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Climate change, migration (governance) and conflict in the South Pacific

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1. Introduction

If the small islands states of the South Pacific are on the radar of politics and the wider public outside of the region these days, then it is first and foremost in the context of climate change. The sinking islands of the Pacific have become a symbol for the severe unprecedented consequences of man-made global warming. They are presented as the "canary in the coalmine" (Jakobeit and Methmann 2007, 16), foreshadowing climate change – related environmental and social developments that will affect other parts of the world sooner rather than later. In the current academic and political discourse, migration figures prominently among the social effects of climate change, and climate change – induced migration is seen as a plausible link between climate change and (violent) conflict. An exploration of the climate change-migration-conflict nexus in the South Pacific seems warranted, given that

- firstly, significant climate change effects can be observed in the South Pacific,
- secondly, there is considerable migration in the region, and
- thirdly, the South Pacific has been plagued by several (violent) conflicts in recent history.

Before turning to climate change, migration and conflict, however, it is necessary to flag an important caveat: the region is extremely diverse in many respects – geographically, economically, socially, politically, linguistically and culturally. This diversity cautions against talking about 'the' South Pacific (Oceania) in general terms. In today's international political system, the region is divided into 'nation'-states, most of them very small by international standards, many of them comprising dozens of islands. There are 22 countries and self-governing territories in the South Pacific, with altogether approximately10 million people

inhabiting about 300 islands (out of around 7500 islands altogether). Of the 32 million square kilometres of the region, 98 per cent is water. Of the remaining two per cent of land mass Papua New Guinea (PNG) alone comprises about 95 per cent. With its approximately seven million inhabitants PNG is also by far the country with the biggest population. None of the other Pacific Island Countries (PIC) has a population of over one million; several only have a few thousand people. In fact, the Pacific has the greatest concentration of micro-states (states with less than half a million inhabitants) worldwide.

Apart from the independent states and self-governing territories there are several political entities with a colonial or quasi-colonial status. Decolonization in the region occurred relatively late, between 1962 (independence of Samoa) and 1980 (independence of Vanuatu). The residues of colonialism strongly reverberate in the region. French Polynesia and Wallis and Futuna are overseas French territories, and so is New Caledonia/Kanaky, albeit with a special political status and the option for a referendum on independence. Niue, the Cook Islands and Tokelau have special relationships with New Zealand (in 'free association' with New Zealand). Other self-governing territories are legally linked to the USA: the territories of the Northern Mariana Islands, the Federated States of Micronesia, the Marshall Islands, Palau and American Samoa. Finally, some islands or territories in the Pacific region are part of non-region states: Rapa Nui (Easter Island) is part of Chile, Hawaii is part of the USA, the Torres Straits Islands are part of Australia, and (West) Papua which occupies the western half of the island of New Guinea is part of Indonesia - this status, however, is strongly contested by an indigenous movement for self-determination.¹

Migration is widespread in the South Pacific today, both in-country and across state borders. Some of it is (more or less) climate change – induced (see section 3). Such migration is seen as "one of the most plausible links from climate change to conflict" as Nils Petter Gleditsch and colleagues found in 2007 (Gleditsch, Nordas and Salehyan 2007, 4). In the same year, the German Advisory Council on Global Change included environmentally induced migration in to the spectre of 'conflict constellations' caused by climate change (WBGU 2007, 3), and Dan Smith and Jani Vivekananda from International Alert in their publication 'A climate of conflict. The links between climate change, peace and war', also from 2007, identified migration as a key conflict-relevant risk of climate change (Smith and Vivekananda 2007, 21-22). The most recent take on this topic is the G7-commissioned report 'A new climate for peace' by Adelphi and others from April 2015 which also makes the link between climate change, social disruption, migration and "local and regional instability" (Rüttinger et al. 2015, 3). Between 2007 and today, a considerable number of researchers have explored the climate change-migration-conflict nexus, and research and findings have become ever more complex and sophisticated, trying to disentangle the "long and uncertain causal chains from climate change to social consequences like conflict" (Gleditsch, Nordas and Salehyan 2007, 8).²

Such "causal chains" can go like this: People forced from their homelands due to the environmental and social effects of climate change (e.g. sea level rise, water scarcity, food insecurity) clash with people in recipient regions over scarce natural resources, employment opportunities, cultural differences etc. (the climate change – migration – conflict chain). Or: climate change leads to environmental degradation which leads to violent conflicts (over land and/or water), and violent conflict leads to migration (the climate change – conflict – migration chain) (Reuveny 2007, 660).

¹ Australia and New Zealand are not understood here as being PICs/part of the South Pacific region, although the islands of New Zealand are geographically Pacific islands, and Australia has a long Pacific coastline and some islands in the Pacific. Both are industrialised countries of the 'first' or OECD world, dominated by settlers of mostly European descent, with their original indigenous populations merely minorities today. This makes Australia and New Zealand clearly distinct from the other PIC. Nevertheless, both are politically (and otherwise) very active in the region and influential members of regional Pacific organisations, most importantly the Pacific Island Forum.

² As an elaborated example of such endeavours of disentangling these causal chains see Scheffran, Link and Schilling 2012.

For the South Pacific, such connections have not yet been explored explicitly. Violent conflict in the South Pacific is less prominent a topic than climate change or migration, mainly because violent conflicts in the region appear as being rather minor in comparison to today's major wars, like in Syria or Afghanistan, and they take place far away from the power centres of the world, both geographically and with regard to strategic and other interests of those power centres. For the people in the region, however, these violent conflicts are of major concern.

While it can make sense to review the violent conflicts in the South Pacific region through the climate change-migration-conflict lens, this paper will take another approach. It will start from migration (as this is supposedly the crucial link between climate change and conflict), with a focus on a specific form of migration, namely planned relocation, and then will explore the potential for conflict or actual conflict associated with relocation. It will become clear, firstly, that violence and violent conflict in the climate change – migration context is very much low level today, below the threshold of large-scale intra-state violent conflict (not to speak of international violent conflict), and, secondly, that migration governance is crucial for (the prevention of) violent conflict escalation.

The paper is structured as follows: First, the environmental and social effects of climate change on Pacific Island Countries are sketched very briefly. Secondly, a short overview of current migration patterns in the region, both in-country and transnational, is given. The paper then turns to the issue of climate change – induced relocation as a particularly relevant – that is: conflict-prone - form of climate change – induced migration. In this context, a specific case, the Carterets resettlement in Bougainville/Papua New Guinea, is presented in a bit more detail. Flowing from that, major challenges of migration governance are discussed. After that, I'll finally come to conflict as a consequence of failures to adequately address those governance challenges. Then the need for and options of conflict-sensitive migration governance are explored, arguing that governance is the decisive link in the climate change – migration – conflict nexus. The paper concludes with a brief summary and some thoughts on further research.

2. The environmental and social effects of climate change in the South Pacific

It is common knowledge today, not least confirmed by the latest (the fifth) IPCC Assessment Report of 2014, that climate change in the South Pacific leads to sea level rise and an increased frequency and intensity of extreme weather events such as tropical cyclones and storm surges, increasing air and sea surface temperatures, and changing rainfall patterns, including protracted droughts (Nurse/IPCC 2014, 1616).

Sea-level rise and associated submersion, storm surges, salt water intrusion, salinization, erosion and other coastal hazards degrade fresh groundwater resources and reduce land available for agriculture, settlements and infrastructure. Sea surface temperature rise will result in increased coral bleaching and reef degradation, which in turn has negative impacts on fisheries and other marine-based resources (Nurse/IPCC, 1616). Rising temperatures will also increase the risk of vector-borne diseases such as malaria and dengue fever as well as diarrhoeal diseases, with significant ramifications for health sectors in PIC.

The particularly high level of climate change – related vulnerability³ of many South Pacific islands is due to their extreme exposure and their rather constrained options for adaptation.

³ Vulnerability is understood as the extent to which a system is unable to cope with the undesirable impacts of change. Small islands are not only highly vulnerable with regard to climate change, but also other aspects, e.g. expensive and unreliable transport, lack of (access to) markets, dependency on strategic imports such as food and fuel (Petzold and Ratter, 37).

This holds particularly true to atoll islands which are of extremely low elevation and often also of rather limited area. The highest point of the Pacific island country of Kiribati is three metres, and the average island width of Kiribati islands is less than 1000 meters. Atoll countries are particularly vulnerable to sea level rise "because of their high ratio of coastline to land area, relative high population densities and low level of available resources for adaptive measures" (Yamamoto & Esteban, 2010, p. 2). Large islands with high elevations and volcanic high islands are less exposed, but also face severe climate change – induced environmental degradation.

Given the environmental effects of climate change, PIC are confronted with challenges to land security, livelihood security and habitat security (Campbell 2014, 4-5), which includes water security and food security as well as health. Land security is lost due to coastal erosion and inundation, livelihood and habitat security due to reduced quantity and quality of water supplies and loss of food production. These losses affect atoll communities in particular, but also coastal locations, river delta or inland river communities.

Options for *in situ* technical adaptation⁴, such as planting mangroves in order to reduce coastal erosion, building seawalls in order to contain storm surges, setting up rainwater tanks to improve fresh water supply, are limited, oftentimes technically not feasible or too costly, and sometimes they only work as interim measures. Movement to locations that are less exposed might be the better – or even the only – option in certain cases.

In this context, migration can be seen as an alternative to *in situ* adaptation or as another adaptation strategy.⁵ Views vary on whether it is an adaptation measure among others which is used, and should be used, in vulnerable locations alongside other adaptation measures (migration as part of an integrated adaptation strategy), or whether it is an adaptation measure of last resort only, once a location has become (almost) uninhabitable. In extreme cases resettlement can be seen as being the most appropriate form of long-term adaptation. In "some extreme circumstances it is likely to be the only option left when the life-support systems (land, livelihood, and/or habitat security) of a community's territory fail. In such cases, the migration becomes forced, and the movement may involve whole or large portions of communities" (Campbell 2014, 7).

Before we turn to these cases, however, let me give a brief overview of current 'normal' or 'everyday' migration patterns that can be found in the South Pacific - and their connection (or otherwise) to climate change.

3. Migration patterns in the South Pacific today

Pacific islanders have a long history of migration. In pre-colonial and pre-contact times Pacific seafarers criss-crossed the 'sea of islands' over enormous distances, resettling in far-away places or bringing back resources needed for the sustenance of home communities.⁶

⁴ Adaptation and adaptive capacity is not only a technical issue, but has also political and social dimensions (Petzold and Ratter 2015, 36). I'll come back to that later.

⁵ Scheffran, Marmer and Sow, for example, build a case for "migration as a contribution to climate adaptation" (Scheffran, Marmer and Sow 2012, 119), based on experiences from the Western Sahel region.

⁶ While outsiders think of the Pacific as a massive expanse of water, with small to tiny isolated islands scattered within, vulnerable and far apart (and far away from a metropolitan perspective), an insiders' view of the region presents it as a 'sea of islands' (Epeli Hau'ofa, a famous Tongan poet and author), focusing on the bonds and linkages that the ocean has provided for times immemorial between the various island societies, many of them extremely able and skilled seafarers. Hau'ofa posits: "There is a world of difference between viewing the Pacific as 'islands in a far sea' and as 'a sea of islands'. The first emphasizes dry surfaces in a vast ocean far from the centers of power. Focusing in this way stresses the smallness and remoteness of the islands. The second is a more holistic perspective in which things are seen in the totality of their relationships. (...) Continental men, namely Europeans, on entering the Pacific after crossing huge expanses of ocean, introduced the view of 'islands in a far sea'. (...) Later on, continental men – Europeans and Americans – drew imaginary lines across the sea,

This mobility "is intrinsic to livelihoods in the liquid geography of Oceania, and current migration practices are a continuation of pre-contact journeys…" (Hofmann 2014, 36). By far most migration in the South Pacific today is individual and/or family/household migration, induced by a combination of a variety of push and pull factors – economic, political, social, demographic, environmental (ADB 2012). Economic considerations are prevalent. People move from rural areas to the (few) urban centres and/or from small outer islands to the main islands of PIC, mainly in search of employment opportunities, but also because they want better access to public services, particularly in education and health. This type of migration can reduce demographic pressure, pressure on the environment and on natural resources in the home areas (migration-as-adaptation), and, if successful, it can even contribute to the resilience and adaptive capacities of home communities (migration-for-adaptation), in particular via remittances (see below).⁷

The populations of all urbans centres in the South Pacific have grown considerably over the last years and decades, mainly due to in-country migration from outer islands and rural areas (ADB 2012, 35-36). Particularly the young, mostly the male young, are attracted by 'exciting' 'modern' city lifestyles as opposed to rather 'boring' 'traditional' lifestyles in their villages of origin. More often than not their expectations – to get a job, to earn cash – are disappointed. Large numbers of unemployed youth can be found in the squatter settlements of the cities; and these settlements usually lack decent housing and basic services, they are plagued by law and order problems, and often are exposed to the effects of climate change – induced environmental degradation, because they are often established in marginal locations, e.g. in riverbeds, on steep slopes or volatile coastal strips. Finally, they are sites of everyday violence and of low-level violent conflicts (see below section 7). Many migrants go back home sooner or later, because they could not find regular paid jobs, because of the high costs of living in the cities, and because of the insecurities of life in an alien urban environment. But they might come back to the city again. Migration is to a large extent temporary and circular (Birk and Rasmussen 2014).

