Routledge Studies in Development, Displacement and Resettlement

Land Solutions for Climate Displacement
Edited by Scott Leckie

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Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2014
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

and by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
Land solutions for climate displacement / [edited by] Scott Leckie.
pages cm. – (Routledge studies in displacement and resettlement)
Includes bibliographical references and index.
1. Environmental refugees. 2. Forced migration. 3. Climatic changes–Social aspects. I. Leckie, Scott.
HV640.L285 2014
362.87'8–dc23
2013040801

ISBN: 978-0-415-70373-4 (hbk)
ISBN: 978-0-203-76251-6 (ebk)

Typeset in Times New Roman
by FiSH Books Ltd, Enfield

MIX
Paper from responsible sources
FSC® C013056

Printed and bound in Great Britain by
TJ International Ltd, Padstow, Cornwall

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- Continue to strengthen the established network between the Newtok Relocation Community in Alaska, Tulele Peisa and the Carterets Relocation Program.

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10 Climate-related displacement and options for resettlement in Solomon Islands

Rebecca Monson and Joseph D. Foukona

Introduction

Solomon Islands is a scattered archipelago comprising hundreds of mountainous islands and low-lying coral atolls in the south-west Pacific. The six largest islands are Choiseul, New Georgia, Santa Isabel, Guadalcanal, Malaita and San Cristobal (Makira). Most of these islands have central mountain ranges that rise rapidly from the ocean, and with the exception of the plains on northeast Guadalcanal, there is little coastal plain. Contemporary settlements are concentrated in the coastal areas, which are bordered by mangroves, coral-reef lagoons, or open oceans. The country includes many inhabited coral atolls, including the low-lying Ontong Java (or Lord Howe) and Sikaiana, and the raised atolls of Rennell and Bellona; as well as low-lying artificial islands built in relatively shallow lagoons off mainland Malaita. Many communities are experiencing what they believe to be the effects of climate change, including rising sea levels. In some places, this has already induced the relocation of entire communities from small islands and atolls to the coastal areas of larger islands nearby. Other communities are currently discussing the prospect of relocating to higher ground.

Although the Pacific Island countries are often overlooked in global debates about customary land tenure, discussions among Solomon Islanders about customary land tenure provide insight into a range of conceptual and normative issues that are of considerable interest to scholars concerned with displacement, resettlement, customary land tenure and social differentiation in other postcolonial contexts. While donors and non-government organizations active in Solomon Islands have devoted attention to the impact of climate change on rural livelihoods, far less attention has been devoted to the vexing issue of how customary land tenure systems might provide scope for adaptation to the effects of climate change. Customary tenure systems in Solomon Islands provide means for incorporating migrants into the land and the existing groups that occupy it, but migration of entire groups of people has also long been a source of conflict in the country. This chapter draws on preliminary research undertaken by the authors and a larger team of Australian and Solomon Islander researchers, as part of a larger ongoing project on climate change and localized mechanisms for resettlement in Solomon Islands. The preliminary research has focused on a number of

sites in which people have already relocated, or are contemplating relocation, as a result of oceanic inundation.[1]

Customary land tenure and contemporary settlement patterns

The population of Solomon Islands is extremely diverse, with some 500,000 people speaking more than 70 languages, with Solomon Islands' Pijin as a *lingua franca*. The majority of the population are indigenous Melanesians (94.5 per cent), followed by indigenous Polynesians (3 per cent). The Polynesian population are indigenous to the low-lying atolls of Ontong Java and Sikaiana; the raised atolls of Rennell and Bellona; and the tiny, mountainous islands of Anuta and Tikopia. There is a small population of Gilbertese people, who are ethnic Micronesians (1.2 per cent) and descended from those who were relocated from Kiribati during the colonial period. People of Chinese ethnic heritage are concentrated in Honiara and provincial centres.[2]

Around 12 per cent of the population lives in the capital, Honiara, on the island of Guadalcanal, and a further 4 per cent reside in other urban centres, primarily in provincial centres such as Auki, Gizo, Kira Kira, Lata, Tulagi, Taro and Buala.[3] Relocation to Honiara has long been an adaptive strategy for people from economically poorer or more isolated areas, including Polynesian outliers such as Rennell and Bellona, Ontong Java and Tikopia.[4] It is therefore highly likely that Honiara will grow as a result of climate-related migration. The vast majority of the country's population (85 per cent) lives in relatively small settlements in rural areas, where people are primarily engaged in subsistence gardening and fishing. Solomon Islands' economy is almost entirely dependent on agricultural development and the exploitation of natural resources, particularly through the production of copra, logging, fishing, and the cultivation of oil palm plantations. The country is ranked 142 out of 187 countries on the 2011 Human Development Index, and is therefore often described as one of the 'least developed countries' in the world.[5]

The state has a minimal role in governance and the management of conflict at the local level, and people outside Honiara and provincial urban centres have limited recourse to state-based laws and institutions.[6] Approximately 80 per cent of land Solomon Islands is held according to customary law (referred to in Pijin as *kastom*).[7] Very little customary land is registered,[8] and that which has been registered is generally held in the names of five trustees.[9] Land scarcity is not a major issue, but disputes over customary land are extremely widespread, and are perceived by Solomon Islanders to be a major source of social conflict.[10]

Systems of landholding and social organization in Solomon Islands are highly varied, but in general terms, named kin groups occupy and use a named territory, which they generally claim through tracing descent to an apical ancestor settler of the area.[11] These kin groups provide the basis for regulating subsistence activities, and access to and control over land at the local level. The indigenous people of Guadalcanal, Isabel, Central Province and Makira trace membership of a kin group and claims to land primarily through women, while people in the western islands

regularly draw on both matrilineal and patrilineal links. On Malaita there is an emphasis on patrilineal descent.[12] The Polynesian societies on Rennell, Bellona, Tikopia, Anuta and Ontong Java also emphasize patrilineal principles. People make claims to both land and membership of kin groups by drawing on oral (and increasingly, written) histories of their ancestors' origins, the migration and intermarriage of particular lineages, and the establishment of settlements, gardens and sacred sites. These narratives often feature references to dislocation and resettlement as a result of warfare, sorcery, and natural disasters. These highly complex stories are embedded in the landscape and linked to natural features such as rivers or caves; sacred sites; and abandoned villages, old gardens and trees.[13] Descent and kinship therefore circumscribe relationships not only between one person and another, but also between a person and a *place*.[14] Furthermore, land tenure systems in Solomon Islands are characterized by narratives of ancestral origin and first possession, exchange, alliance and precedence; and at this level of generality, share similarities with societies elsewhere in the Pacific.[15]

