenges involving climate at the front line. Furthermore, in regions such as the Pacific, ‘hybrid models’ of governance, including both formal and traditional governance mechanisms, are essential to address climate change adaptation in a sustainable manner. Developing a model of governance at national level would not be exportable to other Pacific countries, as each country holds specific features related to their particular political, security and customary systems. Most innovative approaches addressing new security threats associated with climate change in the Pacific region should be addressed at the regional level of governance, as it is the most appropriate form of governance that would at the same time deal with security in an efficient way while allowing some space for the preservation of Pacific cultures and traditional systems specific to the region. Gradually, anticipative measures, including retreating from coastal areas and development of population relocation preparedness strategies, have become a priority for the region (SPREP 2010: 5). At the regional level, relocation has been identified as a main priority for climate change adaptation since 2012, alongside food security, crop improvement, water security and resilient infrastructure (AUSAID 2012). However, human mobility as an adaptation strategy to climate change should be a last resort solution as underlined by the 2011 Nansen Principles, stating that all efforts should be directed towards preventing affected people to move, failing which, efforts should be towards assisting and protecting the people displaced (Nansen Conference, principle 4). The Pacific regional consultation under the Nansen Initiative concluded that it was particularly the case in the Pacific and that planned relocation should be considered if no option is left to the affected population. The Nansen Initiative was undertaken following the adoption of paragraph 14 (f) of the Cancún Outcome Agreement in December 2010 (COP16), recognizing climate change-induced migration, displacement and relocation as an adaptation challenge. The Nansen Initiative was developed based on the outcome of the June 2011 Nansen Conference on Climate Change and Displacement in Oslo, with the aim to address the need for a more coherent approach to the protection of people displaced across borders in the context of disasters and the effects of climate change.
Results of this study reflect on a central argument around the need to find a middle ground between international approaches, that are difficult to practically implement, and restricted national options. Regional governance provides a promising venue to address specific challenges and cultural features the regions hold. In the same line, this research suggests that land management in the context of climate-induced relocation in the Pacific would highly benefit from a strong and coherent regional framework that would support national and local governance specific to each country. Customary land tenure processes (directly conditioning water access and security), specific to the region and their implications for climate-induced human mobility, would be better addressed by enhancing and adapting already existing frameworks around land and conflict prevention in the region.

This option would avoid the bias of disconnection between international discourse and regional specific challenges the region has been dealing with for decades. Regional governance also allows preserving ownership on the, often recuperated, issue of climate change. This argument has been already strongly advanced specifically on environmental migration by authors such as Benoit Mayer (2013), who underline the role of regional governance as key to avoiding the disconnect bias. Mayer (2013) also argues that regional organizations should be considered major players in coordinating and planning policies on forced displacement and climate change, as governance of environmental migration is most likely to succeed within a regional framework. Similarly, Angela Williams (2008) considers regional entities as able to provide an “alternative system” to states acting in isolation: “[a system] may be better coordinated by way of regional agreement, operating under an international umbrella framework” (517). Mayer (2013) also argues for a multilateral discussion and “a home-grown” legal approach of environmental migration in the Asia-Pacific that would strengthen the region’s growing diplomatic roles and demonstrate their ability to develop liberal forms of transnational governance. Regional organizations, allowing regional ownership of climate action, multi-stakeholder cooperation across countries and promoting policy coherence are increasingly considered, in both the literature and at policy level, as best placed to assist governments in providing policy support on climate change and human mobility (Barnett & Webber, 2010; African, Caribbean and Pacific Group of States -ACP- 2011; Blocher & Gharbaoui 2017).
Multi-level cooperation placing the regional level as “umbrella” is key to coordinate policy on climate change and human mobility and local coordination is essential to avoid injustices. The Ministry of Lands and the Ministry of iTaukei affairs (overseeing provincial councils headed by Roko Tui, the provincial chief that have the responsibility to protect the land and organise the interests of indigenous Fijians49) are well-represented and have a key role in the Fijian National Guidelines on Planned Relocation. This can be considered as good practice and could be replicated in regions of the world that face similar challenges while approaching land through both collective and individual ownership systems. However, the role of the National Relocation Taskforce Committee (NRTC) present in the draft of the National Guidelines is also central but disappeared in the second version that has been published in 2018 (GoF, 2018). The reasons for this suppression should be investigated and more research is needed on that particular area as our study revealed that there is no viable model of planned relocation governance in the Pacific without local coordination as customary land mechanisms and arrangements are specific and highly vary according the various contexts in the region.

The next chapter will shed the light on the main conclusions of the thesis including a conceptualization of planned relocation as adaptation to climate change based on the main trends and lessons identified by the study. Putting in perspective our community study results related to land tensions in planned relocation within the political frameworks identified enabled to provide specific policy recommendations that could serve as tool for future policy-making in the region while proposing directions for future research.
Chapter 8: Conclusion

8.1 Summarizing the results

While there is a growing body of literature on land tenure and climate change, less attention has been paid to the implications of customary land tenure in planning for relocation as an adaptation strategy to climate change. There is still a gap in understanding cultural needs related to land governance in relocation in the Pacific, while there is a strong need for a coherent framework including a solid understanding of the conditions for improving tenure security directly contributing to improve water and food security, and cultural and social cohesion in the context of planned relocation. Furthermore, there is a lack of study on current and future island migration patterns related to land tenure, regional relocation trends and land-based conflicts in the context of increasing environmental pressure. As seen in Chapter 2 (Literature review), there is a major gap in the understanding of the limits to adapting to climate change through community relocation (Campbell et al. 2005; UNHCR 2014; Gemenne & Blocher 2016, 2017). The issue has received limited scholarly attention as compared to migration and displacement in response to climate change (Lopez-Carr & Marter-Kenyon 2015). Good governance and best practice addressing limits to adaptation should include this dimension. Our thesis contributes to fulfil this gap by identifying the limits to adaptation in relation to the loss of land and cultural cohesion taking Fiji as case study.

The preceding chapters allowed us to confirm our main hypothesis; customary authorities and institutions are legitimate governance actors holding their own governance mechanisms in the Pacific region. Strategies addressing land tenure governance and relocation as adaptation to climate change in the Pacific should include both state-based governance mechanisms combined with customary non-state institutions. This cannot be done without a deep respect for their view of the world, a profound understanding of how they represent climate change and migration within their belief systems and how traditional knowledge directly addresses those questions.