Qualitative research, including interviews and focus group discussion, but also household surveys, conducted in sending and recipient communities so far has found that climate change and environmental degradation are rarely mentioned as major drivers of current migration (see e.g. Birk and Rasmussen 2014). People usually do not cite 'climate change' as such as a reason to migrate, sometimes, however, they refer to environmental factors which can be linked to climate change, such as problems in agriculture due to water shortages or coastal erosion; or they refer to the increase in extreme weather events which makes life in their home communities more insecure, or to gradual changes which do not augur well for the future, e.g. increase in the rates of coastal erosion (Oxfam 2009). But mostly people are not concerned enough about the changes they observe to have considered leaving their home community because of them. In general, "people have other more pressing challenges to deal with" (Birk and Rasmussen 2014, 9, with regard to migration from Reef Island and Ontong Java in the Solomon Islands). Finally, people in the South Pacific have an intimately close relationship with their home, their land; they do not take the decision to move lightly (I'll come back to this).

Individual in-country migration often generates additional environmental and social problems, as the examples of the two PIC which are most often cited in the climate change debate, namely Kiribati and Tuvalu, amply demonstrate (Maclellan 2012). In Kiribati, there has been considerable migration from outer islands to the capital island of South Tarawa. Land in South Tarawa is less than three meters above sea level, and the island has an average width

making the colonial boundaries that confined ocean peoples to tiny spaces for the first time. These boundaries today define the island states and territories of the Pacific" (152-153). By contrast, the ocean peoples themselves "viewed their world as 'a sea of islands rather than as 'islands in the sea" (153). ... Flowing from this view it is important to stress that "representations of island space should not be solely approached as a number of single entities but as multi-scalar and intertwined territorial networks" (Chevalier 2014, 70).

⁷ On migration-as-adaptation and migration-for-adaptation see Scheffran, Marmer and Sow 2012.

of only 450 meters. South Tarawa already today has a population density of approximately 8000 persons per square kilometre – that is similar to Hong Kong. In the 1940s only approximately 1700 people lived on South Tarawa, today the number is almost 65,000, more than half of the total population of Kiribati (Locke 2009). Many people live in overcrowded squatter settlements, without safe water and sanitation (ADB 2006). People from outer islands came to Tarawa because of economic pull factors, but also because of environmental push factors, "there appears to be a correlation between influxes in urban migration and increased potable water scarcity, coral reef depletion and coastal erosion on the outer islands" (Locke 2009, 175). South Tarawa today is itself water scarce and overpopulated.

The situation in Tuvalu is similar. On Tuvalu's outer islands freshwater sources and crops like taro are adversely impacted by sea level rise. Currently Tuvaluans migrate, as individuals or families, from outer islands to the capital island of Funafuti, where a squatter settlement has emerged. "Similar to the case of Kiribati, a combination of economic and environmental factors has contributed to the influx of population from the outer islands to Funafuti. Economic opportunity, in addition to an increasingly volatile environment, has both pulled and forced people to migrate from outer islands" (Locke 2009, 176).

Some Tuvaluans move on to Fiji and New Zealand, with climate change induced environmental problems contributing to their decision to migrate. As one migrant from Tuvalu noted: "I don't want to wake up one morning with the island washed away. Look at what happened in the Solomon Islands! I prefer to leave now before I have no other choice" (quoted from Warner et al. 2009, 19).

International migration goes to the big industrialised countries of the Pacific Rim, most notably the USA, Canada, Australia, and New Zealand (ADB 2012, 35-36). When people from Pacific island states go there today, then it is mostly only temporarily – in order to earn some money - with the firm determination and the option to go home after a certain period of time.

The New Zealand and Australian temporary work schemes for Pacific Islanders operate exactly on this basis (Nansen Initiative 2013a). New Zealand established a seasonal labour scheme (Recognized Seasonal Employer, RSE, scheme) in October 2006 which allows up to 8000 workers from six PIC (Fiji, Samoa, Tonga, Kiribati, Tuvalu and Vanuatu) each year to work within the horticulture and viticulture sectors temporarily (for seven months, picking fruit and harvesting crops). This scheme aims to solve a labour shortage in New Zealand in those industries. It benefits PIC mostly in the form of remittances. In August 2008 Australia followed with a similar (pilot) scheme (Pacific Seasonal Workers Program), allowing up to 2500 citizens from four PIC (Kiribati, Tonga, Vanuatu and Papua New Guinea) to come to Australia temporarily for low-skilled work in the horticulture industry in nominated locations. Again, this scheme is geared to address a chronic labour shortage in the agricultural sector in some parts of Australia (MacDermott and Opeskin 2010). In October 2010, a new Memorandum of Understanding and Facilitation Arrangements were approved by the PNG government (similar MoUs between Australia and Kiribati, Tonga and Vanuatu were signed in 2008). These schemes provide sources of employment and income for island communities and also for education and training, but they also have a variety of serious social and other problems (e.g. housing, payment rates and deductions) (MacDermott and Opeskin 2010). In any case, they do not directly address the issue of climate-induced migration. This also holds true for the Pacific Access Category (PAC) which was established in 2002 by the New Zealand government in order to facilitate migration from neighbouring countries in the Pacific. PAC allows for 1,100 Samoans, 250 Tongans and Fijians each, and 75 citizens from Tuvalu and Kiribati each to come to New Zealand per year. Applications from Kiribati citizens have risen from 300 in 2002 to 3,000 in 2008. Applications from other countries have increased in a similar order. Again, however, the PAC does not make any reference to migration related to climate change. New Zealand is very cautious not to take any legal responsibility for people displaced due to climate change, and so is Australia.

These schemes can contribute, however, to the strengthening of adaptive capacities in home countries. Remittances can sustain families at home and make communities more resilient. Because of these effects, governments in the home countries of the seasonal workers call for an expansion of the schemes, and other countries which are not yet covered by them, ask to be included. One can assume that, given the increasing pressure on home countries due to the effects of climate change, this trend will be enhanced in the future.

For some Pacific islands international migration opportunities are better than for others. PIC with special relationships to industrialised countries have an advantage. Tokelau, Niue and Cook Islands for example are linked to New Zealand through special compacts of free association, and some Micronesian countries are in a similar manner linked to the US. The French territories in the South Pacific are legally parts of France. Others, by contrast, are left in the cold (or better: the heat), like the two atoll states of Tuvalu and Kiribati, which belong to the group of countries "with the greatest need for induced and forced international migration options but with the fewest choices" (Campbell 2014, 21).

Already today relatively large diaspora communities from Pacific island countries can be found in New Zealand, Australia, Canada and the United States. ⁸ Their remittances (in cash or goods) play an important role for the economies of their home countries and for the improvement of household livelihoods at home (ADB 2012, 18).⁹ The same holds true for the remittances from Kiribati, Tuvalu and other PIC seafarers who crew vessels for international shipping companies from the US and Europe, not least Germany. Seafarers remittances have provided about 15 per cent of Kiribati's GDP in recent years, for example.

But it is not only the economic dimension of remittances which is important. There are also social remittances in the form of information, knowledge, ideas, practices (Greiner, Peth and Sakdapolrak 2014, 26-27). In this context it becomes obvious that migration can be more than just a coping strategy of last resort: it can be an adaptation strategy in the form of labour mobility which, through financial and social remittances, also strengthens the resilience and adaptive capacities of the home communities (Ober 2015, 8-9; Scheffran, Marmer and Sow 2012, UNEP 2014, 29) as these home communities are embedded in translocal/transnational networks constituted by (circular) migration (Greiner, Peth and Sakdapolrak 2014, 26).

There is a lot of debate about whether this migration is 'voluntary' or 'forced'. The reality is that "most migration decisions fall somewhere on a continuum between forced and voluntary" (Nishimura 2015, 113). It is difficult to identify the tipping point where voluntary migration turns into forced migration (Mc Adam 2014, 19).¹⁰ Rather than talking about 'voluntary' migration, Campbell differentiates between 'induced' and 'forced' climate change migration. He argues that in cases where climate change – related environmental and social problems contribute to migration in a substantial way, one can speak of climate change – induced migration. Climate change – induced migrants "have a choice between staying and leaving, or about who goes and who stays" (Campbell 2014, 11). By contrast, the category of climate-change forced migrants applies to those "who have lost the land, livelihood, and/or food security of their homeland to such an extent that it is no longer habitable" (Campbell 2014, 11).¹¹

⁸ More Cook Islanders and more Tokelauans live today in New Zealand than in the Cook Islands and Tokelau. ⁹ Remittances by overseas Samoans back to Samoa accounted for 21.4 per cent of GDP in 2011, for Tongan remittances it was 16.4 per cent (International Migration Institute 2013, 17).

¹⁰ For a detailed debate about the 'forced'-'voluntary' problem see Warner et al. 2013, 38-43.

¹¹ This differentiation is similar to the one made by Renaud et al. between forced environmental migrants who have to leave their homes and environmentally motivated migrants who may decide to move because of environmental stress. Within the 'forced' category emergency migrants (who have to leave to save their lives from imminent threat) is a sub-category (Renaud et al. 2007, 11-12).

Climate-change forced migration generally takes the form of permanent community relocation, relocating significant parts of communities or even entire communities.¹² In other words: it is not individual/family migration (which mostly falls in the category of 'voluntary' or 'induced'). Such relocation "may be considered the most extreme form of climate migration and is considered by many to be a last-resort adaptation option" (Campbell 2014, 11) – and "many" in this case includes academics, governments, NGOs and not least the affected people themselves. It is to this type of migration that I now turn.

4. Community relocation

Permanent resettlement¹³ of entire communities is not new to the Pacific. Whole island communities were relocated on several occasions in the past. Prominent cases are the Banaba Islanders who were resettled by the British colonial administration to Rabi in Fiji, because their island was depleted and had become uninhabitable due to phosphate mining. Then there is the relocation of Bikini islanders by the US government because of nuclear testing in the 1940s and 1950s. In the late 1950s and early 1960s I-Kiribati (inhabitants of the islands which were to become the independent state of Kiribati in 1979) were resettled to the western Solomon Islands because of water shortages on their home islands. In more recent times, several communities in PNG had to be resettled after outbreaks of volcanoes or after earthquakes.¹⁴ Most of these resettlements left the affected communities worse off than in their home areas, and many of the affected people and their descendents still dream of returning home one day. These examples demonstrate: "Movement in response to environmental change in association with other factors is not new in Oceania and indigenous strategies for adapting to both rapid-onset and slow-onset environmental events have tended to be ignored in the more sensationalist reporting of possible long-term impacts of climate change in the region" (Campbell and Bedford 2014, 181).

However, these previous instances of relocation were isolated and exceptional. Relocation in the context of climate change poses a new challenge altogether as it will be much more widespread, and, most importantly, there definitely will be no return option. On the other hand, there will be time for relatively long-term planning, at least with regard to the slow-onset effects of climate change.¹⁵ Hence one may put such planned relocation in between 'voluntary' and 'induced' migration on the one hand and 'forced displacement' (due to rapid-onset events such as cyclones or earthquakes) on the other – although one has to keep in mind that this 'planned relocation' is caused by the insight that there are no other options left, at least not long-term, and thus there is an element of 'forced' to it. On the other hand, planned relocation now or in the forseeable future under terms and conditions that they can influence themselves, at least to a certain extent; they are not just victims of forced displacement.

Today there is a lot of talk in the Pacific about the need to relocate, often rather alarmist and sensationalist. But there is much less planning for relocation, and even less actual relocation happening. There are many ideas and scenarios floating around, often imagining the relocation of whole island nations. For example, a couple of years ago there was talk about

¹² On different sub-categories of planned relocation see Warner et al. 2013, 32.

¹³ In this text, I use the terms 'relocation' and 'resettlement' interchangeably. It means the act of moving people to another location and settling them there. It is permanent when people do not have the option to return to their homes. This text is only dealing with permanent relocation/resettlement, not with temporary relocation, e.g. due to disasters.

¹⁴ On these and other cases see Nansen Initiative 2013a, 7-8.

¹⁵ Relocation as a response to climate-related rapid-onset events, such as cyclones, is another matter of course, but this falls into the realm of disaster management, and it is not permanent - people in general return to their homes after some time. I won't deal with this type of temporal disaster-related relocation, but only with permanent relocation in the slow-onset context.

resettling the entire nation of Tuvalu to Australia.¹⁶ Similar scenarios were developed for other Pacific atoll nations, and the Representative of the Secretary-General on the Human Rights of Internally Displaced Persons posited in 2008 that for "citizens of sinking island states permanent solutions on the territory of other states must be found" (Representative of the Secretary-General 2008, 7). Experts in international law have jumped on this topic as it raises a host of complicated legal questions: can these countries maintain their sovereignty and statehood, given that one key qualification of statehood under international law is a defined territory? Can they retain something like a 'deterritorialised' statehood with some form of a 'government-in-exile'? Can they continue to claim an Exclusive Economic Zone even after their islands have been totally submerged? Will other states be willing – or obliged – to recognize such 'deterritorialised' states and their governments and accommodate their populations and government institutions? Will the people of those submerged island states maintain their original citizenship or will they become stateless persons? Answers to these questions will have immediate repercussions on the forms of international resettlement.¹⁷

At the moment, however, planning for and actual resettlement is an internal affair. The only possible exception to date is the Kiribati-Fiji case. In September 2014, the Kiribati government bought a piece of freehold land on the Fiji island of Vanua Levu from the Anglican Church for almost 10 million AUD (8 Mio USD), around 2300 ha. This is one of the largest free-hold land areas remaining in Fiji (and it equals approximately 10% of Kiribati land area) (Campbell and Bedford 2014, 180). Currently, however, there are no plans to relocate people from Kiribati to Fiji, but to use the land for food production, forestry (pine plantation) and fisheries. However, resettlement from Kiribati to Fiji remains an option for the future.