Oral histories indicate that customary systems of landholding and social organization have historically had the capacity to adapt to migration. Claims to land are inextricably tied to claims to membership of particular social groups, and land claims often depend upon the assertion of a privileged relationship between particular social groups and particular places. However claims to land rarely, if ever, depend upon the assertion of *exclusive* rights to the land. Productive activities – such as the establishment of villages, or the reproduction of lineages through the birth of children – inevitably require engagement with other social groups, for example through exogamous marriage and shared residence on the land.[16] Oral histories also reveal that there were a variety of other means for incorporating 'outsiders' into social groups, whether they were captives taken during raids,[17] or migrants from nearby plantations.[18] However within most social systems there is also a system of social differentiation that emphasizes temporal precedence, with original settlers being accorded a higher status, and more extensive roles in political and economic affairs, than newcomers.[19]

While local systems of landholding and social organization provide scope for the incorporation of migrants, migration has also been a source of social conflict in Solomon Islands. From 1998 to 2003, Solomon Islanders experienced a period of land-related civil conflict commonly known as 'the Tension'. At the heart of the crisis were disputes between the customary landowners of Guadalcanal, the island on which the capital, Honiara, is located; and settlers from the neighbouring island of Malaita, who were evicted from the land they had occupied for many years because they were perceived to be usurping the privileged status of the indigenous people of Guadalcanal. By 2003, the country was being described as a 'failed state', and the Solomon Islands made repeated requests to Australia for assistance. This eventually resulted in the mobilization of the Regional Assistance Mission to Solomon Islands ('RAMSI'), an Australian-led mission comprised of personnel from Australia, New Zealand, and the Pacific Island states. RAMSI is currently undergoing a transition that will include withdrawal of military personnel and a shift from the 'post-conflict' assistance to long-term development assistance.

Migration and resettlement during the colonial period

The Tension has contributed to the re-emergence of national debates about land tenure, migration and settlement patterns, and the extent to which internal migration should be controlled. These contemporary debates about migration and freedom of movement need to be understood in the context of transformations occurring since the colonial period.[20]

The British formally annexed Solomon Islands in 1893, establishing the British Solomon Islands Protectorate (BSIP). The establishment of a plantation economy and the activities of Christian missionaries during the colonial period promoted novel forms of migration within the archipelago. Men often travelled to plantations or missions located in other provinces in order to access employment, education and training. While small numbers of women travelled to the missions and plantations, it was generally young men who were drawn into these new forms of migration.[21] While most male migrants returned 'home' at the end of their contracts or training, some married into local landholding groups in the vicinity of plantations and missions, and stayed for the rest of their lives. In some instances migrant labourers stayed on and created their own settlements, such as the Nukufero settlement by Tikopian labourers in the Russell Islands and Kokana settlement by Reef Islander labourers in Makira.

Male labour migration, and life on the plantations and missions, facilitated the formation of new masculine identities that stretched beyond the old boundaries of kin group and language, and founded instead on islands and regions.[22] For example, when men from the island of Malaita worked together on the plantations, they realized that they had linguistic, religious and cultural concepts and practices in common.[23] These new, island-based identities were often deepened far more than any sense of national solidarity, partly as a result of the conflicts that arose between labourers from different islands, and between migrant workers and landowners in the vicinity of the plantations, often due to differing cultural expectations regarding appropriate behaviour.[24] The experience of male migrant workers on plantations converged with the colonial division of labour and the establishment of colonial administrative boundaries to give rise to place-based 'ethnic' categories that persist today, such as 'Western', 'Malaitan' and 'Guale'.[25]

Settlement patterns were also significantly transformed during the colonial period. Today the bulk of the population is concentrated on the coastline of major islands and on the small islands offshore, and there is a noticeable absence of inland settlement in many parts of the country. However this was not always the case. In pre-colonial times, there was often a strong distinction between the 'bush' people who occupied the inland forests of the major islands, and the 'coastal' or 'saltwater' people living in the coastal areas or on smaller outlying islands. In many parts of Solomon Islands, such as Marovo Lagoon in Western Province and Lau Lagoon in Malaita, these groups often confronted each other in warfare, but also engaged in a system of institutionalized barter during which women from the bush met women from the coastal communities on the beaches,

and exchanged products from the bush such as taro, betelnut and pig in return for fish, shellfish and lime made from coral.[26]

This old settlement pattern was reorganized during the colonial period as missionaries and colonial administrators encouraged people to move from their relatively small, scattered hamlets in the interior to larger, permanent villages on the coast, where the activities of the missions and Protectorate officials were focused.[27] On the island of Malaita, for example, converts to the South Seas Evangelical Church relocated to villages along the coastline and small islands offshore such as Kwai and Ngongosila.[28] These coastal villages were established far closer to beaches and foreshores than had previously been the case. These areas are considered common grounds open for use by villages for common and ordinary usage such as bathing, picnics, construction of canoes, shelters, collecting sea water for cooking, cleaning kitchen utensils and removing sand or gravel. People from outside the community are permitted to use the village beaches or foreshores, but such permission does not extend to obtaining an economic benefit from the use of these resources. For example, if outsiders start using gravel or the sand for a commercial purpose, landowners will demand payment for access or use of such area.

After conversion to the Church of Melanesia (Anglicanism), the 'coastal people of the artificial island of Walande relocated to coastal areas on the nearby mainland. However oral histories record that the environment was unfamiliar and uncomfortable for these 'saltwater' people, and many people died (these deaths are generally attributed to either sorcery or malaria). As a result, many people soon left these new, coastal villages and returned to the small island of Walande. The settlement of Lilisiana, which lies on the edge of Auki Harbour, began to develop as the 'coastal' people from Koloka Island began to move closer to the growing township of Auki. They settled on Kwarinakinaki Land, which they purchased from the 'bush' Asisiki group.[29]

Bush-coastal distinctions have been significantly transformed by factors including missionization and colonization, while they remain important in relation to language, social organization, territorial holdings, and the use of natural products. Denominational membership is also an important distinction, because doctrinal differences entail different patterns of resource use and conflict management. For example, in the Western Province, there is often a greater emphasis on cooperative economic activity in villages belonging to the United Church, whereas the Seventh Day Adventist Church is characterized by a more individualistic approach to economic activity, and prohibits consumption of betel nut, alcohol, crustaceans and pigs.[30] In some senses, the establishment of missions provided scope for the emergence of more unified communities out of previously distinct groups,[31] but in others instances, denominational differences provided a range of potent opportunities for reinforcing long-standing distinctions and enmities.