In order to understand how to include those two forms of governance in relocation as adaptation strategy to climate change, it was necessary to understand what role traditional authorities hold in the currently developing decision-making process on relocation.
One of the key strands of the thesis is how to best conceptualise planned relocation as an adaptation strategy to climate change in order to develop appropriate policy responses that would address challenges associated with land tensions. Key results from this study underline the need to reframe the role of traditional and non-traditional community leadership in planned relocation based on the "middle-ground approach to relocation.” Beyond participation and consultation, the role of traditional and non-traditional community leadership should be central and active in the relocation process. The thesis proposed a re-conceptualization of the role of traditional authorities in the relocation process. Traditional and non-traditional community leaders should be at the center of decision-making on relocation in order to avoid pre and post-relocation tensions associated to land. The thesis proposed a model that redefines the role of traditional leaders currently limited to consultation and participation. It argues that, while the national relocation guidelines developed by the Fiji government could be considered as an example of good practice, current relocation frameworks are not inclusive of this dimension and this may increase the potential for pre-relocation tensions associated with land. It also demonstrates through an empirical study undertaken in Fiji that the risk for tensions associated with land at the pre-relocation phase is high when leadership is not considered as central in the decision-making process on planned relocation.

As we have observed in previous chapters, forced mobilities as a result of climate change will lead to growing challenges threatening Pacific Islands’ security through issues such as land and food security, state-sovereignty and culture preservation. Promoting the integration of natural resource management and customary tenure into South Pacific regional governance is central to the results of this study in a context where the impact of climate change is increasingly visible in the region. Furthermore, it is essential that those frameworks include the central role of customary leaders and land owners while considering ‘perceptions’, ‘immobility’ (or ‘trapped population’) and ‘resilience’ as central concepts to address and frame planned relocation as adaptation strategy to climate change in the region.

Pacific governments have shown reluctance to choose customary land as selected site for planned relocation in order to avoid associated land-based tensions (Nansen 2013). However, most of the land available for relocation in most Pacific countries such as Fiji is customary-based. One may argue that it is possible to reduce limits to adaptation in planned relocation and risks associated
with land linked to the erosion of cultural cohesion. Successful relocations must integrate: criteria for societal well-being, livelihood or subsistence activities, community cohesion and cultural integrity (Bronen & Chapin 2013; Gharbaoui & Blocher 2016a). To do this, customary authorities, impartial local land experts and affected communities, as key stakeholders in land negotiation, should have a leading role in decision-making related to the relocation process. They should therefore be legitimate and central stakeholders in the National relocation guidelines developed at the state level in Fiji.

The field study intended to understand firstly to what extent customary land tenure is key to forming a sustainable adaptive response to climate change through migration in the Pacific region and how it relates to natural resource management. It is particularly crucial to address this dimension, particularly in the context of the Pacific Islands, as important features such as food security, water access, and social structure directly rely on successful management of land ownership, right to land property and access to land. The study revealed that an important element to consider is the strong demand for more appropriate governance mechanisms by Pacific Islanders. Data collected on perceptions from affected populations is key in this study. It allows the study to derive results directly from local perceptions of the issue. The main conclusions of the study show the need to include customary leadership and ensure it has a central role in the decision-making process on planned relocation. Furthermore, the study reveals that there is a strong case to be made about regional cooperation to take the lead in developing inclusive frameworks on climate-induced human mobility in the region. These conclusions are in line with the Niue Declaration and the need for Pacific Peoples to keep ownership of the solutions to the issue of climate change often recuperated by external stakeholders. This addresses the lack of cultural relativism highlighted in recent research on land in the context of climate-induced mobility (Gharbaoui & Blocher 2016, 2017), while promoting research incorporating Pacific values. Indeed, results of this study emphasise the need to promote local researchers and research reflecting local knowledge. This gap has been well-articulated by Mayer (2013), who argues that many proposals for global legal governance of environmental migration have recently been published, almost exclusively by Western scholars, and denounces:

… the geographical and intellectual disconnect between descriptive works on environmental migration as a phenomenon and the normative studies on the developments
in law and governance. … this disconnect has resulted in a post-colonial approach towards tackling environmental migration, which could impede the protection of environmental migrants (Mayer 2013: 2).

Furthermore, decision-making should further prioritize Pacific Islands values in order to promote the sustainable, equitable and spiritual development of the region. The disconnect between stakeholders (resource users, developers, policy makers, communities) and the lack of information about climate change impacts tailored to people’s needs should be seriously considered in future regional strategies on adaptation to climate change.

The theory of hybridity (Corendea 2007) used to explore our results was very useful in revealing that hybrid political governance including traditional and Weberian political forms of governance seems to be an important path that would allow for climate-induced mobility to be planned in a sustainable manner that would allow inclusion of the unique cultural and traditional features of the Pacific region. The main challenges would be to define how it might be possible to combine different kinds of political approaches to strengthen resilience to climate change through migration while generating peace, security and structural stability for the next generations. Without developing models of climate governance based on political hybridity in the Pacific, customary-based governance mechanisms may not be sustainable and conducive to peace. Indeed, “Existing structures that have provided a certain degree of efficiency in the past have the greatest potential to implement new concepts and instructions successfully, since their chances of being accepted by the population are high” (Worliczek and Allenbach 2011, 152). What are the most effective ways of using both forms of governance when planning for relocation to avoid land tensions between relocatees and hosting communities? The thesis argues that one way of approaching this is retrieving past and recent/current example of environmental-relocation “good governance” through customary mechanisms in the region. Those approaches should be based on local practices and include community-based systems in order to be sustainable and respect the diversity of the region where customary structures constitute an important part of the land tenure. The diversity of customary land rights in the Pacific Island region makes relocation a particularly complex process. In order for governments and relevant stakeholders to plan for sustainable relocation in the Pacific, a number of suggests can be considered in the decision-making processes and political frameworks.
The “combined-approach to relocation”

This approach which tested through the thesis is important in addressing relocation planning in the Pacific region. Relocation needs to include negotiation at early stages of the process, including governments, local leaders and both relocatees and hosting communities. Understanding this dimension is crucial and without deep comprehension of ancestral adaptation strategies and planning around land management, the relocation process is likely to be unsustainable as it will lack the important local specificities and the essential link between Islanders and their land. Customary authorities and institutions are legitimate governance actors holding their own governance mechanisms in the Pacific region. Strategies addressing land tenure governance and relocation as adaptation to climate change in the Pacific should include state-based governance mechanisms combined with customary non-state institutions in order to be sustainable. This cannot be done without a deep respect for their view of the world, a profound understanding of how they represent climate change and migration within their belief systems and how traditional knowledge directly addresses those questions. Inserting local adaptation strategies and traditional knowledge on environment in regional and national decision-making is crucial; however, it is important to also insert measures supporting awareness raising on climate change among customary high chiefs in parallel.