Let's turn to in-country relocation then. Some governments have commenced planning for relocation in the context of national climate adaptation plans, and some have begun with actual relocation of vulnerable communities. The first was Kiribati. In 2005 the Kiribati government finalised an Integrated Land and Population Development Programme as part of a broader national Climate Change Adaptation Strategy. The programme was financed by the Japan Special Fund, it envisaged large scale inter-island relocation, with the main element being the voluntary resettlement of up to 30,000 people from smaller islands and from the severely overcrowded and critically water scarce capital island of South Tarawa to the larger island of Kiribati's land mass, but with only approximately 5000 inhabitants as of 2005 (ADB 2006). The problem is that it is 3000 kilometres away from Tarawa, and it is very low-lying too. People were hesitant to relocate; many of those who actually migrated to Kiritimati island "have ended up as squatters", and the government did not provide the basic infrastructure, particularly water sanitation and power.¹⁸

Less ambitious plans in Fiji have led to first actual activities. After extensive vulnerability and adaptation assessments, the Fiji government has identified 45 coastal or river bank villages affected by climate change (sea level rise, coastal erosion, high tides, salt water intrusion, damages to homes and crops) which have to be relocated over the next decade or so (out of 800 communities altogether identified as being affected by climate change). Three villages have been relocated already (Fiji Times 13 Feb 2015).

¹⁶ The Tuvalu Prime Minister "issued a formal request to the government in Australia in 2008 to cede to Tuvalu a small piece of territory for the purposes of re-establishing Tuvalu on a minute portion of what is now Australian territory and resettling the entire population of the country there. Australia did not support this request, but in response to the Federal Government's reluctance and in an act of remarkable islander solidarity, representatives from the Torres Straits Islands in the north of Australia unofficially offered Tuvalu use of one of its islands to re-establish itself there" (Displacement Solutions, no date, 20-21). The Torres Straits Islands, however, also suffer from the effects of climate change and have to struggle with similar problems as Tuvalu.

¹⁷ Some of these issues are discussed by Park 2011, Yamamoto and Esteban 2010 and Rayfuse 2009; see for comprehensive overviews Gerrard and Wannier 2013 and McAdam 2012.

¹⁸ Technical Assistance Completion Report 21 Dec 2009, prepared by Edy Brotoisworo, ADB.

The poster child of this relocation programme is the village of Vunidogoloa on the island of Vanua Levu. In February 2014 it was the first village to relocate, shifting two kilometres inland after years of coastal erosion and flooding had made the original site inhospitable. Relocation cost the government close to a million Fiji Dollars, with the money spent on 30 new houses, fish ponds, copra drier and other infrastructure. The community provided the timber for construction of houses etc., the International Labour Organisation (ILO) sent qualified volunteers to help construct houses, and ILO also provided funding for pineapple seedlings (Compendium 2015, 50).

Another relocated village is Narikoso on Ono island. The Narikoso village relocation (to an elevated site, a few hundred meters inland from the original village) was supported by the Fiji Government and a climate change programme run jointly by the Secretariat of the Pacific Community and Germany's GIZ, the 'Coping with climate change in the Pacific Islands Region' (CCCPIR) programme (OCHA. Fiji: Building resilience in the face of climate change).¹⁹

In the Solomon Islands spontaneous unplanned relocations of communities from smaller outer islands to bigger islands (in particular the most populous island of Malaita) have been under way over the last few years, with severe, even conflict-prone, problems (see below section 7). Only recently formal government supported planning for relocation has begun. Mention has to be made of Choiseul province, where the provincial capital Taro (1000 inhabitants) will be relocated from Taro island to the adjacent mainland, because of its vulnerability to storm surges and other coastal hazards. The Choiseul project "is the first time that a provincial capital with all its services and facilities will be relocated in the Pacific Islands" (Scientific American Aug 15, 2014. Township in Solomon Islands is 1st in Pacific to relocate due to climate change). The relocation planning is based on an integrated climate change adaptation plan which found that "the only viable option for the long-term safety of the community is relocation of the entire population to a safer site on the mainland" (Haines 2014, no page).²⁰ Complete relocation will take years, if not decades. The Solomon Island government is now looking for the support of international donors in order to implement the relocation plan.

The most advanced climate-related relocation programme in the South Pacific to date is the resettlement of Carterets islanders from their atoll to mainland Bougainville in PNG. In the next section, a closer look at this programme is taken, as some general governance and conflict issues will become clear from this case.

5. The Carterets case

The Carterets atoll comprises a handful of low-lying islands (Han, Huene, Jangain, Yesila, Yolasa, Piul), inhabited by approximately 3500 people. The islands belong to the Autonomous Region of Bougainville (ABR), which is part of the independent state of Papua New Guinea.

With a maximum elevation of 1.5 metres above sea level, the islands are affected by sea level rise. The people have great difficulties maintaining their subsistence economy which is based on fish, bananas, taro and other vegetables, grown in food gardens. Taro, the main

¹⁹ The Fiji government has presented its relocation program as leading the way in this governance field and has offered to resettle communities from other low-lying Pacific nations. This can be taken as an example of how the issue is politicized in pursuit of national interests: Fiji wants to present itself as a 'good leader' of Pacific islands nations.

²⁰ The plan was elaborated by Australian environmental and town planning consultancies in collaboration with the University of Queensland's School of Civil Enigneering in the context of the Australian Government's Pacific-Australia Climate Change Science and Adaptaion Planning programme (Haines, Rolley and Albert, no date (2014)).

staple food crop, cannot grow any more due to salt water intrusion and salinization of soil and water. Soils become more and more swampy, providing better breeding grounds for mosquitos; and as a consequence, malaria becomes more frequent. Freshwater wells have been contaminated by saltwater, making freshwater more and more scarce. Food security is under immediate threat (Tulele Peisa, no date).

People are becoming increasingly dependent on food aid shipped in from mainland Bougainville; the diet, however, is unhealthy (rice) and the shipments are irregular and unreliable. Other atolls in the Autonomous Region of Bougainville are in a similar situation, namely Tasman, Mortlock and Nugeria, which have a total population of about 2,500.

In situ adaptation is difficult and only modestly successful: raised bed gardens, mangrove seed planting, seaweed farming, seawalls. Given these conditions, relocation to the main island of Bougainville is another adaptation option for the Carterets islanders. Bougainville is around 80 kilometers away to the south west of the Carterets, a four hour ride by boat.

For almost ten years (1989 to 1998) Bougainville was the theatre of a large-scale internal war of secession, the longest and bloodiest violent conflict in the South Pacific since the end of World War Two.²¹ After a ceasefire in 1998 and a Peace Agreement in 2001, Bougainville has gone through rather successful post-conflict peace-building. However, some unresolved issues remain, and the situation is still volatile in parts of the island. Land is scarce on Bougainville, conflicts over land are common.

Nevertheless, the majority of Carterets islanders intend to resettle on Bougainville, People from the Carterets themselves took the initiative to develop a resettlement plan. After a series of community meetings which discussed the worsening situation on the atolls, the Carterets Council of Elders, the local governing body on the islands, in late 2006 decided to form an NGO to organize the resettlement. The organization was named 'Tulele Peisa', which in the local language means 'sailing the waves on our own'. "This name choice reflects the elders' desire to see Carteret islanders remain strong and self-reliant" as the organization's Executive Director Ursula Rakova explains (Rakova, 2009, p. 2). Tulele Peisa elaborated a detailed resettlement plan, the Carterets Integrated Relocation Programme (CIRP) which aims at the voluntary relocation of approximately 1700 Carteret islanders to four locations on mainland Bougainville (Tinputz, Tearouki, Tsimba and Mabiri). In a first step, the Catholic Church provided some resettlement land in the Tinputz area. In April 2009 the first settlers from the Carterets arrived on Bougainville, the heads of five families with around 100 family members. They were to pave the way for the others. Currently (2015), eight families live at the Tinputz resettlement site (personal communication Ursula Rakova 18 April 2015).

The resettlement plan does not only address issues such as constructing housing and infrastructure for the settlers, but also envisages the implementation of agricultural and income generation projects (mainly around cash cropping of coconuts and cocoa) and the development of education and health facilities as well as community development training programmes which will support the settlers in adjusting to their new home environment economically and socially (Tulele Peisa, no date).

The plan also addresses the needs and interests of the target communities (approximately 10,000 people) so as to "ensure that these host communities will also benefit through upgrading of basic health and education facilities and training programs for income generation" (Tulele Peisa, no date, p. 5). The reason for this is to avoid preferential treatment of relocated newcomers because this could cause resentment, frustration and animosities from the side of host communities. Accordingly, the plan envisages "exchange programs

²¹ For overviews over the war on Bougainville, its causes and post-conflict peacebuilding see Boege 2008, Boege 2012, Regan 2010, Regan and Griffin 2005.

involving chiefs, women and youth from host communities and the Carterets (...) for establishing relationships and understanding" (Rakova, 2009, p. 2). Several such programmes have been actually carried through: chiefs and elders exchanges between Carterets and resettlement site in Tinputz; young people speaking tours.

Resettlement was accompanied by custom ceremonies which farewelled people on the Carterets and welcomed them to host communities on Bougainville (including the exchange of shell money). Tulele Peisa also has sought to promote inter-marriages between Carterets islanders and members of host communities as this can create bonds and social cohesion and provide newcomers with access to much needed land. As both the Carterets islanders and the Bougainvilleans are Melanesians they share a common cultural background which makes building relationships and mutual understanding relatively easy. Furthermore, clans on the Carterets have long-standing kinship ties to clans on the mainland. Things will be more difficult for people from the other atolls in the ABR (Mortlocks, Tasman, Nuguria) as they are Polynesians who do not have such kinship ties with people on mainland Bougainville.

Currently work is underway in the Tinputz resettlement site: clearing of the site, establishing food gardens (for own consumption and sending surplus back to the Carterets), planting taro, learning how to grow cocoa and coconut trees for income generation, building houses, planting trees. TP runs a 'mini forest' project and a mini agricultural research station (holding over 20 different species of yams) and owns three hectares of land with over 2500 cocoa trees which provide some cash income for TP (Ursula Rakova, personal communication 18 April 2015).

Securing more land for the people who are willing to resettle will be the most important and most difficult issue. TP is planning to have three more resettlement sites in addition to Tinputz (Tearouki, Mabiri and Tsimba). As has been said before, land is already scarce on Bougainville, and traditional land tenure in Bougainville societies does not easily lend itself for accommodation of newcomers. The vast majority of land on Bougainville (95 per cent) is covered by customary land tenure. Only small portions are alienated land which at some stage in colonial times was bought or expropriated by outsiders - churches, white plantation owners or the colonial administration. It is no wonder that the settlers from the Carterets were relocated to land in the possession of the Catholic Church. This land - around 80 hectares is by far not sufficient; according to the resettlement criteria developed by TP, some 1,700 hectares of land will be required to accommodate all the families who intend to resettle (one hectar of land for every relocated family). It will be much more difficult to negotiate the acquisition of customary land between Carterets islanders and communities on Bougainville and to obtain clear legal title to land. Respective negotiations with landholders in resettlement sites have started in 2007 and are continuing. Securing the funds for land purchase is another critical issue. Members of the Carterets Relocation Task Force Committee are in continuous dialogue about the thorny land issue with the elders, chiefs and church leaders of the host communities. Preparations for relocation to Tearouki (which is in the vicinity of the Tinputz relocation site) are furthest advanced, with the establishment of a Tearouki Relocation Committee in November 2013 and community resource mapping and land surveys underway. Again, this is land of the Catholic Church (originally a German mission station).

For Carterets islanders to have to leave their land is a shocking prospect. They are afraid of losing their cultural heritage which is closely linked to the land. This is why there are still people who do not want to leave. It is particularly the elderly who do not want to move, while members of the younger generation are more willing to do so.

Resettlement poses particular challenges to women. On the Carterets and in most parts of Bougainville communities are matrilineal, which means that land is transferred from the mothers to their daughters. The loss of land is a traumatic experience for the Carterets women as the chain of land transfer will be broken.²² On the other hand, the women realize that their land cannot sustain the families any longer. They are torn between the desire to stay and the need to move if they want to secure a future for their children.

Tulele Peisa is trying to take these factors into account as far as possible; trauma counselling is provided, and the resettlement plan envisages the establishment of a regular sea transport service for freight and passengers in order to maintain links between relocated people and those who will stay behind, and of a Conservation and Marine Management Area around the Carterets so as to maintain the area as customary fishing ground and thus keep the links to the ancestral land (Tulele Peisa, no date, p. 6).

The plight of the Carterets islanders has drawn considerable international attention. They were presented as being at 'the frontline of global climate change' and dubbed the world's first 'environmental refugees', and their relocation was presented as "one of the first organised resettlement movements of forced climate change migrants anywhere in the world" (Displacement Solutions 2008, 2). More than a dozen film crews, news networks and freelance media teams have visited the Carterets over the last few years and have spread the Carterets message to the outside world. In fact, so many media people have visited that they have become a burden and locals have been on speaking tours to Australia, North America and Europe.²³ So far all this international public attention has not translated into substantial support or benefit for the Carteret islanders. The current resettlement program which is conducted by Tulele Peisa is dependent on the resources and ingenuity of the Carteret islanders themselves, plus modest support from donors and international civil society.