Identities and affiliations based on 'bush' and 'coastal' distinctions, kinship, language, islands, regions and denominations have therefore undergone significant transformation since the colonial period, and both reinforce and cross-cut each other in a variety of ways. People generally make reference to their village

based on bush or coastal distinctions; but also identify with an area of origin founded on kin groups and languages. For example, in the northern part of Malaita, people make distinctions about areas based on languages such as Tobaita, Baelelea, Baelanga, Baefua, Baenao, Baegu and Lau. Various kin groups speak these different languages; they can understand each other and some people can switch from one language to another. These kin-based identities and affiliations are crucial to understanding land tenure, which cannot be understood in terms of distinctions between 'public' and 'private', or 'individual' and 'communal'. However regional and island-based identities such as 'Guale', 'Malaitan' and 'Western'; as well as denominational affiliations and distinctions; provide a further layer of social interaction and differentiation, particularly at the regional, provincial, national and even international level.

Climate change and displacement

People in many parts of Solomon Islands are now reporting a range of phenomena that could be expected to increase and intensify with anthropogenic climate change. These include a change in seasonal patterns, which compromises agricultural activities because people no longer know when the wet and dry seasons will occur. Changes in the frequency and scale of cyclones, droughts and high tides are also compromising the ability of people to prepare for natural hazards. People in many parts of the country are reporting what they believe to be lower low tides, which require them to travel farther afield to fish; as well as higher high tides, which cause damage to essential infrastructure such as wharfs, houses and church buildings.

Our preliminary research suggests that the communities that are openly discussing issues of relocation and resettlement due to climate change are concentrated in Malaita Province and Temotu Province.[32] In Malaita Province, these include the populations of the low-lying islands of Kwai and Ngongosila; and the artificial islands of Walande and Fanalei in Small Malaita and in Lau Lagoon in north Malaita.[33] Low-lying coastal areas on the mainland, notably Lilisiana on Auki Harbour, are also currently discussing the prospect of relocating further inland.

Kwai, Ngongosila, Walande and Fanalei all experienced unusually high king tides and flash flooding in early 2009, which washed away numerous houses and damaged others, causing almost 200 people to evacuate to the mainland.[34] King tides often occur in January and February, but the 2009 tides were much higher than usual.

Kwai and Ngongosila are extremely vulnerable to flooding: both are less than 2 metres above sea level, and Kwai is about 500 metres long and 100 metres wide, while Ngongosila is about 300 metres long by 100 metres wide. These two islands have often varied in size and shape depending on prevailing weather conditions, and have a history of being inundated by high tides during September. In the 1940s, the islands were only sparsely populated and covered in dense vegetation. Villages were built away from the constantly shifting coastline. By the 1990s, however, much of the vegetation had been cleared and the islands were severely over-populated given their small size.[35] In 2009, several families permanently relocated to the mainland after high tides flooded villages, washed away houses, and left many other homes severely damaged.

The same tides broke through the sea wall surrounding the island of Walande and washed through the village, reportedly destroying sixteen homes and the church building. As noted earlier, settlement patterns and land tenure practices were transformed by colonization, missionization and the cessation of pre-colonial warfare. Prior to colonization, the 'bush people' lived in the hills, while the 'coastal people' of the surrounding islands were able to access the coastal areas on the mainland. After conversion to Christianity, the people of Walande resettled in these coastal areas on the mainland. However, the environment was unfamiliar and many people died (these deaths are often attributed to either sorcery or malaria). As a result, they ultimately returned to the artificial island of Walande.

During the 2009 floods, the entire village, comprising more than 40 households, was initially evacuated to the mainland. Some families had already relocated to the mainland after similar events in 2004, but the remainder relocated after the 2009 tides.[36] The people of Walande have relocated to Tetele Land on the mainland, but their claims to this land are contested by the surrounding bush communities. Furthermore, while the relocation to Tetele Land is very recent, most is now settled or under cultivation, and as the population grows, so too will the pressures on the land.

The relocation of Walande people to Tetele Land commenced in the mid-1980s, following Cyclone Namu (1986) and when funding was secured from the Australian High Commission to bulldoze the Tetele Land for settlement. Over the next decade, the effects of environmental change meant that the sea wall began to break down, and the increasing size of waves, loss of mangroves, and declining availability of dead coral made rebuilding the wall increasingly difficult.[37]

People were initially unwilling to relocate to Tetele land, largely because of the stories of previous attempts to resettle on the mainland. In order to address this, a church was built on Tetele land, and the Church of Melanesia Bishop spread holy water over the area. People then began to feel more confident about relocating there, and following the 2009 tides, the majority of people have left Walande and relocated to Tetele Land.[38] According to anecdotal information, some people entered into informal land sale transactions to acquire a parcel of land from landowners to resettle while others were allowed to resettle on the land due to intermarriages that created kinship ties. However, to access land for gardening purposes the Walande people would have to ask landowners on the mainland for permission. In May 2009, the Walande church was deconsecrated.[39] Church buildings are significant sites in Solomon Islands, and in most villages the church is one of the largest and most important buildings. Church-based activities form one of the foundations for social interaction in every village. The deconsecration of Walande church therefore signified the closing of a place of worship so that it would no longer be considered as sacred, and reinforced the finality of the decision to move to a new place and create a new Walande community. The closure

of a sacred site such as a house of prayer symbolizes a transition to a new place, with no point of returning or reconnecting the community with the old place. There is a major shift in social life and structures which begins with the deconsecration of a church house. The relationships between the people of Walande and their connection to place are therefore undergoing rapid transformation. The relocation has had a significant impact on social organization, culture and perceptions of place. For example, houses on Tetele Land are built much further apart than they used to be, and members of the community perceive this to be associated with a breakdown in community cohesion and cooperation, and a challenge to the authority of traditional leaders.[40]

The Lau Lagoon is located on the eastern coast of North Malaita, one of the most densely populated parts of the country. It is famed for the artificial islands Tara'ana, Tauba, Kokoefou, Surikiki, Takwaiasi, Lafmasi, Auri, Foueda, Funafou, Adegege, Sulufou, Sau'a, Ferasubua, Fuaga and Fare, which are constructed from coral from the sea floor. According to oral narratives the original occupants who built and settled on the islands were from the centre of Malaita and they migrated either from the hills to the coastal areas due to warfare, and shifted from one coastal area to another, settling in Lau Lagoon before moving on to Walande. The descendants of these original settlers have rights to either use or access marine or land resources in the area. They have strong kinship and social networks with people on the mainland and neighbouring coastal villages.