The “combined” model should be addressed at the regional level of governance. Creating a regional model of governance is challenging in the context of the Pacific region where the level of resilience to climate change is diverse according to the geographical and political context; and where the high diversity of land tenure systems and customary-based mechanisms is particularly complex. However, the regional level of governance offers particularly interesting alternatives for dealing with adaptation to climate change and human security. Indeed, there is a growing international recognition that regions are best placed to engage with cultural-inclusive approaches to solving new security challenges involving climate at the front line. Furthermore, the “combined model” should not intend to draw a model at national level as it wouldn’t be exportable to other Pacific countries, because of the various political, traditional and security configurations.
The “hybrid approach”

The theory of “hybridity” allowed understanding that hybrid forms of adaptation to climate change combining local and formal governance mechanisms are key to address land in the context of planned relocation in the Pacific. Customary authorities and institutions are legitimate governance actors operating in the region. Climate-induced mobility governance should include both state-based governance mechanisms combined with local customary non-state institutions. In order to combine community-based governance mechanisms to formal frameworks, it is necessary to include traditional authorities to the decision-making process on relocation. Land access and acquisition should be based on customary processes that governments often lack knowledge or understanding while communities still need assistance from states and external stakeholders to deal with the logistical and financial aspect of relocation. Land acquisition processes are key in planned relocation. The way land is accessed and negotiated is central in preventing land security challenges including water tensions, issues around resources distribution and community cohesion. We have observed that using *talanoa* has been successful to address land negotiation in the context of planned relocation; including traditional methods of land governance in the design of global approaches is therefore crucial to better deal with future environmentally-induced relocation in the Pacific region. The political tools currently being developed in the region should facilitate those traditional land acquisition processes (talanoa, etc.) and ensure that customary authorities and land owner are central in the process. The role of the “Planned Relocation Working Group” (PRWG) present in the “Planned Relocation National Guidelines” (Fiji 2018) is a concrete tool that could be considered as example of good practice in using a hybrid approach to relocation as illustrated below. Exploring our results to fill the gaps still present in concrete political tools such as the PRWG could support inclusive policy on planned relocation in the future.
Figure x: An example of good practice based on the “hybrid approach”

The centrality of the “combined approach to relocation” and the “hybrid approach” both underline that flexible approaches to land governance are key for dealing with planned relocation in the Pacific. Security of tenure is central and developing policies optimizing registration of customary lands would help to protect the land rights of communities forced to move as a result of climate change. Unsecure tenure and issues around customary land titles and ownership including unclear villages’ boundaries demarcation can increase the vulnerability of relocatees and provide fertile ground for post-relocation land-based conflicts. The concept of Social Domain Model (SDM) (FIG/GLTN 2010) offers a combined state-based and community-based approach to land governance that could be used to address land tenure security and planned relocation. The SDM provides flexibility by allowing all legal and social tenure rights to be captured and, also offers flexible alternatives for village lands allocation while considering the option to register individual rights as the need arises (Byamugisha 2013). The “Fit-For-Purpose” (FFP) approach to land governance could also be an interesting framework to consider in the context of planned relocation in the Pacific as it considers the combination of the spatial, legal and institutional frameworks. This approach also includes key principles such as Good land governance preventing bureaucratic barriers, the promotion of integrated institutional framework rather than
sectorial approaches, transparent land information systems accessible to communities and all stakeholders involved with land management and gender equity in all aspects of land administration (UN-HABITAT, GLTN 2008). Finally, the conceptual perspective used in the Voluntary Guidelines on Responsible Governance of Tenure (FAO 2012) could be a key tool used in order to incorporate to the global agenda responsible governance of tenure in the context of climate-induced planned relocation.

**Future research:**

Interdisciplinary research networks should be further developed in order to develop evidence-based knowledge of relocation as an adaptive response to the adverse effects of sea level rise and extreme weather events resulting from climate change. This needs to be addressed in regional planning on land while land dynamics should be closely studied and included in regional decision-making on adaptation to climate change.

Future research should focus on how to develop a collaborative institutional model addressing land tensions associated to relocation as adaptive response to climate change impacts designed for use by Pacific institutions with the idea to combine indigenous and formal governance mechanisms to address tensions associated to land in the context of climate-induced relocation. For that purpose, theoretical frameworks addressing planned relocation and indigenous governance such as “The Adaptive governance relocation framework” (Robin Bronen 2015) could be used. This framework is based on research involving four Alaska Native communities threatened by climate-induced environmental impacts; the “community-based social ecological assessment tool” aims to engage communities in a “collaborative decision-making process with government representatives to determine whether and when to relocate {…}”. The final aim would be to “avoid or minimize the harmful effects of government-mandated relocations.” (Robin Bronen 2015). This framework focuses on collaborative knowledge production between communities and governance institutions in order to develop a monitoring and assessment tool that aims to determine whether and when relocation needs to occur. The framework provides interesting theoretical orientations that would support the development of the collaborative institutional model addressing land tensions associated to relocation as adaptive response to climate change impacts. The “flexible approach to social-ecological governance that promotes collaboration among stakeholders at various scales” (Gary Kofinas 2009) will also be a very
useful example of collaborative governance taking the case of resource management in conditions of change that “{…} requires an understanding of both the processes by which groups make decisions and the mechanisms by which these decision-making processes adjust to change”.

Furthermore, the “typology of planned relocation” revealed by the study and described in chapter 6, helps understand that we have studied a very specific and small portion of what constitute the relocation process that is complex and need to be comprehensively addressed in research and policy. Indeed, this study provides some interesting insights on disaster-induced cases of relocation based on a “reactive” approach, driven by external stakeholders and by the state. It also looked at the pros- and cons of using “staggered” or “whole” relocation strategy. Furthermore, the relocation stage studied was mostly focussing on the “planning” phase while the relocation phase observed was category 2 (almost finalised or recently been finalised), category 3 (relocations confirmed but not started or will take place soon) and category 4 (“trapped” communities “at risk” and likely to be relocated in the future but not yet considered for relocation). More research would be needed to study slow-onset relocation, preventive relocation, community-driven relocation, other stages of the relocation process (assessment, decision, implementation and monitoring) and category 1 (completed relocation). It would be particularly interesting to study the implementation and monitoring phase, as well as the category 1 – completed relocation- that would provide more details on post-relocation vulnerabilities and lessons for future relocations at preliminary phases. The study of community-driven relocation would be particularly important in the context of the Pacific. Community-driven cases of relocation would also be important to study as data collected at the institutional level and results from our study suggests that it is the form of relocation that is more likely to emerge in the future in regions of the world where affected communities have their own traditional governance mechanisms. The consequences of climate change on the region will increasingly leave considerable numbers of communities “trapped” and not considered for relocation (category 4) by the state while not being supported by external stakeholders. In such cases, local governments have a crucial role to play in order to support already existing traditional structures that will be key in negotiate the land (as they already are), but also to plan the whole relocation process by themselves. Indeed, it is suggested that this form of relocation would emerge massively in the Pacific if appropriate legislation, public policies, inter-institutional coordination and funding
mechanisms are not efficiently and comprehensively put in place to respond effectively to the increasing number of communities in need of relocation. Community-driven relocation needs to be seriously addressed by policy makers and future studies on planned relocation should further study how local level governance entities can support traditional structure in place in the region. Indeed, community relocation demands considerable financial and institutional capacity of governance institutions and can result in important conflicts between the affected and hosting community including tensions related to land (Naser, 2014) (Bronen & Chapin, 2013). It is therefore crucial to understand better how this type of relocation can be supported and organised preventively in order to avoid dealing with the associated conflicts and land tensions in a reactive manner. In that context, observing some historical case studies as it was done in this study, could help understand that the inclusion of traditional knowledge in the study of planned relocation is crucial as Pacific Island communities have a wide range of mechanisms that have helped cope with adverse environmental conditions for millennia of adaptation. Collective and individual strategies for managing risks and dealing with shocks, as well as a deep understanding of environmental variability, are integrated into the collective knowledge and practices of Pacific communities. The traditional structures and methods of governance of traditional chiefs reinforce these strategies and are at the origin of collective decision-making.