Support from the side of the state of Papua New Guinea and the Autonomous Bougainville Government (ABG) so far has been very modest. State institutions acknowledge the problem and the need for action, but things on their end move very slowly. In October 2007 the PNG government allocated 2 million Kina (800,000 USD) for an official 'Carterets Relocation Program' (Tulele Peisa estimates that some 14 million Kina will be required to resettle all of those who wish to relocate (Displacement Solutions, 2008, p. 4)). But somehow this money disappeared somewhere in the jungle of the PNG state bureaucracy. It is not clear how much of the money has been used already for preparatory work, and how much is left for actual resettlement. So far an office in charge of relocation has been set up by the ABG in the ABG administration centre of Buka (a bigger island close to mainland Bougainville), and the ABG adopted an 'Atoll Integrated Development Policy'(AIDP) and formed a multi-sectoral 'AIDP Steering Committee' (Lange 2009, v). This means that the ABG is not only planning for the relocation of Carterets islanders, but also the inhabitants of the other atolls in the ARB (Mortlocks, Tasman, Nuguria). In 2009, after lengthy consultations with local landowners, resettlement land was secured on the island of Buka (Karoola Plantation, 600 hectares).²⁴ and an 'AIDP Ground Committee' with participation of representatives from local communities was formed (Lange 2009, v-vi). In the following years several rounds of surveys were conducted, asking atoll islanders about their concerns, needs and aspirations regarding resettlement. Over the years, workshops and Focus Group Discussions were held, interviews

²² Hofmann gives exactly the same account on women regarding the matrilineal society on Chuuk (Hofmann 2014, 35, 38).
²³ Tulele Poise is involved in international civil accient, activities reporting a liver to the same account of th

²³ Tulele Peisa is involved in international civil society activities regarding climate change and resettlement. It is part of efforts to build an alliance of vulnerable Pacific communities impacted by climate change, and it is determined to document its own experiences so that other communities around the world might profit from the lessons learned in the Carterets case. It presents itself as a "community led model for relocation of climate affected communities elsewhere" (Tulele Peisa, no date, p. 5). TP even organised exchanges between Carterets islanders and Native American communities from Alaska affected by climate change.

²⁴ There are serious problems with Karoola plantation land: it is contested, it is swampy, difficult to access by road, and with difficult access to the sea.

carried out, expectations raised, but so far no actual resettlement in the context of the state program has taken place.

From this case one could argue on the one hand that it is admirable that the people from the Carterets have not waited for the state and others to come to their assistance, but have taken their fate into their own hands, and in doing so have shown considerable capabilities and ingenuity. The people on the ground obviously have agency of their own. On the other hand though, local agency should not be used as an excuse for the passivity of state institutions and the governance shortcomings on the side of the state.

Based on the empirical evidence from the Carterets case, I'm now turning to governance challenges that have to be taken into account when it comes to the conflict dimension of climate change - induced migration and relocation.

6. Governance of climate change - induced migration

From the surveys and community consultations conducted in the context of the ABG's AIDP a number of important issues regarding relocation governance become obvious.²⁵ People have high hopes and expectations with regard to relocation, but they also voice serious concerns and fears, and they have very specific demands and proposals regarding the planning process and the implementation of relocation.

People expect from relocation: food security, better access to services, in particular health and education, better opportunities for income generation (jobs, cash crops) and useful exchanges of skills and knowledge with host communities.

People are concerned about: the loss of traditional lifestyles (based on close ties with the sea) and traditional culture (due to abandonment of the land of their ancestors and interaction with host communities and an 'alien' society), loss of local language and changes in religious practices. They fear for their safety due to land disputes and conflicts with host communities (including fear of sorcery), there is also fear of changes in status and role of women and youth and fear of an increase in alcohol and drug consumption due to the availability of cash. The Polynesian relocatees additionally are afraid of racism by the Melanesian majority on Bougainville.

People have long lists of demands regarding planning and implementation of relocation, including: the continuous involvement of communities via regular consultations with community leaders/chiefs; establishment of all essential infrastructure, services and facilities at the resettlement site before actual relocation (schools, churches, health posts, police stations etc.); permanent housing reflecting the traditional village layout; allocation of sufficient land for agriculture; improved transport between atolls and mainland; separate sites for the different island communities so that they can maintain their culture and feel safe; security provision; guarantees for the maintenance of the clan system of islanders (resettlement of entire clans in one site) and of their traditional leadership system.

Similar expectations, concerns and demands of potential relocatees can be found everywhere in the South Pacific. They speak to a bundle of governance issues which have to be addressed as they are decisive links in the climate change – migration – conflict nexus. They can be clustered in to three issue areas of particular significance: land governance, governance of settler-host relations, and governance of state-community relations.

²⁵ For the following see Lange 2009, in particular the summary 139-142.

6.1. Land governance

Resettlement implies moving from one area of land to another. But land is scarce, not only on Bougainville, but all over the South Pacific. Finding appropriate resettlement land is a major challenge. Land acquisition for resettlement purposes is not an easy task; it will be difficult to find land, and it will be costly to purchase it. The problem will rise in magnitude in the future, given the rise in numbers of people who will have to relocate. As an internationally recognized principle of voluntary resettlement is that settlers must not be worse off after resettlement than in their regions of origin, it will be an enormous challenge to find solutions for this problem.

Resettlement does not only pose financial, technical, legal and economic challenges, and it is not merely a technical exercise.²⁶ It has a variety of political, social, cultural, and - I dare say - spiritual aspects to it. I have emphasized the importance of 'land' to the Carterets islanders, with the meaning of 'land' being very different from 'land' in the Western sense as understood by most academics and policy-makers who deal with these issues. 90% of land in PIC is held under various forms of customary title, and this land is at the heart of the entire social, cultural and spiritual order of communities. Hence loss or scarcity of land does not only pose economic problems, but has far-reaching effects on the social structure, the spiritual life and the psychic conditions of the affected groups and their members. Land and people are one, the people belong to the land as much as the land belongs to the people. Land belongs to the whole group. Access to land depends on membership in a specific social kin-based group (lineage, clan). There is no concept of individual ownership or of land as a commodity that can be bought and sold. There is a whole variety of primary, secondary and further land use rights, which complicates the notion of 'land ownership'. Boundaries of certain areas of land are often not clearly defined. Land provides not only livelihood and the most reliable security for the group, but it is also the source of its cultural and spiritual wellbeing. There is no clear-cut boundary between the nature/environment and the people/society. The land is the home of the spirits of the ancestors and of the unborn generations. Land has an other-worldly dimension, it connects people to the unseen world (of spirits, gods, God).

This holistic notion of land and the intimate relatedness of people and land can be found everywhere in the South Pacific. Abandoning one's land and thus the ancestors is a traumatic experience. Chief Paul Mika from Han island in the Carterets explains: "The hardest thing will be to lose our sacred places, our tambu places" (quoted from Pacific Institute of Public Policy, 2009, p. 2). An inhabitant of Babaga island in the Solomon Islands says: "They talk about us moving. But we are tied to this land. Will we take our cemeteries with us? For we are nothing without our land and our ancestors" (quoted from Oxfam, 2009, p. 36). The same reports come from resettlement sites in Fiji: relocation is hard for villagers, because their ancestral land is part of their culture and identity (Compendium 2015, 51). What one researcher describes for the Marshall Islands also holds true for any other place in the South Pacific, namely that "the entire culture revolves around vital connections to land and family, and it is difficult for outsiders to comprehend what it means from a Marshallese perspective to see the graves of your ancestors and traditional leaders succumb to the seas" (Barker, 2008, 2).

The latest IPCC assessment report in its chapter on Human Security acknowledges the importance of this cultural-spiritual dimension, by saying that climate change threatens "cultural practices embedded in livelihoods and expressed in narratives, world views, identity, community cohesion and sense of place. Loss of land and displacement, for example on

²⁶ In the same vein, Petzold and Ratter posit that "climate change adaptation is more a societal than a technical issue and demands thorough understanding of the awareness, experience, and the linkages among the island population" (Petzold and Ratter 2015, 42).

small islands and coastal communities, has well documented negative cultural and wellbeing impacts" (Adger/IPCC 2014, 2).²⁷

This is the main reason why many Pacific Islanders strictly refuse to even contemplate relocation. They say, for example, that one cannot re-establish Kiribati land-life connections in Fiji, or Tuvalu land-life connections in Australia (Baptiste-Brown 2014, 49-50). Many old people say that they'd rather die on their sinking island than relocate – and this on occasions has to be taken literally. In the case of Lifuka Island in Tonga, for example, the strong recommendation of external experts after thorough vulnerability studies was to relocate, but the people refused. It was only after a tropical cyclone hit Tonga and most houses on Lifuka were destroyed that this event "made possible further consideration of relocation as an adaptation strategy" (Compendium 2015, 63). This example confirms the IPCC's finding that there is "significant resistance to relocation even where such options are well planned and have robust justifications" - if cultural and psychological factors are not taken into account (Adger/IPCC 2014, 15).

More practical issues are significant too. Atoll islanders have problems to adapt to other environments. They have to learn new agricultural techniques, getting used to other food crops and to planting cash crops, to live detached from the sea, further inland or even on high ground, without the fishing opportunities they grew up with. For relocated Carterets islanders in Tinputz, for example, it is a major problem that they now live a little bit far away from the beach on a hillside, and they cannot go fishing because they do not have a boat, and they have to adjust to growing and eating unfamiliar food (personal communication settlers Tinputz August 2013). And the main challenge for Vunidogoloa relocates in Fiji is the shift from being a fishing community to an inland crop-growing community "with diminished activities along the coast and sea. The community will have to tend to their fish farms close to the village rather than venturing to sea" (Compendium 2015, 51).

An obvious challenge of resettlement governance then is to address the 'land' issue in its entirety, with all its aspects, in an integrated and holistic manner. This in particular also includes the 'soft' – cultural, psychological, spiritual – dimensions which are a decisive factor for the wellbeing and perhaps even the survival of people (at least as members of a culturally distinctive group). Failure to do so can lead to severe social problems (from the influx of 'landless' migrants into urban squatter settlements to the traumatisation of entire communities) and, as a consequence, even to violence and violent conflict (see below section 7).

6.2. The relations between relocatee communities and recipient communities

The 'land' challenge is closely linked to a second challenge, namely the relations between relocatees and host communities. Resettlement does not only affect those people who have to leave their homes, but also those who have to accommodate them in their midst. There are no empty spaces left in the South Pacific. Settlers in each and any case will find that

²⁷ It has been argued that the large diasporas of Pacific Islanders in New Zealand, Australia or the United States are proof that people are capable of dragging their culture with them overseas and sustain their cultures of origin. The existence of an intact community on the islands back home, however, seems to be indispensable for maintaining one's own identity even far from home, in the diaspora. The link to the land and to all that it comprises – culture, custom, sustenance, sacred sites, spirits of the ancestors – remains intact over great spatial distance, as long as the land and some of the people are still there. Diaspora communities and villages at home maintain close links, e.g. through churches, sporting groups or so-called kava clubs; and diaspora groups regularly raise funds for community development projects in their home villages and islands. It is a very common phenomenon that people living abroad or in the few cities of the Pacific regularly travel home to their island and their village over the Christmas period or on other special occasions (such as weddings or funerals) in order to renew their ties to the land and their families and thus get strength for another period of time detached from land and kin. So far, people always could come back, and they usually did come back. Climate change – induced migration, however, is different: it is irrevocable. You cannot return to an uninhabitable or sunken island.

people already live in the areas they are moving to. Resettlement governance therefore will have to focus on establishing and maintaining peaceful relations between settlers and host communities. As most land is customary land it "cannot be bought, sold or even given away unless sanctioned by traditional forms of land exchange which are relatively rare. This is an important issue when considering migration and relocation within the region – the loss of the link to land happens both for migrants and people at the destination whose land may be used for resettlement" (Campbell and Bedford 2014, 186). Hence it has to be taken into account that "for relocatees, to be forced from one's land is likely to be highly traumatic, but the giving up of land to relocatees by destination communities may be equally difficult. Proximate relocation outside one's customary land, or relocation to other PICTs, is likely to be fraught with problems over land tenure, which can continue for generations" (Campbell 2014, 15).

As has been shown, Tulele Peisa has put a lot of reflection and effort in to this problem, trying to establish sustainable bonds between newcomers and recipient communities, and developing inclusive programs which are of benefit for both settlers and hosts. Particular attention has to be paid to equity issues so as to avoid situations in which newcomers are better (or worse) off than the members of host communities, as this can easily spark resentments and conflicts. For example, Tulele Peisa is very anxious to make sure that settlers do not end up with bigger and better houses than their Bougainvillean neighbours. And Tulele Peisa deliberately promotes intermarriages as means of relationship-building. While some settlers agree with this approach, others are opposed to intermarriages, arguing that intermarriages will be destructive for the maintenance of one's own culture (Lange 2009, 90). In the long run, intermarriages will lead to new problems, for example disputes between relocatees who gained access to land because of marrying into the host community, and those without access because they did not marry locals.

Concerns of (potential) relocatees very much revolve around the question how relationships with host communities will play out: will they be hostile or friendly? Anxieties abound (take the example of the atoll islanders in the Bougainville case who fear to become victims of sorcery) (Lange 2009, 139), and experiences of relocatees are often not good. Some of the settlers from the Carterets re-relocated to their home islands because of bad experiences with their neighbours. Most difficult are the cases where relocatees have to negotiate access to customary land. Establishing and maintaining good relationships requires more than legal title. Above all, it requires customary forms of link-building. Traditional reconciliation ceremonies are of major importance.