Houses on the islands are constructed on stilts, and the islands themselves are typically located only a metre above the high water mark. The people of Lau Lagoon have experienced unusually high tides on several occasions. High tides have washed through villages, destroying kitchens that are built directly on the ground of the island; flooding houses; and carrying refuse from the toilets that surround the islands. Some islanders are now attempting to relocate to the mainland, but most wish to remain on their islands. They have identified their options for doing so as including raising houses by building higher stilt foundations; building up the existing stone structure of the islands; or building an entirely new island.[41] Most of the coral necessary for the second two options has been used up: today, the floor of Lau Lagoon is predominantly sand, with very little coral remaining. The depletion of coral also contributes to the decline of the knowledge and skill necessary to maintain and rebuild islands, which is rapidly being lost to younger generations of islanders.

Relocation to the mainland is likely to be a challenge for the people of Lau Lagoon. North Malaita is one of the most heavily populated parts of the country, and subject to many existing and ongoing land disputes. This is partly because there are many different tribal groups in this region who have multiple or overlapping interests/rights and responsibilities to land. Despite land disputes, people continue to co-exist and live peacefully because kinship bonding and mutual social networks continue to exert a strong influence over people's relationship with each other and to the land. These ties provide the crucial avenue through which people living on artificial islands may access and use land on the mainland, and potentially resettle on the mainland without significant social disruption. People's knowledge of genealogy and historical connections to land and other people therefore provide an important avenue for facilitating access to and use of land.

The people of Lilisiana, on the outskirts of the provincial capital of Auki, as well as the surrounding 'bush' communities, are also aware of the prospect of displacement and are discussing options for resettlement. While the initial wave of migration from Auki Island to Lilisiana occurred in the late 1920s, a second wave of resettlement occurred after a cyclone in 1952. To outsiders, Lilisiana is a picturesque village with traditional-style houses raised on stilts over the shore. However the village is extremely densely populated, and tides and inundation have increased since the 1950s, to the extent that Koloka Island has been reduced to coral, and high tides are extending up the roads and rivers that run through Auki.[42]

In the late 1990s, a group of settlers from Lilisiana relocated to a site further inland, called Bethany. Reasons given for the relocation included inundation, over-crowdedness, and internal disputes. This group of migrants had a connection to the female side of the Asisiki group, who originally sold the land on which Lilisiana sands and facilitated the relocation during the 1990s. According to members of the Asisiki group, at the time of the relocation there was no intention to assist the entirety of Lilisiana village to move – the intention was rather to assist a small group of people due to long-standing social relationships and kinship ties. At present, however, a far larger relocation is being discussed. In contrast to the relocation of Walande, which was instigated by the coastal people, the proposed relocation of the Lilisiana people seems to have been driven by the surrounding 'bush' communities.[43]

The Asisiki group are currently developing what they refer to as a 'Relocation Package' for a large tract of land. This land has been made available for relocation because the majority of the Asisiki group live in the hills and currently have no other plans to develop their land in the coastal areas. The Relocation Package includes a proposal to subdivide the land into plots for families, who would acquire registered title to the land. This is intended to provide an incentive for families to relocate, and ensure tenure security for future generations.[44]

The Solomon Islands Government, non-government organizations and donors have also periodically commented on the potential displacement of populations living on Ontong Java and Sikaiana, two small, low-lying coral atolls which are administratively part of Malaita Province.[45] In December 2008 a multi-sector assessment team was sent to Ontong Java to assess the impact of high swells which hit the island. The team assessment report recommended that both the national and provincial government need to consider relocation as a long-term adaptation strategy and this would require looking at land and social issues and proper planning. The report highlights that important government agencies such as the Ministry of Lands and Survey need to be part of the process.[46]

Ontong Java and Sikaiana are both home to ethnic Polynesians, in contrast to the Melanesian majority which populates Malaita. Sikaiana lies approximately

200 kilometres northeast of Malaita. Ontong Java is located more than 250 kilometres north of Santa Isabel, and much closer to atolls in neighbouring Papua New Guinea than any island in Solomon Islands. Both atolls lie approximately 2 metres above sea level. The populations on these islands are highly vulnerable to natural hazards including cyclones and flooding due to a range of factors including the physical exposure of the islands and the populations' dependence on a small number of crops (primarily coconuts and taro).[47] To date, much of the attention of the government and civil society has been directed at the potential relocation of people on Ontong Java, who report that the weather is becoming increasingly unpredictable, with an increased incidence of storms, precipitation, and hot days and nights, as well as higher sea levels and increased incidence of high tides.[48] Droughts of 1–4 weeks occur on an annual basis, with a range of negative impacts on food production. In particular, droughts cause the groundwater level to sink and increase the risk of saltwater intrusion.[49] In 2010, a visiting church minister reported that saltwater intrusion was destroying gardens of swamp taro, a critical staple food on Ontong Java.[50]

Ontong Java is expected to be fully submerged by 2015,[51] and provincial authorities have reportedly attempted to set aside land for resettlement by people from Ontong Java on Sikaiana. However, conflicting land claims meant that this did not eventuate.[52] An alternative plan has been to relocate some 40 families from Ontong Java to Bougainville in Papua New Guinea. According to Terry Brown, the church minister who visited in 2010, many members of the community felt that their best option for relocation was through intermarriage with other island groups, which would permit people to resettle elsewhere. However, as noted by Brown, this strategy may lead to the dispersal of the community and the decline of the distinctive language and culture of the people of Ontong Java.[53]

Anuta, Tikopia and the Reef Islands are all administratively located in Temotu Province, and as is the case in relation to the case of Sikaiana and Ontong Java in Malaita, these island groups are occupied by Polynesians while the larger islands are occupied by the Melanesian majority. Anuta and Tikopia are both small, mountainous islands, while the Reef Islands and Duff Islands groups include atolls. Many of these communities have been hard-hit by cyclones on numerous occasions, and livelihood security has historically been poor. Some communities have been the beneficiaries of NGO-run climate change projects aimed at improving livelihood security. However, in contrast to Ontong Java, which is regularly mentioned in media reports and parliamentary debates about the prospect of displacement and resettlement, the prospect of large-scale relocation within Temotu Province does not appear to have received a great deal of attention.

While the other cases mentioned previously concern situations in which people are currently trying to relocate, the case of the Nupani settlers in the Reef Island group provides an example of previous relocations. The Nupani settlers have already been relocated twice, and are now in the process of a third phase of relocation.