Framing land governance around approaches observed in our dissertation cannot be done without a deep respect for the Pacific peoples’ view of the world and a profound understanding of how they represent climate change and mobility within their belief systems and how traditional knowledge directly addresses those questions. Traditional adaptation strategies enabling Pacific Islanders to cope with extreme environmental events were developed through the past centuries, and this knowledge should be valued and ways to incorporate it to future decision-making around climate change and mobility in the region should be urgently developed and set as priority at the regional level. Future studies should also observe existing examples of community-led relocations in countries such as PNG and Solomon Islands where traditional forms of governance prevail. It would be necessary that future research focus on (preferably ethnographic and longitudinal) studies that observe the composition, mechanism and functionalities of community-led relocation initiatives as well as the role of the government and local entities in this process. Indeed, an analysis of government and institutional capacities in supporting community-led relocation would be a great idea.
There is no existing policy framework that deals with climate-induced human mobility in both PNG and Solomon Islands. As we have observed in our chapter 4, Carteret Islands relocation in PNG is an interesting case of community-driven relocation instigated by the Council of Elders of the Carteret Islands in 2012 and supported by the local NGO “Tuele Peisa”. Furthermore, in Bougainville, community-led relocation initiatives are part of an informal system that compliments the formal government system for the relocation of the Atolls people of Bougainville through the Atolls Integrated Development Policy (AIDP). In the context of the Solomon Islands, where the state has limited power over land acquisition, the study of community-driven relocation is crucial. The Solomon Island’s National Adaptation Programme of Action (NAPA) acknowledges that communities are likely to be displaced by climate change and includes some mentions of adaptive measures and community relocation (Monson & Fitzpatrick, 2015). However, the main pathways of mobility in Solomon Islands include networks created by trade and intermarriage within kin-based communities. Therefore, there has been little number of relocation cases able to relocate in areas where they have affinal links, or a history of trade exchange with the local land-owning tribe (Monson & Fitzpatrick, 2015). Furthermore, communities which are part of such networks are left “trapped” with limited option to move. It would be crucial to address those dynamics and further study community relocation in such contexts can teach us a lot on future cases of community-driven planned relocation.

**Future policy:**

At the policy level there is an urgent need to strengthen government focus on land and climate change issues. Migration as adaptation to climate change in the region will need stronger regional cooperation and there is a need to devise land related policies and program that can address these challenges in order to minimize vulnerability. Identifying inter-linkages between secure customary land tenure mechanisms, state-based land governance, regional and global frameworks is critical. Results of the role of external stakeholders in the relocation process also emphasised on the need to move away from project-based relocation as much as possible. Instead, it is suggested that planned relocation is designed, organized, implemented and monitored by institutions including local entities holding a central role under the umbrella of regional standards. In this approach, the National Relocation Taskforce Committee (NRTC) has a central role and should be reintroduced in the National relocation guidelines developed in Fiji that could
serve as model for the region. As mentioned in the first draft of the guidelines, the NRTC should report to the National Climate Change Policy (NCCP) Sub-Committee that oversees the objective of Adaptation under the NCCP. These outcomes are then reported to the National Climate Change Coordinating Committee who is in charge of final decisions on issues related to relocation as a result of climate change in Fiji. Indeed, multi-level cooperation is key and local coordination is essential to avoid injustices. We argue that a multi-level governance of planned relocation with a particular emphasis on the role of regional governance and local entities with national governance having an intermediate role as facilitator is key to address planned relocation in a sustainable manner. It would also be important that regional entities such as the PIF that have been leading frameworks on Climate Change and Human Mobility include in their future work the central role of customary authorities, land owners and affected communities while considering “perceptions”, the issue of “immobility” and “resilience” as central concepts to address processes on planned relocation as adaptation strategy to climate change in the region.

8.2 Key Trends Identified

The study reveals research gaps as well as three emerging concepts that are key in understanding challenges associated with land tensions in the context of planned relocation in the Pacific. The “Combined/Middle-Ground Approach to relocation” (Gharbaoui, Blocher 2017), combining logistical and sociological approaches to relocation has been used as the main framework in order to address relocation at a political level in a sustainable way, allowing Pacific peoples to adapt to climate change while continuing to live lives they value. “Resilience”, “perceptions” and “immobility” (trapped populations) are the key concepts emerging from the research results, showing that those concepts need to be articulated when addressing land acquisition modalities.
A key trend identified all through the study is the crucial role of “perceptions”. The review revealed that it is widely agreed among various disciplines that local perceptions of environmental change are determinant for human mobility. The gap between perceptions and climatic data can be primarily or in part attributed to socioeconomic factors. In studies on perceptions, household surveys and interviews in a short time frame remain the main method of data collection. Again, here, there is a strong need to undertake further studies to understand
evolving perceptions in a long-term prospect as well as longitudinal studies in order to capture perceptions over time for a more comprehensive understanding of land tenure in the context of human mobility.

Furthermore, data collected on perceptions from affected populations and Pacific Peoples is key in this study. It allows the study to derive results directly from local perceptions of the issue. While the role of perceptions is considered central, using perceptions in a climate-induced human mobility study is also an area of controversy in the literature, as:

“...some people who do not intend to migrate may not have a choice in the future and may have to use migration as a survival strategy. Conversely, the intention to migrate may not translate into actual movements: people who intend to migrate may find themselves unable to do so, lacking the necessary means (financial, social, and human capital)” (Zickgraf 2016).

This caveat has been considered and mentioned in most studies on perceptions evaluated in this study. It is also one of the main results from the field study. Studies on “trapped population”, increasingly present over time in the literature seem to partially address this controversy as it captures those people unable to migrate lacking the necessary means.