Even if the resettlement land is formally legally free (so called alienated freehold land) and thus in principle available for resettlement, in most cases there are people already there, dwelling there, gardening there, or hunting – 'illegally' perhaps according to state law, but referring to long-established customary rights of usage. Examples are the land acquired by the Kiribati government in Fiji or the Karoola plantation land on Buka in the ABG/AIDP case. Although the Kiribati government bought freehold land in Fiji from the rightful legal owner, the Anglican Church, the land had been occupied and used by local people for a long time. The Kiribati government had to go to the courts in Fiji to enforce access rights, and at the same time also negotiated directly with the squatters so as to allow them to stay on the land and harvest all their crops before they had to move (Fijilive Sept 30, 2014).²⁸ Karoola plantation is legally freehold land, but nevertheless the ABG had to negotiate access with the neighbouring communities whose members have used this land for a long time.

The only type of relocation that is not burdened with the issue of relations between relocatees and hosts is resettlement within the boundaries of one's own ancestral land – that

²⁸ Interestingly enough, these squatters are of Solomon Islands origin. Their ancestors had been relocated to Fiji in the 19th and early 20th century in order to work on the sugar cane fields. Their descendents form a marginalized and disenfranchised minority in today's Fiji.

is the case of the Fiji villages. "The least problematic form of relocation is to locations within one's own customary territory" (Campbell 2014, 17).

Another obvious challenge of resettlement governance then is to take into account the needs and interests not only of relocatee communities, but also of recipient communities, and the relationship between them and relocatees. Failure to do so, again, can lead to serious social problems, including enmities and hostile interactions which can even escalate to violent conflict.

6.3. State – community relations

In the case of the Carterets/Bougainville atolls it is obvious that there are problems in the relations between state institutions and communities. The state has not delivered so far, and Carterets islanders have taken things into their own hands, detached from the state. Relationships between Tulele Peisa on the one hand and the PNG government and the ABG on the other have been strained for long periods of time, only recently there are some signs of a rapprochement (personal communication Ursula Rakova 18 April 2015).

On the side of the state there were apparent governance deficiencies. Consequently, people were annoyed about the mismanagement (or non-transparent management) of the relocation fund. People ask: Why have the two million Kina that had been allocated to resettlement by the PNG government not been used (or perhaps partly used, but perhaps for other things, or in a non-transparent manner)? The fact that this money has not (yet?) been put to its designated use is a clear indication of weaknesses in governance. This can be taken as an expression of what has been called the 'climate-fragility risk' (Rüttinger et al. 2015), with the argument being that fragile states with limited institutional capacities have much more difficulties in dealing with climate change and its environmental and social effects than states with stable institutions. Lack of capacities and ensuing lack of effectiveness in dealing with those effects diminishes the legitimacy and trustworthiness of state institutions in the eyes of the people on the ground, and lack of legitimacy on the other hand makes it more difficult for state institutions to effectively implement adaptive measures, including planned relocation.

In such fragile situations non-state actors can play and do play important roles, as the example of Tulele Peisa demonstrates. The interesting thing about Tulele Peisa is that it is not just an NGO or civil society organisation in the Western understanding of the term, but is closely linked to non-state actors who do not neatly fit into the Western 'civil society' category. Tulele Peisa was set up at the request of the local Council of Elders, that is, traditional authorities from the customary sphere of societal life. Tulele Peisa thus can be seen as an example of a "bridging organisation" (Petzold and Ratter 2015, 40), which tries to connect local customary life-worlds and the 'outside' world of state and civil society.

A third obvious challenge to resettlement governance then is related to the lack of capacities, effectiveness and legitimacy of state institutions in the context of weak and fragile statehood. This necessitates the alignment of state and non-state (civil society, customary) actors, institutions and strategies in efforts of relocation governance. Failure to do so can lead to serious political problems in the relationship between governments and state institutions on the one hand and people ('citizens') and local communities on the other. Again, conflicts and violent conflict escalation can flow from these problems.

7. Conflict

There are no "climate wars" in the South Pacific, neither inter-state nor intra-state. What can be found, however, are conflicts in the local context which at times escalate violently, albeit at a relatively low level of intensity, and what can be found is everyday dispersed

violence, such as domestic violence against women and children. This everyday violence and these local low-intensity violent conflicts can be linked to the social effects of climateinduced migration and relocation.

There are alarming reports, for example, of increasing domestic violence in the overcrowded squatter settlements of South Tarawa, the capital city of Kiribati (reference). The same holds true for settlements of other urban centres in the South Pacific. These settlements are also often the sites of violent, sometimes deadly, conflicts between communities from different islands. Causation of course is always complex and path dependent. The deadly clashes between two island communities (from the islands of Tanna and Ambrym) in Port Vila, the capital city of Vanuatu, for example, in 2007 were triggered by sorcery accusations.²⁹ It would be misleading to label this conflict as a 'sorcery conflict'. But it would also be misleading to label it a 'climate conflict' on the grounds that members of these communities had migrated to Port Vila due to – inter alia³⁰ - the effects of climate change on their home islands. Both, climate change and sorcery (accusations) played a role in causing this conflict, and so did a host of other factors. 'Climate change - induced migration' can be identified as one element in a complex web of conflict causation, and sorcery (allegations) can be identified as a trigger in a complex process of conflict escalation. The fact that this conflict escalated violently is due to a specific constellation of factors and events which, taken together, 'caused' the violent conduct of conflict in a non-linear complex and emergent manner. That some chiefs of the island communities in conflict were – just by chance – not in town on the decisive day of violent escalation might have provided the tipping point. These chiefs might have successfully prevented violent conflict escalation (note that other conflicts between island communities in Port Vila did not and do not lead to violence). For the people directly involved in this conflict (or at least most of the people), sorcery was without doubt its cause. Western academics analysing the conflict will reject this explanation and turn to more 'rational' or 'objective' causes (like climate change - induced migration). In doing so, however, they miss an important point, namely the worldviews, perceptions and motivation of the people on the ground. Hence conflicts like this one have to be grasped as complex and emergent (which also includes the appearance of non-predictable unexpected/contingent phenomena) rather than as 'caused' by climate change (- induced migration) - or sorcery.

Localised violent conflicts do not only occur in the urban settlements of migrants from climate change affected islands, but also on the islands themselves. A community leader from Tuvalu describes the problem as follows: 'Right now we have land issues for people living at the edges of the island. As the land on the coast is eaten away, people want to relocate saying "We're losing our land: we need to move a bit in". Other families reply "This is our land, this is where it stops". So this is creating disputes amongst the communities in Tuvalu. Land in Tuvalu is communal land, so it's not one person arguing with another, it becomes a wider dispute with family versus family" (Annie Homasi, quoted from Oxfam, 2009, p. 33). From a story like this one can easily construct a causal chain from climate change to coastal erosion to land scarcity to relocation to conflict between communities over the scarce natural resource land. Whether such a conflict will escalate violently or not, however, is dependent on a host of additional elements and their relations and non-linear interactions and the processes of actions and reactions of affected communities, including the history of relations between affected communities, the (dis)functionality of customary dispute resolution mechanisms, the adaptive capacity of affected communities (including options for long-distance migration), the capabilities and preparedness to use physical force in conflict situations, and not least the stability or fragility of the overall societal and state environment.

²⁹ On this conflict see Boege and Forsyth 2015 (forthcoming).

³⁰ Other factors contributing to the decision to migrate are search for paid work in the cash economy, reunion of families, better education services in the capital city.

Similar stories of conflicts between people moving from the coast to higher ground and the landowners there can be heard from Palau, Vanuatu or Solomon Islands. In Kiribati water scarcity has led to conflicts over water between neighbouring communities which felt forced to encroach on each other's land (Foreign Affairs Committee, 2010, 102). Of particular concern is the situation in the Solomon Islands which similar to Bougainville experienced a large-scale internal violent conflict not long ago (1998-2003) and which still is in a postconflict peacebuilding situation. The island and province of Malaita was a conflict hotspot. Currently some outer islands of Malaita province are becoming uninhabitable due to sealevel rise and its effects, and people have started to relocate to mainland Malaita- more or less spontaneously or organised. On occasions, there have been outbursts of sporadic violence; many relocatees live in fear, and the overall situation is tense. Malaita is the most densely populated island in the Solomon Islands, it is categorised as overpopulated by the government, and land is extremely scarce. Over the last decades, thousands of Malaitans have migrated to other parts of the Solomon Islands, mainly to the capital city Honiara on the island of Guadalcanal, and conflicts between Malaitan settlers and the local population on Guadalcanal had been a major factor in the above-mentioned large-scale violent conflict.

Finally, planned relocation can also lead to local conflicts between settlers and recipient communities. As has been mentioned before, disputes over land have led to the re-relocation of Carterets islanders back home to their islands from the Tulele Peisa resettlement site in Tinputz on mainland Bougainville. And people from another Carterets relocation site on Buka island report that there is "a lack of 'unity' with the host community" (Lange 2009, 103), with ongoing conflicts over land use and fishing rights.³¹ Relocatees are the target of hostilities from their neighbours who destroy their houses and food gardens or their produce when they take it to the market or attack their young people or rape the women (Lange 2009, 104). As a consequence, "many families returned to the Carteret Islands due to difficulties integrating with the host community" (Lange 2009, 104). Traditional reconciliation ceremonies have not led to sustainable inter-community peace so far.

These types of low intensity violence and conflicts may look petty and negligible in comparison to the popular 'climate wars' talk. But they are what really happens (and what slips through the grids of large-N studies). For the people who are directly affected, these small conflicts are extremely serious; for them they can have devastating, even life-threatening or deadly, consequences. They can be interpreted as conflicts of interest over scarce natural resources (land, water, fish stocks, ...) and conflicts of interest over access to public goods and economic opportunities (jobs in the formal economy, access to health and education facilities...), and some are also identity conflicts (over customs, culture, history, religion, sorcery ...). As Pacific islands are usually "regions with exclusive identities", they are particularly prone to such dentity conflicts – to take up a term used Michael Brzoska and Christiane Froehlich in their latest publication on the topic (Brzoska and Froehlich 2015, 14-15). Climate change – induced migration is without doubt a contributing factor in the conflicts mentioned. Its specific significance, however, can only be explored on a case-by-case basis, in the overall context of complex and emergent conflictual webs and pathways.

Having said that, violent conflict escalation cannot be ruled out, particularly in a fragile postconflict environment such as in Bougainville or Solomon Islands, or in situations that are already conflict-prone anyway due to other factors which are of relevance for the interests and identities of (potential) conflict parties.³² In those situations climate change - induced migration can lead to conflict escalation, particularly in the resettlement areas (be they urban squatter settlements or rural communally owned lands), between newcomers and locals or

and even violent conflict" (Ruettinger et al. 2015, 1).

³¹ In the course of the war on Bougainville, 30 families from the Carterets had been relocated to the west coast of Buka island. Most of these families have re-relocated to the Carterets in the meantime (Lange 2009, 101). ³² "The sharpest risks emerge when the impacts of climate change overburden weak states. Climate change is the ultimate "threat multiplier": it will aggravate already fragile situations and may contribute to social upheaval

between different groups of newcomers, particularly under conditions of scarcity and (perceptions of) inequity.

Whether there will be violent conflict escalation or not, however, in the first place depends on migration/relocation governance.

8. Migration governance

Migration and resettlement are and will be mostly an internal affair within countries affected by the environmental and social effects of climate change.

Migration governance in PIC is confronted with the fact that state structures in many PIC are weak or fragile. State weakness or fragility, however, does not automatically mean weakness or fragility of political order and governance as such. Rather, political order and governance in PIC are often hybrid, combining state and non-state actors and institutions.³³ In hybrid political orders, diverse and competing authority structures, sets of rules and logics of order co-exist, compete, overlap, interact, intertwine and blend, combining elements of introduced western models of governance and elements stemming from local indigenous traditions of governance and politics, with further influences exerted by the forces of globalisation and associated societal fragmentation (in various forms: ethnic, tribal, religious...). They emerge from genuinely different societal spheres – spheres which do not exist in isolation from each other, but permeate each other. Consequently, these orders are shaped by the closely interwoven texture of their separate sources of origin, that is: they are hybrid (Boege et. al. 2010; Boege et. al. 2009).

Hybridity of political order has to be taken into account when it comes to migration and resettlement governance. It is not just an issue that can be dealt with in the framework of the state and according to the laws of the state, implemented and enforced by state institutions. The other societal spheres, actors and institutions mentioned above also matter.

In particular, one has to be aware of the fact that resilience of communities and adaptive capacity in South Pacific island societies very much rest with densely knit customary (mostly kin-based) societal networks of support and reciprocity, with customary authorities and institutions as effective and legitimate governance actors and mechanisms. Migration and resettlement governance therefore should not only be left with state institutions, but also include local customary non-state (as well as more formal civil society) institutions. Their potential must not be left untapped.³⁴ Traditional authorities – chiefs and elders, tribal leaders, religious authorities, healers, wise men and women etc. - are of major importance for the organisation of everyday life in the weak states of the South Pacific. They are in charge of the governance of communities, natural resources and the environment; they often follow customary law (and not the written law of the state), they regulate resource use and solve disputes (not least disputes over land and other natural resources) according to local custom, and communities' adaptive capacity - seen not as a technical issue, but in its political and social dimensions - rests with them. These types of non-state customary actors have to be taken into account when it comes to addressing the social effects of climate change, including resettlement governance.