Nupani is a Polynesian atoll that can sustain around 30 people. The first relocation occurred in 1963, when three *tepuke* (canoes) carrying 15 people each

relocated to the island of Tinakula, a conical volcanic island just south of the Reef Island group. The settlers were induced to leave by coastal erosion and sea-level rise, which had started to affect the crops upon which they depended, and prior to the first relocation, they had already explored Tinakula and started planting crops there. This relocation was instigated by the community, who relocated after being instructed to do so by their chiefs.[54]

The second relocation occurred in 1971, when Tinakula erupted. By that time, the island supported a population of more than 100 settlers, who were evacuated by ship to the Santa Cruz Islands, where they were accommodated in temporary camps and supported by the locals on Santa Cruz for almost a year. The colonial government wanted to acquire 100 hectares of land for the settlers, but was only able to acquire fifty. This was obtained from an elder who offered his land because of his good relationship with the settlers, based on trade relations that preceded the colonial era.[55]

Today, the population of Nupani settlers has outstripped the capacity for the land to sustain them. In addition, the settlers report that rising sea levels are encroaching upon their land, with the result that it is no longer suitable for gardening and settlement. The land is also subject to competing claims of customary ownership.[56] Some of the settlers have married people who are indigenous to Santa Cruz or other islands, but many couples prefer to live in the settlement due to the income generation opportunities available there.[57] Many people are therefore unwilling to move. However, others are prepared to do so, and a third relocation has begun. One of the probable sites for relocation is Vanikoro, which is currently inhabited by people indigenous to that island, as well as people who trace their origins to Tikopia. Some Nupani settlers have already relocated to Vanikoro, others are negotiating with parliamentarians for access to alienated land on that island.[58]

Assessment of state-based mechanisms for responding to displacement

The Solomon Islands Government recognizes that climate change is an increasing issue in Solomon Islands. It has committed to address the issue by being a party to international agreements on biodiversity, the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, and recently it endorsed the Rio Principles 2012. The government agrees to adhere to the principles in the international instruments as part of the process to deal with climate change. However, these international arrangements do not provide a great deal of guidance as to how governments can respond to displacement at the local level. The government is making slow progress incorporating the international agreements as part of its domestic laws. Translating this commitment to addressing climate change into government programs and existing legal frameworks remains a largely uncoordinated work in progress.

Since 2007 people from communities living on lying atolls, artificial islands and areas affected by sea level rise and tsunami have notified the government that

their livelihood is at risk. The government has responded by repeatedly affirming that they are considering the prospect of relocating people affected by sea level rise or tsunamis. For example, in 2007 Prime Minister Sogavare stated that his government was 'seriously looking at the issue of relocating people on low lying islands to safe locations'. Likewise, the then-Minister of Environment and Conservation, Honourable Gordon Darcy Lilo when responding to questions in Parliament in 2009 stated that land must be acquired to accommodate people who will be relocated as a result of sea level rise. According to Lilo, all alienated land in the county has been earmarked for commercial development, and any land for people that may be affected by sea level rise must be negotiated with landowners and provinces.[59] While the government is to be applauded for acknowledging the necessity of acquiring further land, this is likely to be a challenge, given the complex nature of landholding arrangements in Solomon Islands.

The Solomon Islands government as a means of responding to climate change issues has engaged in a number of adaptation and mitigation activities. For example, with regard to adaptation two of the main adaptation activities among others were the National Adaptation Program of Action Implementation Project and the Pacific Adaptation to Climate Change (PACC). As for mitigation activities the government has become involved in activities such as the Forestry Conservation Management Programme, Pacific Islands Greenhouse Gas Abetment Renewable Energy Project, Community Electrification Project for Rural Solomon Islands, AusAID Rural Electrification Project, the Sustainable Energy Project and the Tina Hydro Dam. The sustainability of these projects needs to be looked at carefully. As experienced with Constituency Development Funds, Members of Parliament would give out iron roofing, materials and solar panels from the CDF as part of housing projects but people would usually sell them for cash to satisfy their immediate needs and wants. Therefore, adaptation and mitigation activities should not only directly address the issue of displacement and relocation of communities affected by climate change but also consider the sustainability of a relocation programme.

The Climate Change Division (CCD) of the Ministry of Environment, Conservation and Meteorology (MECM) is the main state institution involved in coordinating and overseeing climate change adaptation and mitigation activities and work at the national level. According to the government's National Climate Change Policy 2012, the Ministry of Environment, Conservation and Meteorology (MECM) is also responsible for the development of guidelines, tools and capacity to support the relocation of communities but the issue of relocation should be considered as the last resort.[60] However, the MECM has limited capacity to engage in adaptation and mitigation activities and work effectively to address climate change issues because of inadequate resources and insufficient coordination between stakeholders.

The Solomon Islands National Adaptation Programmes of Action (NAPA) provides an action and activity based framework for dealing with climate change issues including how to address low lying atolls and artificially built islands affected by sea level rise. NAPA recognizes the need for resettlement of communities affected by climate change and that land acquisition is necessary but it fails

to provide a clear outline of how this will happen. Since land is an important factor of consideration for purposes of relocation and resettlement the Ministry of Lands, Housing and Survey and landowners who own approximately 87 per cent of land in Solomon Islands need to be proactively involved. At present NAPA fails to provide a clear outline on how and where in Solomon Islands land will be acquired for resettlement. Acquiring customary land for resettlement needs to be looked at carefully because customary land, people, relationships, identity and power structures are inter-related.

The existing legal framework for land acquisition deals with both alienated or government land registered as perpetual or fixed-term estates and customary land. The compulsory acquisition of such lands must be for a public purpose[61] and landowners are required to be compensated.[62] The process for compulsory acquisition of customary land can take a long time and is expensive to negotiate due to multiple and overlapping interests. Customary landowners are not likely to give up their land easily, due to the strong connections between people and place. There are wide-ranging social and economic consequences of land alienation which are not (and possibly cannot be) easily addressed through the land acquisition process. It is less complex for the state to acquire land that has already been alienated during the colonial period (including public land, fixed term estates, and perpetual estates). This land is predominantly located in urban areas. At present it appears that the government is considering negotiating with landowners for the acquisition of customary land for resettlement. However there is no clear resettlement policy, and no guidance as to how customary land can be acquired with minimal social disruption.

With the recent launch of Solomon Islands National Climate Change Policy, the European Union has released the first tranche of funds of SBD11 million under the Solomon Islands Climate Change Assistance Programme (SICAP).[63] The European Union funding is provided as part of general budget support to assist the government implement its adaptation and mitigation activities to deal with climate change challenges. The SICAP will support the government implement the National Climate Change Policy that prioritizes relocation and resettlement of communities affected by sea level rise as one of its policy goals.

The Minister of Climate Change, Disaster Management and Meteorology, Honorable Moffat Fugui indicated that funding will be made available to study relocation options.[64] The relocation of large groups of people is not unprecedented in Solomon Islands, and it may be instructive to examine past experiences. During the 1950s, the colonial government was involved in the relocation of people from the over-crowded Gilbert and Ellice Islands in Kiribati, to Wagina (Choiseul) and Titiana (Gizo).[65] In 1977, the Horabau people of the Weathercoast of Guadalcanal were victims due to an earthquake in 1977. This prompted the government to respond to the disaster by relocating the Horabau people on government alienated land at Aruligo on the North West of Guadalcanal near Honiara.[66] The people struggled to resettle on the alienated land because there was limited government support in terms of infrastructure but with the presence of a Catholic mission station at Aruligo it provided a basis for social interaction with nearby communities. The

presence of the church made it easier for a smooth resettlement transition because with the influence of church narratives the surrounding communities were in a position to welcome the Horabau people in their territory.