“Trapped population” is therefore another concept emerging from this study. There is little research on the land acquisition processes leading a community or part of it to be trapped or “immobilized” in the context of planned relocation, especially within the Pacific context. Land acquisition is critical in the context of planned relocation in the Pacific, as land that is not under state control should be acquired through customary arrangements that are not regulated through formal processes. This can lead to negative outcomes such as land disputes based on staggered relocation, leaving part of a village in a flood-prone area. Comparing Tukuraki and Matawalu case studies reflect on the challenges land negotiation, land access and land acquisition can reveal in the case of planned relocation. Customary arrangements between the land owner of the hosting site and the customary chief of the affected village left a portion of Matawalu villagers behind, as land acquisition had been negotiated by the customary chief with the condition from the landowner to leave some of the new housing to the hosting community, which has resulted in part of the Matawalu community not being able to move. This illustrates how mechanisms of land
acquisition in the context of customary land ownership should be improved in order to avoid staggered relocation as much as possible and to ensure that the outcome of relocation does not lead a community, or part of it, to be trapped.

The concept of “resilience” is another emerging key concept from the study. Most studies analysing land and climate change as a mobility driver in the Pacific tend to agree on the central role of resilience. Resilience is considered a key concept to understand the complex link between land and mobility in the Pacific. Field study underlined the importance of considering resilience in the context of land acquisition while embracing the principles of the Talanoa dialogue through the spirit of collaboration, inclusivity and partnership. Furthermore, the Framework for Resilient Development in the Pacific (FRDP) is the main coordinating framework on human mobility in the context of planned relocation with the main aim to guide actions strengthening Pacific resilience at the regional, national and local levels.

Figure 8.2. Key interrelated concepts emerging from the thesis.

8.3 Research Gaps and Main Recommendations

The literature reviewed in the study focused on the links between land degradation, land tenure and human mobility looking in particular at the Pacific context. It argues that studying the land tenure and human mobility nexus within the particular context of the Pacific region could be further enriched by trans-disciplinary and integrated approaches from various disciplines. Furthermore, the cross-disciplinary thematic approach, based on the distinction
between migration, displacement and planned relocation allowed us to identify areas of controversy, key trends, major research gaps and recommendations for future research through the wide spectrum of human mobility and avoiding over-simplification of the concept.

a) Slow-onset events can be a significant driver of migration, displacement and planned relocation, however, there is a significant gap in the current data on land and human mobility linked to slow-onset events in the PIR.

- The literature reviewed revealed that more qualitative and quantitative national assessments are needed to understand human mobility and issues associated to land in the PIR. The lack of reliable data on population dynamics is a major obstacle to assess the mobility and vulnerability at the regional level. The Pacific Islands Region has often been used in comparative regional studies on climate change and human mobility. However, there are just a few comparative studies comparing case studies from different countries in the PIR. While the Pacific as regional entity is often referred to in studies on sea level rise-induced mobility and is often compared to other regions, the review identified the need to develop further comparative studies at national level that use similar methodologies and conceptual frameworks as a major obstacle to the harmonization of data collection on land degradation and human mobility at the regional level remains the lack of accurate, comparable and complete data at national level.

- In terms of methodology, there is a strong need to improve quantitative assessments, both estimates and predictions in the study of the land and human mobility nexus in the PIR. The literature is still primarily based on qualitative methods of data collection, 64% of the papers reviewed (36 in total) are based on qualitative methods. Quantitative and mixed methods assessments are still under-represented and should be encouraged. Furthermore, longitudinal studies are still minor in the literature while slow-onset events such as sea-level rise should be further studied in a long-term prospect. Longitudinal data would also allow assessments of the impacts on both host communities and communities of origin. Finally, comparative studies that use similar methodologies and conceptual frameworks are key to develop comprehensive understanding of land tenure and human mobility.
• Empirical studies (both qualitative and quantitative) on cross-border/ internal displacement and planned relocation in the particular context of land tenure and land governance in the PIR are still minor in the literature. Collecting qualitative and quantitative data and enhancing knowledge on cross-border/ internal displacement and planned relocation is crucial in order to have a broader understanding of human mobility dynamics as a whole within the context of land governance in the PIR.

• Literature associating land tenure and planned relocation often refers to issues related to tenure security. Tensions between formal and customary land arrangements have significantly increased and tenure issues are highly problematic when relocation takes place outside the territory governed by the customary law of the affected population. Furthermore, tenure and land use practices are continuously evolving; however, long-term longitudinal studies are under-represented in the literature. In the Pacific context, land access, mostly in rural area, involves interaction between social networks, locally, tenure institutions, and competing claims over land. Very little studies emphasize on the interaction between land degradation, land tenure and human mobility. Challenges associated with customary land tenure and tenure security in the context of climate-induced mobility and particularly relocation should be further studied in the Pacific context. Beyond customary land rights, both qualitative and quantitative data should consider all the tenure types from freehold issued with land title, to legitimate informal settlements. Finally, in order to promote national assessments addressing issues on land tenure in a comprehensive manner, there is a need to identify and define the intangible losses associated to land tenure (culture, heritage and community assets) and overcome issues of incommensurability.

b) Confusion in the use of human mobility terminology in the context of climate change. The distinction between migration, displacement and planned relocation is still not very clear in the literature and it is sometimes difficult to clearly separate voluntary movements of those forced. Furthermore, the use of various definitions of “land degradation” and “land tenure” across disciplines makes it particularly challenging. There is a strong need to address the lack of consensus about how human movements are characterized within the context of climate change and how definitional/terminological distinctions are made.
There is still a tendency to use “migration” while addressing other forms of human mobility such as displacement and relocation. The literature is still dominated by narratives on “migration” that should be nuanced, reframed and redefined in order to capture human mobility in a comprehensive manner.

c) Land acquisition modalities were highlighted as key in capturing “vulnerability” criteria associated to land degradation, land tenure and human mobility patterns. “Resilience” is highlighted in the review as increasingly shaping mobility outcomes.

- In order to develop better data collection processes capturing « resilience » and its associated socio-economic and gender factors, it is crucial to ensure data includes details on land acquisition modalities and is disaggregated by sex, age, economic status, social and cultural components.

d) We have focused our method of data collection on a participatory approach mostly trying to capture “perceptions”. There is a strong need to address the gap between “perceptions” and reality. Some authors (Zickgraf et al. 2016, Ozer et al. 2010) address the gap between perceptions of environmental change and quantifiable assessments with the aim to better capture the impact of differentiated perceptions on migration outcomes. In studies on « perceptions », other authors justify the need for such studies through a cultural relativist approach. A study on « perceptions » from Van Der Geest (2010), for example, rather aims to challenge the dominant « Western » perspective on climate-induced mobility studies and suggests studying the impact of out-migration on sending areas through an inclusive participatory approach that would capture how affected people perceive mobility beyond “Western” academic parameters.