The same holds true for the churches as the most important civil society organisations in PIC. The vast majority of Pacific Islanders are devout Christians. State institutions in PIC

³³ For the reconceptualisation of the ,weak' and ,fragile' states of the South Pacific as hybrid political orders and emerging states see Boege et al. 2008.

³⁴ Petzold and Ratter rightly posit: "Only by understanding how social features, such as local networks and initiatives of collective actions, are integrated into local decision-making and planning, and which role collective memory and civil society plays, the effectiveness and acceptance of adaptation measures can be increased and community resilience effectively improved" (Petzold and Ratter 2015, 42).

might not reach far beyond the urban centres, but the churches are everywhere on the ground. They can provide leadership in adaptation and resettlement governance.³⁵ For example, churches played an important role in Fiji relocations. The Pacific Conference of Churches (PCC) has been working with villagers to help them deal with the loss of their homelands. A PCC representative said: "Because faith is such a large part of people's lives in the Pacific, the church is well placed to assist communities with climate change challenges (...) We offer accompaniment to affected communities and support to church leaders in dealing with the impacts" (quoted from OCHA Fiji: Building resilience in the face of climate change). PCC has taken the issue on board more generally. In its work, it has a focus on climate change and its environmental, social, cultural and spiritual effects, and it has established respective organisational structures.

Engaging with the churches and with traditional authorities like chiefs and elders, however, requires respect for their ways of operating and their worldviews, and this means acknowledging the cultural and spiritual dimension of climate change - induced resettlement and the significance of local knowledge. One must not forget that "islanders developed efficient traditional adaptation strategies" over the centuries (Petzold and Ratter 2015, 37), based on local knowledge. This local knowledge has to be taken seriously. In this context, Dan Smith and Janani Vivekananda point to the dangers of cultural insensitivity: "To ordinary people it will feel like outside experts coming and telling them how things are, how they should live and what they should do. The likelihood is that they will ignore this advice or, if necessary, fight it. A different way of working is possible, grounded in a peace-building approach. This emphasises the importance of local knowledge and seeks the active participation of local communities in working out how best to adapt to climate change" (Smith and Vivekananda, 2007, 29). Accordingly, there is need "to bring hard science and local knowledge together" (ibid.), acknowledging "that local knowledge alone is not enough, because climate change throws up unprecedented problems, but nor is the best hard science enough by itself, because adaptation needs to be locally grounded and culturally appropriate" (Smith and Vivekananda, 2007, 32). The Taro relocation programme consultants, for example, identified as a crucial lesson learned from their community engagement: "valuing local knowledge" (Haines, Rolley and Albert no date (2014), 15). The IPCC also strongly supports the incorporation of indigenous knowledge into adaptation planning in small island states (Nurse/IPCC 2014, 1636) and criticises that "such forms of knowledge are often neglected in policy and research" (Adger/IPCC 2014, 2). The IPCC holds that "mutual integration and co-production of local and traditional and scientific knowledge increase adaptive capacity and reduce vulnerability" (Adger/IPCC, 10). 'Bridging' institutions and actors who are familiar with both worlds, the local world of traditional knowledge and the international world of scientific knowledge, can and have to play an important role in this regard.³⁶

Finally, governments and state institutions do of course matter in migration governance. They have the power to set framework conditions for climate adaptation, including matters of migration and relocation governance at the national level, and they provide the link between needs and interests of local populations and the international level, by representing their people in international climate politics and by securing international assistance for climate adaptation measures in their respective countries, either directly (e.g. via the Green Climate Fund) or indirectly via development assistance which increasingly comprises climate change – related programmes and projects in the PIC.³⁷ So far, however, National Adaptation

³⁵ On the other hand, they can also pose obstacles to necessary action with regard to climate change if they do not take the issue seriously because of certain interpretations of biblical teachings. In this context, it is important to note that fundamentalist Pentecostal and evangelical churches are rapidly gaining ground in PIC.
³⁶ On "bridging organizations" and their role in climate change adaptation strategies, in particular with regard to

³⁰ On "bridging organizations" and their role in climate change adaptation strategies, in particular with regard to connecting various actors and supporting reciprocal transfer of knowledge, see Petzold and Ratter 2015, 40. ³⁷ Village relocation in Fiji, for example, is partly supported by the SPC/GIZ Coping with Climate Change in the Pacific Island Region (CCCPIR) programme. The Pacific Climate Change and Migration (PCCM) project is funded by the EU, and the Global Climate Change Alliance of the EU is also active in PIC. In fact, one sometimes gets

Programmes of Action (NAPA) in the Pacific hardly mention migration.³⁸ It is still primarily seen as something negative that has to be avoided (Nansen Initiative 2013a, 20). Of course, it is perfectly fine to try to do everything to keep people who do not want to move in their home places, particularly in light of the close attachment of Pacific islanders to their land (see above...). Nevertheless plans have to be made for times and instances when this is not possible any longer. Long-term planning is a must - and it is possible as many climate change – related environmental degradation effects are slow-onset events. Hence Biermann and Boas have a case when they argue: "When it comes to sea-level rise in particular, there is no need to wait for extreme weather events to strike and islands and coastal regions to be flooded. All areas that cannot be protected through increased coastal defences for practical or economic reasons need to be included early in long-term resettlement and reintegration programs that make the process acceptable for the affected people" (Biermann & Boas, 2010, p. 83). Making the process 'acceptable for the affected people', however, is the big challenge that relocation governance is confronted with. In the light of the governance challenges that I elaborated on in previous sections it is perfectly clear that the 'long-term resettlement and reintegration programs' Biermann and Boas are envisaging have to go far beyond technical and managerial issues: they are of a highly political nature. Problems start with the issue of land acquisition for resettlement purposes: "States should begin now to review public land holdings and to select possible long-term resettlement sites that will be removed from the land market through land set-aside programmes" (Displacement Solutions, no date, 27).

This is easier said than done. There is lack of suitable non-customary 'public' land available for 'land set-aside programmes', therefore access to customary land will have to be negotiated with traditional landowning groups in most cases. To give just one example to illustrate the associated problems:

In the case of Taro in the Solomons (see above section 4), "negotiations with customary land owners have been underway for over two decades, which only recently resulted in the purchase of a 470 ha parcel of land, now owned by the Choiseul Provincial Government. A significant portion of this land is unfortunately unsuitable for development due to its low-lying topography (...) additional land negotiations are likely to be required to secure access to a suitable water supply, a hydropower site and road and sea links" (Haines, Rolley and Albert no date (2014), 1). Accordingly, external consultants in the Taro case identified as a major challenge: "The delicate nature of customary land ownership and the need to discuss land ownership matters with tribal groups and community members" (Haines, Rolley and Albert no date (2014), 12).

The problem is aggravated by the fact that communities need to be relocated in their entirety. People in general are not willing to relocate on an individual or family basis or as fragmented groups. They are afraid of losing their culture and their customary social support networks, which are based on locality and kinship relations. To disperse people over different resettlement sites would mean that people cannot stand together as a community and thus would lose their resilience. Therefore communities from the Bougainville atolls, for example, have made it perfectly clear that they insist on relocation as entire groups (Lange 2009). For state institutions to ignore these demands would mean asking for trouble. They are dependent on the collaboration of customary community leaders (chiefs, elders, priests).

the impression that conventional development projects and programs are just re-labelled to fit into the climate change (- migration) field (see for example the 'compendium of case studies on climate and disaster resilient development in the Pacific' compiled by the Secretariat of the Pacific Community in 2015) (Compendium 2015). Currently there seems to be a strong tendency "of mainstreaming or integrating climate change policies in development plans", based on the view that "climate change and development strategies should be considered as complementary" (Nurse/IPCC 2014, 1640). There is some suspicion that adaptation policies in small island countries are to a large extent supply/donor driven (ibid., 1643).

³⁸ So far, only five PIC have included human mobility considerations within their NAPAs: Kiribati, Samoa, Solomon Islands, Tuvalu and Vanuatu (Nansen Initiative 2013a, 19).

Trying to enforce relocation measures against their resistance would inevitably lead to serious conflicts between communities and state institutions.

An alternative option to in-country relocation of whole communities can be state-sponsorship of international migration at the individual or family level. This approach could link in with the long-standing history of international migrations and diasporas which I briefly described earlier (see section 3). It is an approach particularly appropriate for PIC which are so small and exposed that resettlement in-country is not feasible in the long run. A case in point is Kiribati. The Kiribati government has not only bought land in Fiji (see section 4), but pursues a comprehensive migration strategy which is called 'Migration with dignity'.^{39'} As early as 2008 Kiribati President Anote Tong explained the reasons behind this strategy in his address to the UN General Assembly: "The relocation of the 100,000 people of Kiribati, for example, cannot be done overnight. It requires long-term forward planning and the sooner we act, the less stressful and the less painful it would be for all concerned. This is why my government has developed a long-term merit-based relocation strategy as an option for our people. As leaders, it is our duty to the people we serve to prepare them for the worst-case scenario" (quoted from Oxfam 2009, 36-37). And in his 2009 statement to the UN General Assembly he said: "I have been advocating a combination of pragmatic adaptation strategies for my people. It is our overwhelming desire to maintain our homeland and our sovereignty. However, with the inevitable decline in the ability of our islands to support life, let alone increasing populations, due to rising sea levels, we must also provide opportunities for those of our people who wish to migrate to do so on merit and with dignity" (quoted from Foreign Affairs Committee 2010, 105).

Ever since Anote Tong has been a vocal advocate of 'Migration with dignity'. Education and vocational training for I-Kiribati overseas are key elements of this strategy. One example for this is KANI – the Kiribati Australia Nurses Initiative: training of young I-Kiribati men and women as nurses and aged care workers in Queensland (Nansen Initiative 2013a, 19).⁴⁰

The success of such initiatives like Migration with Dignity of course depends on the willingness of potential recipient states to play their part. However, as has been said before, the big developed countries of the South Pacific region so far have been reluctant to engage with the issue. They could and should do more: A meaningful increase in adaptation and relocation funding for PIC, in addition to already existing aid commitments, should be particularly allocated to basic resilience programs at the *in situ* community level, but also to in-country resettlement programs such as Tulele Peisa's. Furthermore, migrant workers schemes as the ones New Zealand and Australia have already in place could be expanded and explicitly include members of communities particularly vulnerable to climate change. For an interim period such temporary and circular migration schemes can be of use for the home communities and support their resilience and adaptive capacities, particularly when combined with "measures to facilitate and strengthen the benefits of migrant remittances" (Warner et al. 2009, v). In the long run, however, Australia, New Zealand and others will have to face the need of planning for permanent immigration from PIC affected by climate change.

Today's realities, however, are far from that. Attempts to address the climate change – migration nexus in the context of international climate policy and negotiations have only led to very modest results so far. The Cancun Adaptation Framework of 2010 mentioned the issue and used the terminology of climate change induced displacement, migration and

³⁹ For a critical assessment of Migration with Dignity see Baptiste-Brown 2014 who says that it is a governmentlevel approach which is not known or understood at the community level.

⁴⁰ KANI is part of the Australia-Kiribati Partnership for Development. The downside of this policy is the inherent danger of brain drain: well educated young I-Kiribati might decide to stay abroad permanently (Baptiste-Brown 2014, 49).

planned relocation (Nansen Initiative 2013a, 20).⁴¹ Expectations, however, that this could be the starting point for serious engagement with the issue at the international level were not met. As a result, the governments of Norway and Switzerland which had been pushing this agenda launched the Nansen Initiative as a relatively low-key endeavour in order to keep the topic on the international agenda. The Nansen Initiative is "a state-led, bottom-up consultative process intended to build consensus on the development of a protection agenda addressing the needs of people displaced across international borders by natural disasters, including those linked to the effects of climate change" (Nansen Initiative 2013a, 3). The Initiative is particularly active in the South Pacific. It held a major regional consultation in Rarotonga, Cook Islands, in May 2013, which was attended by representatives from ten PIC, representatives from regional and international organisations, civil society and academics; it triggered intensified debate about climate change and migration in the South Pacific (Nansen Initiative 2013b). The Nansen Initiative has its limitations though as it only focuses on crossborder, disaster-induced migration and non-binding regulations (McAdam 2014). Furthermore, as a state-led endeavour it has its blind spots regarding the relevance of nonstate actors and institutions. It is laudable of course that it also includes civil society and national and international NGOs, but in the Pacific context this is not enough. As has been demonstrated, here actors and institutions beyond state and civil society play crucial governance roles in the context of hybridity of political order. Initiatives for the governance of climate change – induced migration must not ignore this hybridity.

9. Summary and conclusions

Let me briefly summarise and draw some conclusions. Several different types of climate change – induced migration can be identified in the South Pacific.⁴²

Firstly, climate change – induced migration is individual and family migration. It is mostly 'voluntary', and it is mostly rural-urban migration in-country, but it can also be international. Effects of climate change are one factor among other push and pull factors influencing the decision to move. Everyday dispersed violence (e.g. domestic violence) and inter-community violence in urban environments can be linked to this type of migration.

Secondly, climate change – induced migration is planned community relocation. It is more or less 'voluntary' or 'forced', depending on the severity of climate change effects at the site of origin. It is not rural-urban and not international (at least not yet), but in-country rural-rural - from the coast inland, from outer islands to main islands. Within this type, several variations can be found: It is either proximate migration on own lands or proximate to others' lands or distant to others' lands. Relocation to others' lands "is often fraught with long-standing tensions" (Campbell 2014, 17) and can lead to local violent conflict between settlers and recipient communities (conflicts of interest and identity conflicts), whereas short distance relocation within one's own customary land is conflict-free.