A more recent relocation exercise was in 2005 when the Honiara City Council decided to repatriate Malaitan families living at the Honiara rubbish dump site back to their home villages. The Malaitan families have settled near the Honiara dump site for almost fifteen years but the Honiara City Council was concerned their health was at risk.[67] The Honiara City Council, the South Seas Evangelical Church and Compassion Australia coordinated a relocation programme but without involvement of the people from the areas where the relocation would happen. Compassion Australia provided funding for the programme worth more than AUD140,000 to help the families relocate to their home villages. The families agreed to relocate and they were provided with money to do so.[68] Some families relocated to their home villages but found it challenging to resettle and fit in well with local communities. They stayed in their villages for about three months, used the money, and then returned to the Honiara dump site. Others stayed in Honiara with relatives, used the money, and then also returned to the Honiara dump site.

The current National Climate Change Policy fails to provide a clear policy direction on how MECM will address the question of climate displacement and/or the land required to redress such displacement. To date the government has not been prepared to commit existing alienated land to resettlement, but the acquisition of further alienated land, or the relocation of communities on to customary land, is likely to be extremely complex and highly politicized. While state-based laws provide for compulsory acquisition of land, this is likely to be resisted by customary landowners and could provide a source of conflict between the state, customary landowners, and settlers. Compensation or other forms of funding by the state may lead to a proliferation of claims to ownership of the land sought for resettlement, and contribute to land disputes. Provision of funding for displaced persons is similarly likely to raise complex questions of how beneficiaries are to be identified, and may lead to an increased number of people claiming to be displaced. The development of clear policies and guidelines for the provision of funding or allowances is therefore crucial.

Local mechanisms for responding to displacement and the role of civil society

Communities in Solomon Islands have historically had a range of strategies for predicting, responding and adapting to natural hazards, including migration and resettlement.[69] It is these local mechanisms that are facilitating the initial response of Solomon Islanders to climate change, and in the absence of effective state-based policies and institutions, they are likely to continue to provide the principal avenue for adaptation to climate change. Furthermore, these locally based strategies are likely to be cheaper, faster and less productive of social conflict than state-organized relocation of settlements. It is therefore essential that these local mechanisms receive greater attention than has previously been the case.

There has historically been a range of mechanisms within *kastom* that provided for and facilitated migration and access to land, such as intermarriage between groups, and the exchange of fish and root crops between 'bush' and 'coastal' people. These social relations, and shared histories of intermarriage and exchange, continue to have a profound influence on land relations today. For example, coastal people are often able to seek permission to access land from their affinal or cognatic kin in landowning groups on the mainland. A large number of people living on artificial islands such as Kwaleuna, Foufoi'asi and Kwaloai relocated to mainland Malaita after Cyclone Namu. All of these people could either claim access to land on the mainland through their own patrilineal kin groups, or had connections to tribes on the mainland through their mothers. Intermarriage also provides an important avenue by which people may access land: many of the Walande people are descendants of 'bush' people, and those that have a connection with bush people have often intermarried with the present-day bush groups and settled on land acquired through intermarriage.[70] Cultural knowledge and the maintenance and reinforcement of social relationships are therefore crucial to people's options for relocation. A person who possesses detailed knowledge of the history of their ancestors, their migrations, and the places they settled is far more likely to be able to make a persuasive claim to access land in those places today.

In 2007, a number of communities in Western Province relocated further inland after islands in that province were devastated by a major tsunami. One of the worst affected villages was Titiana, which was built along the coastline of the small island of Gizo, the island on which the provincial capital of the same name is located. Titiana was primarily populated by Gilbertese who were relocated from Kiribati during the colonial period, and their descendants. When the tsunami struck, many of the Gilbertese men were out fishing and therefore safe. However stories abound of small children being washed out to sea after curiously chasing the receding waterline. Many people died, the village was destroyed, and the Gilbertese fled into the hills, where they remain living in improvised housing. While some have been able to access land held by relatives, their ethnicity often makes it more difficult to draw on kin relations that would enable them to access land held by the surrounding Melanesian communities. As a result, many are squatting on government land adjacent to major roads or earmarked for future development.[71]

The case of the resettlement of people from Lilisiana may provide a potential model for internal relocations within Solomon Islands, particularly between closely related groups. In many situations, it is the people who are threatened by environmental change who seek a site for relocation. However in the case of Lilisiana, it appears to be the customary landowners who are initiating change. The Asisiki leadership intend to approach the government for support (for example through mapping and registering plots of land) once the relocation has been planned and all the arrangements are in place between the Lilisiana and Asisiki people.

The role of church leaders and church communities as a forum for social interaction and social transformation remains under-explored in Solomon Islands.

Church leaders and church-based groups have historically played a significant role in promoting peace and unity, and provide an important avenue for the creation and maintenance of social relationships and social networks. Church-based organizations also complement the government's delivery of services through the provision of services such as transport, health and education in most parts of Solomon Islands. Through the work of the Solomon Islands Christian Association (SICA) the churches are able to cooperate and coordinate how they perform their roles to promote development in rural Solomon Islands. SICA assisted the government deal with the civil arrest during the Tension in Solomon Islands and at present is partnering with Act for Peace, an international NGO to improve the quality of life of Solomon Islanders by addressing problems generated by violence and natural disaster.[72]

The churches, together with other non-government and civil society organizations, are actively working on projects concerning disaster risk management and climate change adaptation and mitigation issues. Activities on disaster risk management are run in communities throughout Solomon Islands as part of The Pacific Community Focused Integrated Disaster Risk Reduction Project funded by AusAID through the National Council of Churches of Australia (NCCA) and SICA with technical support from the government is currently.[73] The Anglican Church of Melanesia in partnership with the Anglican Board of Mission Australia since 2007 has a climate change programme that assisted the community on Ontong Java to come up with adaptation and mitigation measures to address climate change issues.[74] The Catholic Church in partnership with Caritas Australia has a programme focusing on disaster risk reduction strategies for communities in the Diocese of Auki and Archdiocese of Honiara.[75] The churches are working closely alongside other civil society groups and communities to address disaster and climate change issues but with a limited focus on how they can facilitate a process to proactively respond to climate displacement and relocation.