- Further research and (preferably longitudinal) data on « perceptions » are highly needed in order to fully understand the scope of both differentiated perceptions and objective assessments on climate-induced mobility and cultural relativist approaches. Land acquisition modalities are highly shaped by perceptions and these should be carefully studied.

e) Research should focus on « immobile » populations who will not have the financial, social capital and resources to move. The concept of « trapped populations » is relatively
new in studies on climate-induced mobility. While this concept is very poorly considered in migration studies within the Pacific context and most literature considering “immobility” focus on extreme environmental events and less on coastal erosion as main driver of mobility. Furthermore, there are very little studies on “trapped population” in the context of planned relocation and on how land acquisition can shape outcomes of the affected population being “trapped” or “immobilized”. This gap should be addressed, and data should be collected in order for policy to address the issue of “trapped” populations in areas of origin, transit or destination.

f) We have reviewed some historical cases of relocation in our study. Macro-historical perspective is crucial to address climate change and human mobility. In the particular context of the Pacific, it is crucial to refer to historical processes in order to better understand and address current and future climate-induced mobility and the role of land in the process. There is a strong need to further develop historical data in order to validate models-based projections. The time-frame (too recent), scope and consistency of historical data need to be acknowledged as another crucial focus for future research.

g) Most of the literature reviewed on the land tenure and human mobility nexus in the PIR is still driven by Western institutions and researchers. A multi-stakeholder approach involving local communities in the study of land tenure and human mobility is crucial and has been partially addressed by studies on “perceptions”. A minority of the literature reviewed derived from non-Western institutions and academics. Recent progress is clearly visible in involving local stakeholders and locally-based expertise through the creation of research platforms and building local capacity through initiative supporting local research on climate change, land governance and South-South migration. There is an urgent need to increase the presence and contribution of researchers from the Pacific and the Global “South” in future studies.
There are certainly other conceptual issues that have not been addressed in this study and that need some attention. We have attempted to cover the issue comprehensively but so many other aspects of climate-induced planned relocation and land governance would need to be explored. The field study revealed for example that both gender leadership and marginalization would need to be addressed in future policy.

The issue of land can also be observed in other regions of the world where a collective form of land ownership prevails. The destructive category 5 hurricane Dorian that has been hitting the Bahamas in August 2019 is a recent example of tropical wave rapidly intensifying and causing landfall with disastrous impacts on the population and their livelihoods. Collective family land ownership and Bahamian land ownership is linked closely with the idea of family. Families are forced to move their homes or are being “trapped” in the aftermath of the hurricane which is leading to a series of challenges similar to the issues we have observed with customary land tenure in the Pacific. Such disasters will only intensify in the future and hit many different regions in the world including areas where vulnerable populations will thrive to cope with the destructions.

This dissertation also highlighted that it is a challenge to dissociate policy and research in the study of climate change and human mobility. The nature of the IPCC itself that is taken as reference in any discussion or decision on climate change reflects on this complexity and brings a whole set of questions about the role of politics and therefore funding and economics in framing the agenda on climate change in the coming decades. This should alert us and remind us that the way the issue of climate change is shaped, discussed, explored and negotiated today will be decisive on what will happen to the planet tomorrow. It is urgent to ensure that it only serves the interests of the next generations in the Pacific and anywhere else in the planet. Allowing our children to survive and live with dignity in the future is what matters the most today.

This thesis is dedicated to this new generation portrayed in this picture taken in Matawalu village, Fiji in 2017 and my two sons Jibril and Malik.
Portrait of the new generation of children in Matawalu village with my son, Jibril Bakkali Tahri, Matawalu, Fiji, 2017. (Photo: Dalila Gharbaoui)
References


OFDA/CRED International Disaster Database (EM-DAT) (2015). Brussels: Université Catholique de Louvain. Available at [http://www.emdat.be](http://www.emdat.be). Accessed 22 August 2019. (NB: For a disaster to be entered into the database at least one of the following criteria must be fulfilled: Ten (10) or more people reported killed; a hundred (100) or more people reported affected; a declaration of a state of emergency; a call for international assistance).


Annex

List of questions used for the interviews:

**Institutions approached through narrative and semi-structured interviews:**

- **Regional authorities** approached in order to understand:

  1. What are the current frameworks on regional decision-making frameworks/processes on climate-induced relocation?
  2. What importance land security holds in regional decision-making processes related to climate change and relocation planning?
  3. What is the role of customary-based governance structures in the process of relocation?
  4. What are the measures taken to support, facilitate and coordinate at the regional level of governance national initiatives such as the currently developed national relocation guidelines in Fiji based on lessons from relocation that have already taken place?
  5. Is the combination of both traditional and modern approaches to deal with future challenges associated with climate change and migration in the region considered in decision-making? Is locally-based expertise valued, supported and considered in decision-making?

  - *Traditional knowledge* on community relocation as adaptive response to extreme environmental events in the region is crucial. Perceptions of the environment and of environmental change have social and cultural elements. The great challenge of translating local knowledge into policy should be urgently addressed. Regional institutions in the Pacific are best placed to address this gap and find ways to merge traditional knowledge and scientific best practices in environmental governance.

  - *Locally-based expertise* should be valued and supported. A shift must be operated towards recognition of locally-based experts. Efforts should be put together by governments and regional entities to expand current initiatives aiming at coordinating, publicizing and expanding local expertise to give a sense of ownership key to long term sustainability of relocation.

→ **SPC/PIF** approached through narrative and semi-structures interviews with the following main questions:

  1. Is there any comprehensive regional framework currently being developed on environmental relocation? What is the role of customary-based governance structures in this process?

  2. What are the dispositions taken to support, facilitate and coordinate at the regional level of governance national initiatives such as the currently developed national relocation guidelines in Fiji based on lessons from relocation that have already taken place? What is the role of customary-based governance structures in this process?
3. Is the combination of both traditional and modern approaches to deal with future challenges associated with climate change and relocation in the region considered in decision-making? Is locally-based expertise valued, supported and considered in decision-making?

All other institutional interviewees:

1) To what extend land tenure boundaries are considered in relocation planning? Is community cohesion and the preservation of Pacific people’s identity, culture, social and belief systems linked to their land tenure systems considered in relocation planning?

2) To what extend are consultations and participation of local communities early and often considered in the relocation process, in particular integrating - with the participation of community and traditional leadership structures, in order to maximize buy-in of the community.

1) How all interests at stake are included in the relocation process (from decision-making to resettlement)? Is there an inclusion of hosting and relocated communities and Customary chiefs at both origin and destination sites? If yes, how are they included in the process?

2) How is organized the promotion of a participative approach (including all stakeholders) to relocation with a particular focus on ensuring that affected and hosting communities have access to reliable information at all stages of relocation process?

3) How is organized awareness rising amongst key community decision makers and empowerment of traditional leaders to make informed decisions about environment and mobility?