There is no linear causal link between any of these types of climate change – induced migration and violent conflict. The significance of the factor 'climate change' has to be situated in the specific case-dependent complex conflict constellation and its emergence over time. Conflicts ensue, but whether they escalate violently is dependent on a combination of factors, "such as the intensity of the conflict over interests and identity, the recent history of violent conflict in the receiving region etc." (Brzoska and Froehlich 2015, 14). Governance is a crucial node in the complex network of elements and relations which

 ⁴¹ Paragraph 14(f) in the 2010 Cancun Adaptation Framework is generally cited as the starting point for an international policy debate about human mobility as a climate change adaptation measure (Nansen Initiative 2013a, 20).
 ⁴² I'm talking here about permanent migration in the context of slow-onset events only, not about migration due to

⁴² I'm talking here about permanent migration in the context of slow-onset events only, not about migration due to rapid-onset events, as the latter is usually only temporary short-term.

constitute the specific emergent conflict constellations. Talking about governance has to include, but at the same time also to transcend, issues of weakness and fragility or strength and stability of states. In countries like the PIC, hybridity of political order and governance arrangements have to be taken into account. In this context, customary non-state actors and governance in the local community context figure prominently.

What is needed then is the collaborative effort of non-state customary as well as civil society institutions and state institutions in planning, decision-making and implementation of resettlement programs. Good relocation governance depends on such collaboration. International donors, international organisations and INGOs can come into this mix in order to give financial and technical support.⁴³ State institutions and affected communities, including civil society organisations and social networks from the sphere of communal customary life, will have to join forces, and international donors will have to lend meaningful support for state and non-state civil society and customary institutions and their collaboration. Good migration governance has to be multi-partner, multi-sector, culturally sensitive, conflict-sensitive, integrated and holistic - not least addressing cultural-spiritual aspects which are easily underestimated by foreign 'Western' actors.⁴⁴

Such integrated and holistic migration governance which builds on the complementarity and collaboration of all governance actors who are of relevance in hybrid political orders is essential for the prevention of violent conflict.

At the end of the day, however, a prerequisite for conflict preventive good resettlement governance is to engage with the long-standing and mentally deeply rooted "sedentary bias" (Bakewell 2008), in the context of which migration is perceived and assessed as in principle undesirable and negative, as a mere measure of last resort. This bias is still very powerful with all stakeholders involved: PIC governments, international development agencies, and affected communities and their leaders. An entry point for such engagement could be provided by working with the "binary of mobility and place-attachment" (Hofmann 2014, 40), which is an outstanding feature of Pacific societies. In my view, this will be the decisive challenge in the governance of climate change – induced migration in the South Pacific.

10. Further Research

From this brief presentation of the South Pacific situation it can be concluded that working with concepts like complexity, relationality, emergence and path dependency promises to be more fruitful for grasping the climate change – migration – (violent) conflict nexus than, say, large-N studies based on more or less simplistic or sophisticated models and questionable datasets. Based on these concepts, studying the puzzle of climate change, migration and conflict necessitates qualitative in-depth case study research that delves into the local complexities and relational settings as deeply as possible in order to get an "understanding of inter-linkages between governance and the cultural and social context, which is important for a thorough assessment of local adaptive capacity and resilience" (Petzold and Ratter 2015, 42). Much more empirical evidence with regard to micro level data, based on systematic studies, is needed; "data are needed on low-level conflicts and their geographical

⁴³ Resettlement of communities "will be expensive and few countries in Asia and the Pacific will be able to fund sustainable resettlement alone. International involvement and support will, therefore, be critical to successfully resettle those displaced by climate change" (ADB 2012, 37). Global adaptation funds, such as the Green Climate Fund, should recognize migration and planned resettlement as effective adaptation strategies and provide funding for them.

⁴⁴ A positive example in this regard is the case of Taro relocation planning. It utilised the outcomes "of extensive engagement carried out with local communities, relevant stakeholders and government authorities at local community, provincial government and national government levels" (Haines, Rolley and Albert no date (2014), 4). More than 300 people (out of 1000) at the local level participated in the engagement activities.

and temporal distribution" (Scheffran et al. 2012, 10). Guiding categories for such systematic research could be provided by

- the differentiation between voluntary migration, planned relocation and forced displacement, in the context of either slow-onset or rapid-onset events,
- the differentiation of governance arrangements, e.g. from fragile to stable states and societies, or different types of hybrid political orders,
- the differentiation of types of violence/violent conflict,
- and the differentiation between in-country and international.

An ethnographic research approach, informed by political anthropology and grounded in solid field research/action research, can best disentangle the complexities and the relationality of the live-worlds of Pacific islands communities affected by climate change. Such research should be conducted in close collaboration with local researchers and affected communities whose voices still are largely absent from the discourse today.⁴⁵ Fresh relational approaches in the field of the 'new anthropology of the state' and the concept of 'stategraphy', with stategraphy understood "as a relational anthropology of the state" (Thelen, Vetters and Benda-Beckmann 2014, 15) can provide promising starting points: one might think of an ethnography of climate change - induced migration governance.

Such an ethnographic approach fits well with the research desiderata identified by IPCC in regard to small island states. Under the heading of 'Research and Data Gaps' the IPCC posits: There is need to acknowledge the "heterogeneity and complexity of small island states and territories" (Nurse/IPCC 2014, 1644). Accordingly "within-country and -territory differences need to be better understood" (ibid.); in particular there is "need for more work on rural areas, outer islands, and secondary communities" (ibid.). I could not agree more. The international dimension has to be added though – community networks these days are not necessarily locally confined any more, they transcend boundaries and are of regional and at times global reach. The concept of translocality, linked to climate change – induced migration, seems to be particularly promising here (Greiner, Peth and Sakdapolrak 2014) as it can be assumed that the local-inter/transnational interface will become of increasing significance for our topic.

It would be really fascinating to conduct such research in a comparative manner, comparing regions like the South Pacific, the Caribbean, the Indian Ocean and the Arctic.⁴⁶ They all are dotted with small islands affected by climate change and migration. I am sure that there are striking similarities, but also significant differences, for example with regard to the importance of community networks, the role of customary actors and of state institutions, the relationship between state and non-state actors and institutions, all of relevance for the governance of climate change – induced migration. True: there are quite a lot small islands out there, but having browsed through (part of) the enormous body of literature on 'climate change and migration/conflict' there must be also quite a lot of academics with an interest in the topic out there.

Acronyms

ABG	Autonomous Bougainville Government
ABR	Autonomous Region of Bougainville
ADB	Asian Development Bank

⁴⁵ Jacobeit and Methmann posit that "when it comes to the construction of a theoretical framework, this framework should be grounded in the experiences of affected communities, and not pressed on to the empirical context from the outside" (Jacobeit and Methmann 2012, 309).

⁴⁶ Petzold and Ratter also point to the "need for more comparative island and non-island case studies" (Petzold and Ratter 2015, 42).

AIDP	Atoll Integrated Development Policy
GIZ	Gesellschaft für Internationale Zusammenarbeit
ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
NAPA	National Adaptation Programme(s) of Action
PAC	Pacific Access Category
PCC	Pacific Conference of Churches
PIC	Pacific Island Countries
PNG	Papua New Guinea
TP	Tulele Peisa

References

- ADB 2006. Republic of Kiribati: Integrated Land and Population Development Program on Kirimati Island. ADB.
- ADB 2012. Addressing Climate Change and Migration in Asia and the Pacific. Mandaluyong City: Asian Development Bank.
- Adger W. Neil et al. IPCC 2014. *Climate change 2014. Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects.* Working Group II Contribution to the Fifth Asessement Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press, chapter 12 Human Security.
- Bakewell, O 2008. 'Keeping them in their place': the ambivalent relationship between development and migration in Africa. *Third World Quarterly* 29 (7), 1341-1358.
- Baptiste-Brown, Sara 2014. Behind the words Migration with Dignity in Kiribati, in: Gesing, Friederike, Johannes Herbeck and Silja Klepp (eds.). *Denaturalizing Climate Change: Migration, Mobilities and Space.* Artec-paper Nr. 200. Bremen: Universität Bremen, 44-53.
- Barker, Holly M. 2008. Vulnerable Island Nations at Mercy of World's Polluters. *Pacific Island Report,* 11 November 2008. Hawaii: University of Hawaii.
- Biermann, Frank and Ingrid Boas 2010. Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees, in: Global Environmental Politics, Vol. 10, No. 1, pp. 60-88.
- Birk, Thomas and Kjeld Rasmussen 2014. Migration from atolls as climate change adaptation: Current practices, barriers and options in Solomon Islands. *Natural Resources Forum* 38, 1-13.
- Boege, Volker 2008. A promising liaison: kastom and state in Bougainville. ACPACS Occasional Papers Series No. 12. Brisbane: The Australian Centre for Peace and Conflict Studies (ACPACS).
- Boege, Volker 2012. Hybrid Forms of Peace and Order on a South Sea Island: Experiences from Bougainville (Papua New Guinea), in: Mitchell, Audra and Oliver P. Richmond (eds). *Hybrid Forms of Peace. From Everyday Agency to Post-Liberalism.* New York: Palgrave Macmillan, 88-106.
- Boege, Volker, M. Anne Brown, Kevin Clements and Anna Nolan 2008. *States Emerging from Hybrid Political Orders—Pacific Experiences*. Brisbane: Australian Centre for Peace and Conflict Studies, Occasional Paper No. 11.

- Boege, Volker, M. Anne Brown, Kevin Clements and Anna Nolan 2009. On Hybrid Political Orders and Emerging States: What is Failing – States in the Global South or Research and Politics in the West? *Berghof Handbook Dialogue Series No. 8*, 15-35. Berlin: Berghof Research Center for Constructive Conflict Management.
- Boege, Volker, Anne Brown, Kevin Clements and Anna Nolan 2010. Challenging Statebuilding as Peacebuilding - Working with Hybrid Political Orders to Build Peace, in: Richmond, Oliver P.(ed.) *Palgrave Advances in Peacebuilding. Critical Developments and Approaches.* New York: Palgrave Macmillan, 99-115.
- Boege, Volker and Miranda Forsyth 2015. Customary conflict resolution in a state environment – cases from Vanuatu, in: Aning, Kwesi et al. (eds.): *Exploring Peace Formation: Justice and Security in Post-Conflict States.* Routledge (forthcoming).
- Brzoska, Michael and Christiane Fröhlich 2015. Climate change, migration and violent conflict: vulnerabilities, pathways and adaptation strategies. *Migration and Development* DOI: 10.1080/21632324.2015.1022973
- Campbell, John R. 2014. *Climate-Change Migration in the Pacific.* The Contemporary Pacific 26 (1), 1-28.
- Campbell, John and Richard Bedford 2014. Migration and Climate Change in Oceania, in: Piguet, E and F Laczko (eds.): *People on the Move in a Changing Climate.* Global Migration Issues 2. Dordrecht: Springer.
- Chevalier, Emilie 2014. Beyond isolated Atlantises in an infinite ocean: Replacing the climate change and migration nexus in the context of territorial networks in the South Pacific, in: Gesing, Friederike, Johannes Herbeck and Silja Klepp (eds.). *Denaturalizing Climate Change: Migration, Mobilities and Space.* Artec-paper Nr. 200. Bremen: Universität Bremen, 66-76.
- Compendium 2015. Compendium of Case Studies on Climate and Disaster Resilient Development in the Pacific. Suva, Fiji: SPC.
- Gerrard, Michael B. and Gregory E. Wannier (eds.) 2013. *Threatened Island Nations: Legal Implications of Rising Seas and a Changing Climate.* New York: Cambridge University Press.
- Displacement Solutions no date. Climate Change, displaced persons and housing, land and property rights. Preliminary strategies for rights-based planning and programming to resolve climate-induced displacement. Geneva: Displacement Solutions.
- Displacement Solutions 2008. The Bougainville Resettlement Initiative. Meeting Report. Canberra: Displacement Solutions.
- Foreign Affairs, Defence and Trade References Committee. Security challenges facing Papua New Guinea and the island states of the southwest Pacific. Volume II. Canberra: Commonwealth of Australia, The Senate.
- Gleditsch, Nils Petter, Ragnhild Nordas and Idean Salehyan 2007. Climate Change and Conflict: The Migration Link. Coping with Crisis Working Paper Series. International Peace Academy.
- Gleditsch, Nils Petter and Ragnhild Nordas 2007. Climate change and conflict, in: Political Geography, Vol. 26, pp. 627-638.