The role of churches in addressing climate change is premised on the Otin Taai Declaration following the World Council of Churches (WCC) major regional ecumenical meeting on climate change in Kiribati in 2004. In 2007 the Pacific Conference of Churches (PCC), which mainline churches in Solomon Islands are members of, promoted that member churches should be committed in addressing climate change issues in their countries including resettlement. The PCC pointed out that if resettlement is to happen in the future its groundwork must happen now. The churches in Solomon Islands have picked up on this by partnering with other civil society networks to develop climate change programmes but this is happening with limited state support. The groundwork prior to relocation and resettlement needs to involve all stakeholders and clear cooperation between churches, other civil society groups, the state and landowners.

People trust the churches and are more closely connected to them as compared to the government or state. But despite the level of trust and connection that churches have with the people and communities it does not make it easier for resettlement and relocation to other people's customary territory to happen. The churches and other civil society groups cannot do much in terms of acquiring land

for resettlement purposes due to climate change displacement. Any resettlement framework should involve the churches, state and landowners through a process of adequate consultation and negotiation. Such process should not be money bound but rather socially and culturally sound with the support of local mechanisms. Climate change displacement is a global issue but the idea of relocation and resettlement should be grounded on local solutions facilitated through local mechanism with the support of the churches, other civil society groups and the state.

Conclusion and recommendations

Our preliminary research suggests that solutions to climate displacement grounded in local norms and practices may be more feasible than generally thought. Across Solomon Islands, communities are already feeling the effects of climate change, and in the absence of effective state-based mechanisms are developing their own strategies for responding to climate change. These local initiatives are likely to be cheaper, faster, and less productive of social conflict than state-organized relocation of settlements.

We therefore advocate that increased attention be paid to these local strategies, and that rather than developing a 'one size fits all' approach, governments, donors and non-government organizations adopt a strength-based approach to responding to displacement and resettlement. Such an approach would support communities' own strategies for responding to climate change, rather than support or lead these initiatives.

The researchers involved in this preliminary study regard the Solomon Islands' government as having a key role to play in providing the financial, legal and institutional frameworks necessary to enable communities to access land, and hold it with a degree of tenure security. The Tension has demonstrated the inability of the Solomon Islands' state to guarantee tenure security in the face of competing customary claims.[76] However the state may have an important role to play in acquiring land for resettlement in consultation with customary landholders, or facilitating access to finance so that communities (rather than individuals or families) can purchase land. Our research also demonstrates that where communities have sought to purchase land for resettlement, these transactions have often involved customary exchanges, the meaning, content and significance of which has later become contested. The researchers involved in this study were of the view that the state is responsible for providing mechanisms to record these transactions.

The Solomon Islands' government has a key role to play in providing the financial and legal structures and mechanisms necessary to enable communities to access land, and hold it with a degree of tenure security. The government has an important role to play in acquiring land for resettlement, or facilitating access to finance so that communities can purchase land. Our preliminary research demonstrates that where communities have sought to purchase land for resettlement, these transactions are often highly contested. The government may have a role to play in providing mechanisms to record land transactions, so that communities have a record that can be referred to in the future. This does not need to

entail land registration, which is extremely time-consuming and expensive; involves the delineation and severance of social relationships and physical boundaries on the ground; and is often conducive to increased social conflict. Our preliminary research demonstrates that where communities have sought to 'purchase' land for resettlement, these transactions revolve around feasts, the exchange of traditional shell valuables, and speeches which explain the significance of social relationships and the goods exchanged, as well as the intention of the various parties. Many of these transactions have subsequently become highly contested. Rather than focusing on orthodox land recording mechanisms, these events could be recorded on videotape so that communities have a record for future reference.

Finally, the recent attempt to relocate settlers from the Honiara rubbish dump site serves as a reminder that relocation programmes involving cash payouts can have unexpected consequences. Non-government and civil society organizations, in particular the local churches, often have a far more intimate knowledge of local needs and strengths than do state-based personnel and institutions. Furthermore, Christianity and the churches provide both semantic and institutional opportunities for transcending social difference, resolving social conflict and promoting unity among diverse groups of people.

Acknowledgements

This chapter draws on research undertaken by the authors and Daniel Fitzpatrick, Matthew Fakaia, John Handmer, Paul Mae, Jack Maebuta and Ruth Maetala with financial support from the ANU College of Law, the Centre for Risk and Community Safety at RMIT University, and World Vision. The views expressed in this chapter are those of the authors and are not necessarily representative of those of any other individual or organization involved in this research. Correspondence may be directed to MonsonR@law.anu.edu.au.

Notes

1 Paul Mae and Ruth Maetala examined the possible relocation of people of Ngongosila and Lilisiana respectively; Matthew Fakaia examined the existing relocation of the people from the island of Walande to mainland Malaita; and Jack Maebuta undertook research into the relocation of Nupani settlers to Santa Cruz in Temotu Province during the colonial period. For a report of the workshop see Rebecca Monson (2010), *The Frigate Bird Can Soar: Adaptation to Environmental Change in Solomon Islands* (report of the workshop on Community Adaptation and Resilience: Local Relocations Induced by Rising Sea Levels in the Solomon Islands, Honiara, 4–5 November 2010),www.academia.edu/1599514/The_Frigate_Bird_Can_Soar_adaptation_to_environmental_change_in_Solomon_Islands.

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4 Kjeld Rasmussen, Wilhelm May, Thomas Birk, Melchior Mataki, Ole Mertz and Douglas Yee (2009), 'Climate Change on Three Polynesian Outliers in the Solomon Islands: Impacts, Vulnerability and Adaptation', *Danish Journal of Geography* 109(1): 1–13 at 10.

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7 The manner of holding, occupying, using, enjoying or disposing of 'customary land' is determined by 'current customary usage'. This is defined as the practice of Solomon Islanders relating to the matter in question, at the time when that question arises, regardless of whether that usage has existed from time immemorial or for any lesser period: Land and Titles Act, ss 2(1) 239.

8 In 2002, only 12 per cent of land had been registered: Pacific Island Forum Secretariat, Session 3 Paper: Land Issues (paper prepared for the Forum Economic Ministers Meeting, Port Vila, Vanuatu, 2002).

9 Registration of customary land generally occurs under the Land and Titles Act 1996 [Cap 133], which provides for group ownership of land by means of appointment of a maximum of five trustees. The Customary Land Records Act 1994 [Cap 132] establishes an alternative systems for recording interests in land, but this has not been widely used.

10 The 2011 RAMSI People's Survey found that 65 per cent of rural respondents and 41 per cent of urban respondents identified 'land disputes' as 'the main cause of conflict and problems in Solomon Islands': Regional Assistance Mission to Solomon Islands (2012), *People's Survey 2011* (Honiara: Regional Assistance Mission to Solomon Islands), 91–2.