4) How are potential inter-generational tensions around land assessed and considered in relocation planning? Tensions between pro Individual land rights and pro collective land rights should be considered when planning for relocation to avoid post-relocation conflicts associated with claims from younger generations from the community that provided the land threatening litigation, based on the lack of a formal deed, to obtain the land back.

5) Are the implications of land reform and land-based related conflicts considered in planning for migration as adaptation strategies in the Pacific region?

The evolution of the land reform and the future survival of customary land rights as prevailing form of tenure in the Pacific will have significant incidence on future policies related to land management and environmental migration in the region.

- Affected and Hosting Communities:

Customary Chiefs (in both sites):

1. What is the role of customary land tenure in the relocation process, would you qualify it as facilitating or exacerbating tensions on land security?

2. What role do you play in land issues in your community? In the context of relocation, what role do you think you can play in preventing land conflicts?

3. Were you informed enough by the state-based programmers during relocation?

4. How were you inserted in the relocation process? Were you consulted enough? Did you feel empowered and part of the decision-making?

5. Do you think that land security is at threat at the new relocation site?

6. Did you have to deal with other customary chiefs at hosting site?
7. Did you identify any potential for land conflict at new site?

8. Do you face inter-generational tensions related to land rights in your community (individual vs. collective land rights)? Between members of the affected and hosting community? If yes, was this considered in the relocation process? Do you think these tensions could potentially undermine land security in the future?

9. What do you suggest to be done differently in future relocations to avoid post-relocation vulnerabilities related to land-based conflicts?

**Communities (in both sites-with gender proportion):**

What is the role of customary land tenure in the relocation process, would you qualify it as facilitating or exacerbating tensions on land security?

Were you informed enough by the state-based programmers during relocation?

How were you inserted in the relocation process? Were you consulted enough? Did you feel empowered and part of the decision-making?

Do you think that land security is at threat at the new relocation site?

Did you identify any potential for land conflict at new site?

Do you face inter-generational tensions related to land rights in your community (individual vs. collective land rights)? Between members of the affected and hosting community? If yes, was this considered in the relocation process? Do you think these tensions could potentially undermine land security in the future?

What do you suggest to be done differently in future relocations to avoid post-relocation vulnerabilities related to land-based conflicts?
Endnotes

1 Within the AIMS region, the case of Maldives, Mauritius and Seychelles are particularly of concern.


3 A distinction is made between temporary relocations (in coherence with international standards), planned relocations (for which relocation is coupled with permanent resettlement, with informed consent) and displacement (forced movements carried out in violation of international standards and spontaneous movements in the wake of natural or manmade hazards, or conflict).


5 Lieber defines community relocation as: “a process by which a number of… people from one locale come to live together in a different locale”, and which requires “rebuilding housing, assets, including productive land, and public infrastructure in another location.”

6 Rehabilitation includes “income restoration and re-establishing livelihoods, living, and social systems.”

7 Importantly, this term and type of human mobility was first mentioned in an official text ultimately adopted (of the UNFCCC in 2010, thereby linking the concept to climate change strategies and funding needs in 2010.

8 At the consultation on planned relocations held in San Remo in 2014, evacuations (the rapid movement of individuals and households - whether advised or mandatory, planned or spontaneous, and conducted in coherence with international standards - to physically protect people from imminent threats) were generally considered as separate from planned relocations (considered as a forward-looking measure in which a whole community is physically relocated and permanently resettled). Relocations may, however, follow evacuations in certain circumstances. Displacement, involuntary by definition, may be induced by natural or man-made hazards and also characterizes forced movements carried out in violation of international standards, for example, development-induced displacement.

9 UNFCCC, supra note 9, paras.14 (b)(c)(h). Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012. Decision 3/CP.18. Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change to enhance adaptive capacity, FCCC/CP/2012/8/Add.1.f.

10 Another commonly used definition of ‘planned relocation’ is when “Persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives” (in Brookings, Georgetown University and UNHCR, “Guidance on Planned Relocation within National Borders: To Protect People from Impacts of Disasters and Environmental Change, Including Climate Change,” Draft, 5 June 2015). See also: IASC, IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters. The Brookings-Bern Project on Internal Displacement (2011) defines ‘Planned relocation’ as “The act of moving people to another location in the country and settling them there when they no longer can return to their homes or place of habitual residence.”

11 Composed of relevant UN agencies, non-government organizations (NGOs), and academic institutions working together to ensure that aspects of human mobility addressed under the UNFCCC are coherent and based on the most recent evidence, findings and experience (research, best practices, data, etc.). Members are the United Nations’ High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), the United Nations University Institute for Environment and Human Security (UNU-EHS), the Norwegian Refugee Council and its Internal Displacement Monitoring Centre (NRC/IDMC), Refugees International (RI), the Hub Observatory, and the Arab Network for Environment and Development (RAED).

12 Papua New Guinea, Solomon Islands, New Caledonia, Vanuatu, and Fiji.

13 Tonga, Samoa, French Polynesia, Palau, Federated States of Micronesia, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.


15 El Niño affects the weather in the world in three areas: the level of precipitation, the level of temperatures and the level of tropical cyclones. “The effects depend strongly on the location and the season. The strongest effects on precipitation are in South-East Asia and the western Pacific Ocean, especially in the dry season (August-November). There are temperature effects throughout most of the tropics. The number of tropical cyclones also depends on El Niño in most basins. In boreal winter the effects are most wide-spread: from southern Africa to eastern Russia and most of the Americas”; In Royal Netherlands Meteorological institute, Ministry of Transport, Public Works and Water Management “Effects of El Nino on World weather”, retrieved on 12th September 2018 <http://www.knmi.nl/research/global_climate/enso/effects>

16 Connell explains that population movement and urbanisation resulting from overpopulation could be an important element which explains consequences over extreme of weather events; In J. Connell, “Losing Ground Tuvalu, the greenhouse effect and the garbage can”, Asia-Pacific View Point, Vol. 44, no. 2, 2003, pp. 89-107

17 Baliunas underlines that coastal erosion is mainly caused by sand mining essential to support local infrastructure and argues that rising sea levels is primary cause of that phenomenon; In S. Baliunas, W. Soon, “Is Tuvalu really sinking?”, Pacific Magazine, 28(2): p. 44-45, February 2002
In 1992, the UN Conference on Environment and Development (UNCED), or the "Earth Summit", in Rio de Janeiro, agreed on a Declaration setting out 27 principles supporting sustainable development. The Summit also agreed a plan of action, Agenda 21, and recommended that all countries produce national sustainable development strategies. A special UN Commission on Sustainable Development was created. Also in 1992, the EU adopted its Fifth Environmental Action Programme, called "Towards Sustainability", retrieved on 12th September 2018.