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12 Malaita is often characterized by both Solomon Islanders and foreigners as firmly 'patrilineal', but Roger Keesing describes a cognatic system with an emphasis on patrilineal descent: Roger Keesing (1978), 'Politico-Religious Movements and Anticolonialism on Malaita: Maasina Rule in Historical Perspective', *Oceania* 48(4): 241–61 at 241, 245.

13 See for example Edvard Hviding (1996), *Guardians of Marovo Lagoon: Practice, Place and Politics in Maritime Melanesia* (Honolulu: University of Hawai'i Press); Debra McDougall (2004), *The Shifting Ground of Moral Community: Christianity, Property and Place in Ranongga (Solomon Islands)* (PhD thesis, the University of Chicago); Michael W. Scott (2007), *The Severed Snake: Matrilineages, Making Place, and a Melanesian Christianity in Southeast Solomon Islands* (Durham, NC: Carolina Academic Press).

14 Cf Sabine Hess (2009), *Person and Place: Ideas, Ideals and the Practice of Sociality on Vanua Lava, Vanuatu* (Oxford: Berghahn Books), 17.

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17 Debra McDougall (2000), 'Paths of Pinauzu: Captivity and Social Reproduction in Ranongga', *Journal of the Polynesian Society* 109(1): 99.

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19 Reuter, 'Land and Territory in the Austronesian World', op. cit., 19. However, some Austronesian genealogical histories, such as those in many parts of Fiji and New Caledonia, accord a lower status to the descendants of the *first* people of the place, and a higher status to those who arrived from elsewhere: see for example Marshall Sahlins (1981), 'The Stranger-King: Or Dumézil among the Fijians', *The Journal of Pacific History* 16(3): 107; Margaret Jolly (1994), 'Hierarchy and Encompassment: Rank, Gender and Place in Vanuatu and Fiji' *History and Anthropology* 7(1–4): 133; Margaret Jolly (2007), 'Imagining Oceania: Indigenous and Foreign Representations of a Sea of Islands' *The Contemporary Pacific* 19: 508–45 at 515.

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26 See, for example, Hviding, *Guardians of Marovo Lagoon*, op. cit., 97.

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43 *Ibid.*

44 *Ibid.*

45 The researchers who carried out this research have not yet consulted people from these two islands, and as a result are unable to comment on whether or not the prospect of relocation and resettlement is commonly discussed by the people of these islands.

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Resistance' (unpublished paper presented at the workshop on Community Adaptation and Resilience: Local Relocations Induced by Rising Sea Levels in the Solomon Islands, Honiara, 4–5 November 2010).

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56 *Ibid.*

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65 See further Colin H. Allan (1957), *Customary Land Tenure in the British Solomon Islands Protectorate* (Report of the BSI Special Land Commission, Honiara: Western Pacific High Commission), 239; Ralph Premdas, Jeffrey Steeves and Peter Larmour (1984), 'The Western Breakaway Movement in the Solomon Islands', *Pacific Studies* 7: 34–65; Bennett, *Wealth of the Solomons*, op. cit., 323.

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67 Caroline Tiriman (2005), 'Rubbish Dump Dwellers to Relocate to Malaita', *ABC Radio Australia* (17 October), www.radioaustralia.net.au/international/radio/onairhighlights/rubbish-dump-dwellers-to-relocate-to-malaita; see also Australian Network (2005), 'Honiara's Rubbish Dump Squatters Going Home' (19 October), http://australianetwork.com/news/infocus/s1485746.htm.

68 Australian Network, 'Honiara's Rubbish Dump Squatters Going Home', *ibid.*

69 See for example Rasmussen *et al.*, 'Climate Change on Three Polynesian Outliers in the Solomon Islands', op. cit.

70 Fakaia, 'Walande', op. cit.

71 Rebecca Monson visited Gizo in 2009 and conducted preliminary fieldwork on the resettlements in that area. See also Nic Maclellan (2009), 'Losing Paradise', *Arena* (November), www.arena.org.au/2009/11/losing-paradise.

72 See Act for Peace website at www.actforpeace.org.au.

73 Solomon Star News (2010), 'Gella Leads the Way in Disaster Risk Management', *Solomon Star News* (20 April), www.solomonstarnews.com/news/national/4956-gella-leads-the-way-in-disaster-risk-reduction.

74 See Anglican Board of Mission Australia website at www.abmission.org.

75 The programme is titled 'Preparing for Disasters and Empowering Youths in the Solomons'; see www.caritas.org.au/learn/programs/pacific—solomon-islands-preparing-for-disasters-and-empowering-youth.

76 See further Rebecca Monson (2012), 'Hu nao save tok? Women, Men and Land: Negotiating Property and Authority in Solomon Islands' (PhD thesis, Australian National University), ch. 7.

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11 Climate displacement in Tuvalu

Faatasi Malologa

Climate displacement as a new concept

The term *climate displacement* is a fairly new concept to the people of Tuvalu. It is a new climate vocabulary that most Tuvaluans are still trying to acquaint with in terms of its theoretical and practical definition. Other related terms such as *climate refugees* or *climate-displaced persons* are more commonly used during discussions on climate change or environmental issues that address the plight of Tuvaluans affected by climate change or other natural events in one way or another. The term 'climate-displaced persons' could be the genesis of this new terminology known as 'climate displacement' in the Tuvaluan context.

Climate displacement in Tuvalu is defined as seeking a temporary shelter for cover from the adverse impacts of a climate event, or an adaptation of oneself against the effects of natural disasters by taking temporary shelter with a relative or at a friend's place. Others affected by such natural disasters, particularly those living in coastal areas, will normally be relocated internally from the coastal areas to take shelter in allocated buildings organized by the National Disaster Office.

A relative or a friend's place simply refers to a sheltered home, and land where a displaced individual or a displaced family would take temporary shelter during severe weather events. Total inundation of land, which may be caused by sea level rise and severe weather events, cannot be solved by moving to a relative's or a friend's place on the other side of the island. It would need total evacuation of everyone on the island to resettle on a new place, or a new country.

The increasing number of climate-related events such as droughts, sea level rise, cyclones and storm surges, coupled with an increasing degree of severity, is an indication of increasingly severe weather conditions, which shows that the climate is indeed changing its pattern and not following the normal seasonal pattern that people are familiar with. Although there are no longer wet or dry seasons in Tuvalu, the storm season tends to occur from late December to March. The weather pattern has changed, and is hard to predict.

Such severity of changing weather patterns or climate change has led to Tuvaluans experiencing climate displacement. Families were relocated to take shelter with other relatives or at some allocated sites on the island until it was safe