(B) In NGO Sustainability: Representing Organizations Accredited to the United Nations Economic and Social Council, “Brundtland Definition-Three Dimension Concept”, retrieved on 12th September 2018,

Managing social problems, meeting needs, and opportunities for advancement (Midgley, 1995: 13-14).

Also, social welfare is comprised of three elements; first, the degree to which social problems are managed, second, the extent to which needs are met and finally, the degree to which opportunities for advancement are provided. (Midgley, 1995: 13-14)

The Food and Agriculture Organisation (FAO) defines land tenure as “an institution, i.e., rules invented by societies to regulate behaviour… They define how access is granted to rights to use, control, and transfer land, as well as associated responsibilities and restraints.” (FAO, 2002).

Articles 2(f) and 5(a) of CEDAW require states to modify or abolish customs and practices that constitute discrimination of women (Haines-Sutherland, 2010: 131)

“Protected in International Human Rights by ‘Articles 2(f) and 5(a) of CEDAW require states to take all appropriate actions to modify or abolish customs and practices that constitute discrimination or that are based on the idea of inferiority, superiority or on stereotyped roles for women’”, Steiner, Henry J, Alston, Phillip, and Goodman, Ryan, “International Human Rights in Context: Law, Politics, Moral” (3rd ed, 2008) p. 542

Proponents of cultural relativism assert that concepts are socially constructed and vary cross-culturally. These concepts may include such fundamental notions as what is considered true, morally correct, and what constitutes knowledge or even reality itself.

See, for example, article 22 of the Universal Declaration of Human Rights (UDHR) (1948)

This tool is also based on the “Guidelines of Adaptation to Climate Change in the Pacific Region (SPREP), “Good Governance of Land tenure globally” (FAO), “Customary Land Tenure in the Pacific” (PIF) and “Good governance on Relocation (ADB) and IDPs (UNHCR)

Namely the fear of alienation of customary land, lack of information on land use, lack of participation in customary land decisions, and unfair distribution of economic benefits arising from the use of customary land (LMCM 2006)


Lieber (1977) defines community relocation as: “a process by which a number of … people from one locale come to live together in a different locale”, and which requires “rebuilding housing, assets, including productive land, and public infrastructure in another location.”

Rehabilitation includes “income restoration and re-establishing livelihoods, living, and social systems.” (ADB 1998)

More information: https://www.nanseninitiative.org/pacific-consultations-intergovernmental/

Funded by the European Union and jointly implemented by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the International Labour Organisation (ILO), and the United Nations Development Programme (UNDP). The United Nations University Institute for Environment and Human Security (UNU-EHS), UNESCAP, and the University of the South Pacific (USP)

Government-supported due to the encroaching sea, the case of Vunidogoloa is considered to be the first community relocation in Fiji related to climate change-induced sea level rise. The villagers relocated to Vanua Levu, Fiji’s second largest island, not more than two kilometres from their old village site but on higher ground. The new site has approximately 30 houses, each equipped with its own solar panel, has ponds for fish and prawn production, cattle, coconut farms, and a new community building under construction.

Based on the Information Sheet template in Annex
List of questions and interviewees in Annex

PRRP, currently implemented in Solomon Islands, Vanuatu, Tonga and Fiji, is a US$16.1 million risk governance programme developed in partnership with the Australian Government Department for Foreign Affairs and Trade (DFAT) and the United Nations Development Programme (UNDP 2014).

The total cost of the project is $600,000 FJD. “The Government initially had budgetary allocation in the 2016 budget to finance the relocation, however due to the devastation of TC Winston, the fund was re-diverted to finance relief efforts,” National Disaster Management Office Director, Akapusi Tuifagalele. “The ACP-EU Building Safety and Resilience in the Pacific project (BSRP) is a €19.37 million project funded by the European Union and implemented by the Pacific Community (SPC). The objective of the project is to reduce the vulnerability, as well as the social, economic and environmental costs of disasters caused by natural hazards, thereby achieving regional and national sustainable development and poverty alleviation in ACP Pacific Island States.” (SPC 2016)

Julie Cleaver and Kendall Hutt are in Fiji for the Bearing Witness project, “A collaborative venture between the University of the South Pacific’s journalism programme, the Pacific Centre for the Environment and Sustainable Development (PaCE-SD), the Auckland University of Technology’s Pacific Media Centre and documentary collective Te Ara Motuhenga, Bearing Witness seeks to provide an alternative framing of climate change, focusing on resilience and human rights.” (PCM 2017)

(1) Regional organizations included Secretariat of the Pacific Communities (SPC), Pacific Conference of Churches, Pacific Islands Forum (PIF), University of the South Pacific (USP), European Union, South Pacific Regional Environmental Program (SPREP). These organizations have been involved in formulating regional policies on climate change. Interviews were carried with the attempt to understand some of the rationale, approaches and resources allocation for regional climate change and relocation projects and what are the plans for the future, especially how they will implement decision taken at COP21-22. All these organizations are located in Suva, Fiji. (2) Non-Governmental Organizations (NGO) included in the study were: Pacific Islands Non-Governmental Organizations (PIANGO) and Foundation for the Peoples of the South Pacific, Pacific Network on Globalization (PANG) and the NGO “350 Aotearoa Pacific” These groups are mostly involved in campaigning for sustainability and climate change mitigation and have collected a lot of information from around communities in the region. They are able to see the climate change and relocation issues from the people's point of view without official restrictions and protocol as it could be the case for governments and regional organizations. All these organizations are based in Suva, Fiji. (3) International agencies operating in the Pacific on planned relocation were identified: UNDP, UN Habitat, Pacific Island German Federal Enterprise for International Cooperation (GIZ) and European Union. These reorganizations provide funding and resources for climate change mitigation in the Pacific. All these organizations are based in Suva, Fiji. (4) Fiji government departments; Fiji Ministry of Environment, Fiji Ministry of Foreign Affairs (Climate Change Division), Ministry of iTaukei Affairs and Ministry of Lands were identified as key stakeholders in relocation planning. These ministries are directly involved in policy formulation and design of programs for climate change and relocation in Fiji.

The main objectives of the PIFACC are “(i) implementing tangible, on-the-ground adaptation measures; (ii) governance and decision-making; (iii) improving understanding of climate change; (iv) education, training and awareness; (v) mitigation of global greenhouse gas emissions; and (vi) partnerships and cooperation.”


More information: http://www.forumsec.org/resources/uploads/attachments/documents/LMC%204_1%20COMPLETE.pdf

The hierarchical structure of the provincial system is provincial councils followed by tinkina (sub-province) councils and then turaga ni-koro (village chieftains). In National Legislative Bodies / National Authorities, Fiji: Planned Relocation Guidelines - A framework to undertake climate change related relocation (2018), December 2018, https://www.refworld.org/docid/5c3e92204.html [accessed 3 August 2019]