- Greiner, Clemens, Simon Alexander Perth and Patrick Sakdapolrak 2014. Deciphering migration in the age of climate change. Towards an understanding of translocal relations in social-ecological systems, in: Gesing, Friederike, Johannes Herbeck and Silja Klepp (eds.). *Denaturalizing Climate Change: Migration, Mobilities and Space.* Artec-paper Nr. 200. Bremen: Universität Bremen, 23-32.
- Haines, Philip 2014. Relocation only option for Solomon Islands Provincial Capital. *The Environment Practitioner.* September 2014.
- Haines, Philip, Kylie Rolley and Simon Albert no date (2014). *Empowering Solomon Island Communities to improve Reslience to Climate Change*. Buckle Vann Town Planning Consultants.
- Hartmann, Betsy 2010. Rethinking Climate Refugees and Climate Conflict: Rhetoric, Reality and the Politics of Policy Discourse. *Journal of International Development* 22, 233-246.
- Hau'ofa, Epeli 1994. Our Sea of Islands. The Contemporary Pacific, 6 (1), 147-161.
- Hofmann, Rebecca 2014. The cultural space of climate change, adaptation, and mobility in the Pacific Islands, in: Gesing, Friederike, Johannes Herbeck and Silja Klepp (eds.). *Denaturalizing Climate Change: Migration, Mobilities and Space.* Artec-paper Nr. 200. Bremen: Universität Bremen, 34-43.
- International Migration Institute 2013. *Global Migration Futures. Pacific Region: Processes and Future Scenarios of Migration.* Project Report. Oxford: University of Oxford.
- Jakobeit, Cord and Chris Methmann 2007. Klimafluechtlinge. Die verleugnete Katastrophe. Hamburg: Greenpeace.
- Jakobeit, Cord and Chris Methmann 2012. "Climate Refugees" as Dawning Catastrophe? A Critique of the Dominant Quest for Numbers, in: Scheffran, Jürgen et. al. (eds.): *Climate Change, Human Security and Violent Conflict.* Hexagon Series on Human and Environmental Security and Peace 8. Berlin Heidelberg: Springer, 301-313.
- Lange, Kirstin 2009. Bougainville Atolls Resettlement. An Exploration of Key Social and *Cultural Impacts*.Buka: Bougainville Administration Division of Community Development.
- Locke, Justin T. 2009. Climate change-induced migration in the Pacific Region: sudden crisis and long-term developments, in: The Geographic Journal, Vol. 175, No 3, pp. 171-180.
- MacDermott, Therese and Brian Opeskin 2010. Regulating Pacific Seasonal Labour in Australia, *Pacific Affairs* 83 (2), 283-305.
- MacLellan, Nic 2012. Losing Paradise, in: Leckie, Scott, Ezekiel Simperingham and Jordan Bakker (eds.): *Climate Change and Displacement Reader*. Milton Park, Abingdeon: Earthscan, 125-131.
- McAdam, Jane 2012. *Climate Change, Forced Migration, and International Law.* Oxford: Oxford University Press.
- McAdam, Jane 2014. Creating New Norms on Climate Change, Natural Disasters and Displacement: International Developments 2010-2013. *Refuge* 29 (2), 11-26.

- Nansen Initiative 2013a. Background Paper: "Human Mobility, Natural Disasters and Climate Change in the Pacific". Rarotonga, Cook Islands 21-24 May 2013. The Nansen Initiative.
- Nansen Initiative 2013b. Human Mobility, Natural Disasters and Climate Change in the Pacific. Outcome Report. Report from the Nansen Initiative Pacific Regional Consultation 21-24 May 2013 Rarotonga, Cook Islands. The Nansen Initiative.
- Nishimura, Lauren 2015. 'Climate Change Migrants': Impediments to a Protection Framework and the Need to Incorporate Migration into Climate Change Adaptation Strategies. *International Journal of Refugee Law* 27 (1), 107-134.
- Nurse, L. A. et al. IPCC 2014. *Climate change 2014. Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects.* Working Group II Contribution to the Fifth Asessement Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press, chapter 29 Small Islands, 1613-1654.
- Ober, Kayly 2015. *Migration as Adaptation. Exploring mobility as a coping strategy for climate change.* Oxford: UK Climate Change and Migration Coalition.
- Oxfam 2009. The future is here: climate change in the Pacific. Oxfam Briefing Paper 2009. Carlton, Vic: Oxfam.
- Pacific Institute of Public Policy 2009. *Climate Countdown: time to address the Pacific's development challenges.* Port Vila: Pacific Institute of Public Policy (Briefing 12).
- Park, Susin 2011. Climate Change and the Risk of Statelessness: The Situation of Low-Lying Island States. Legal and Protection Policy Research Series. Geneva: UNHCR.
- Petzold, Jan and Beate M.W. Ratter 2015. Climate change adaptation under a social capital approach An analytical framework for small islands. *Ocean & Coastal Management*, 112, 36-43.
- Rakova, Ursula 2009. *How-to guide for environmental refugees.* http://ourworld.unu.edu/en/how-to-guide-for-environmental-refugess/ (accessed 12 October 2010).
- Representative of the Secretary-General on the Human Rights of Internally Displaced Persons 2008. *Displacement Caused by the Effects of Climate Change: Who will be affected and what are the gaps in the normative frameworks for their protection?* Background paper.
- Rayfuse, Rosemary 2009. *W(h)ither Tuvalu? International Law and Disappearing States.* University of New South Wales Faculty of Law Research Series Paper No. 9. Sydney: UNSW.
- Renaud, F 2007. Control, Adapt or Flee: How to Face Environmental Migration? Bonn: UNU-EHS.
- Regan, Anthony J. 2010. *Light Intervention. Lessons from Bougainville.* Washington DC: Unites States Institute of Peace.
- Regan, Anthony J. and Helga M. Griffin (eds.) 2005: *Bougainville before the conflict.* Canberra: Pandanus Books.

- Reuveny, Rafael 2008. Ecomigration and Violent Conflict: Case Studies and Public Policy Implications. *Human Ecology* 36, 1-13.
- Reuveny, Rafael 2007. Climate change induced migration and violent conflict. *Political Geography*, 26, 656-673.
- Rüttinger, Lukas et al. 2015. A New Climate for Peace. Taking Action on Climate and Fragility Risks. Executive Summary. An independent report commissioned by the G7 members. Berlin et al.: Adelphi et al.
- Scheffran, Jürgen, P. Michael Link and Janpeter Schilling 2012. Theories and Models of Climate-Security Interaction: Framework and Application to a Climate Hot Spot in North Africa, in: Scheffran, Jürgen et. al. (eds.): *Climate Change, Human Security and Violent Conflict.* Hexagon Series on Human and Environmental Security and Peace 8. Berlin – Heidelberg: Springer, 91-131.
- Scheffran, Jürgen et al. 2012. Disentangling the Climate-conflict Nexus: Empirical and Theoretical Assessment of Vulnerabilities and Pathways. *Review of European Studies* 4 (5), 1-13.
- Scheffran, Jürgen, Elina Marmer and Papa Sow 2012. Migration as a contribution to resilience and innovation in climate adaptation: Social networks and co-development in Northwest Africa. *Applied Geography* 33 (2012), 119-127.
- Smith, Dan and Janani Vivekananda 2007. A climate of conflict. The links between climate change, peace and war. London: International Alert.
- Thelen, Tatjana, Larissa Vetters and Keebet von Benda-Beckmann 2014. Introduction to Stategraphy. Toward a Relational Anthropology of the State. *Social Analysis*, 58 (3), 1-19.
- Tulele Peisa Inc, no date. *Carterets Integrated Relocation Program.* Bougainville, Papua New Guinea. Project Proposal. Buka: Tulele Peisa.
- UNEP 2014. GEO Small Island Developing States Outlook. Nairobi: UNEP.
- Warner, Koko et al. 2009. In Search of Shelter. Mapping the Effects of Climate Change on Human Migration and Displacement. UNHCR et al.
- Warner, Koko et al. 2013. Changing Climates, moving people: Framing migration, displacement and planned relocation. Bonn: UNU.
- WBGU 2007. *World in Transition. Climate Change as a Security Risk.* Summary for PolicyMakers. Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveraenderungen. Berlin: WBGU.
- Yamamoto, Lilian and Miguel Esteban 2010. Vanishing Island States and sovereignty. Ocean & Coastal Management 53 (2010), 1-9.

CLISEC Working Papers

Scheffran, J. (2009): *Climate change, Human Security and Societal Instability: Conflict or Cooperation?*, Paper presented at the Synthesis Conference of the Global Environmental Change and Security program, Oslo, Norway, 22-24 June, 2009. Working paper **CLISEC-1**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. (2009): Analysing the path of "using cyclical patterns for interpreting the situation" – a different approach using path dependency theory, submitted. Working paper **CLISEC-2**, Research Group Climate Change and Security, University of Hamburg.

Scheffran, J., Link, P.M. & Schilling, J. (2009): *Theories and Models of the Climate Security Link,* Paper presented at the Conference "Climate Change, Social Stress and Violent Conflict", Hamburg, Germany, 19-20 November, 2009. Working paper **CLISEC-3**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. (2009): *Each institutionalization elementary is a self-reinforcing process increasing path dependency,* submitted. Working paper **CLISEC-4**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. (2009): A new action model – deducing an 'ideal type path dependent' for scenario simulation, submitted. Working paper **CLISEC-5**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M., Piontek, F., Scheffran, J. & Schilling, J. (2010): *Integrated Assessment of Climate Security Hot Spots in the Mediterranean Region: Potential Water Conflicts in the Nile River Basin,* Paper presented at the Conference "Climate Change and Security", Trondheim, Norway, 21-24 June, 2010. Working paper **CLISEC-6**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. (2010): Global climate policy reinforces local social path dependent structures: More conflict in the world?, in: Scheffran, J., Brzoska, M., Brauch, H.G., Link, P.M. & Schilling, J., *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability*, Berlin, Springer Verlag, Hexagon Series Vol. 8, pp. 133-147. Working paper **CLISEC-7**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. (2013): *The pursuit of rational action leads to herding behavior,* submitted. Working paper **CLISEC-8**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M., Piontek, F., Scheffran, J. & Schilling, J. (2010): *Impact of climate change on water conflict and cooperation in the Nile River Basin*. Working paper **CLISEC-9**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M. & Schleupner, C. (2010): How do tourists perceive and accept changes in landscape characteristics on the Eiderstedt peninsula?, *Coastline Reports*, **17**, pp. 133-146. Working paper **CLISEC-10**, Research Group Climate Change and Security, University of Hamburg.

Alwardt, C. (2011): *Wasser als globale Herausforderung: Die Ressource Wasser*. Working paper **CLISEC-11**, Research Group Climate Change and Security, University of Hamburg.

Kominek, J. & Scheffran, J. (2011): Cascading Processes and Path Dependency in Social Networks, in: Soeffner, H.-G. (ed.), *Transnationale Vergesellschaftungen*, Wiesbaden, VS Verlag für Sozialwissenschaften. Working paper **CLISEC-12**, Research Group Climate Change and Security, University of Hamburg.

Schilling, J., Freier, K., Hertig, E. & Scheffran, J. (2011): Climate change, vulnerability and adaptation in North Africa with focus on Morocco, *Agriculture, Ecosystems and Environment*, **156**, pp. 12-26. Working paper **CLISEC-13**, Research Group Climate Change and Security, University of Hamburg.

Schilling, J. & Remling, E. (2011): Local Adaptation and National Climate Change Policy in Kenya: *Discrepancies, Options, and the Way Forward,* submitted. Working paper **CLISEC-14**, Research Group Climate Change and Security, University of Hamburg.

Schilling, J., Akuno, M., Scheffran, J. & Weinzierl, T. (2011): *On arms and adaptation: Climate change and pastoral conflict in Northern Kenya*, submitted. Working paper **CLISEC-15**, Research Group Climate Change and Security, University of Hamburg.

Scheffran, J., Marmer, E. & Sow, P. (2011): Migration as a contribution for resilience and innovation in climate adaptation: Social networks and co-development in Northwest Africa, *Applied Geography*, **33**, pp. 119-127. Working paper **CLISEC-16**, Research Group Climate Change and Security, University of Hamburg.

Marmer, E., Scheffran, J. & Sow, P. (2011): *From security threat to conflict prevention: Integrating migration into climate adaptation policy frameworks in Africa*, submitted. Working paper **CLISEC-17**, Research Group Climate Change and Security, University of Hamburg.

Scheffran, J., Brzoska, M., Kominek, J., Link, P.M. & Schilling, J. (2012): Past and future research on climate change and violent conflict, *Review of European Studies*, **4** (5), pp. 1-13. Working paper **CLISEC-18**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M., Piontek, F., Scheffran, J. & Schilling, J. (2012): *On foes and flows: Vulnerabilities, adaptive capacities and transboundary relations in the Nile River Basin in times of climate change, L'Europe en formation,* **365**, pp. 99-138. Working paper **CLISEC-19**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M., Brzoska, M., Maas, A., Neuneck, G. & Scheffran, J. (2012): *Report on the conference "Geoengineering the Climate: An Issue for Peace and Security Studies?"*. Working paper **CLISEC-20**, Research Group Climate Change and Security, University of Hamburg.

Yang, L., Zhang, C. & Ngaruiya, G.W. (2012): Water Risks and Urban Responses under a Changing Climate: A Case Study of Hong Kong, *Pacific Geographies*, **39**, pp. 9-15. Working paper **CLISEC-21**, Research Group Climate Change and Security, University of Hamburg.

Link, J.S.A. & Link, P.M. (2012): *Modeling the linkage between climate change and violent conflict*, submitted. Working paper **CLISEC-22**, Research Group Climate Change and Security, University of Hamburg.

Ngaruiya, G. & Scheffran, J. (2012): Reducing climate adaptation deficits using revolving fund network schemes in rural areas of Kenya: Case study of Loitoktok district (revised version), *African Journal of Economic & Sustainable Development*, **2** (4), pp. 347-362. Working paper **CLISEC-23**, Research Group Climate Change and Security, University of Hamburg.

Gioli, G. (2012): *Field Trip Report: Gender and Environmental Migration in the Karakoram Region.* Working paper **CLISEC-24**, Research Group Climate Change and Security, University of Hamburg.

Link, P.M., Kominek, J. & Scheffran, J. (2012): Impacts of sea level rise on the coastal zones of Egypt, *Mainzer Geographische Studien*, **55**, pp. 79-94. Working paper **CLISEC-25**, Research Group Climate Change and Security, University of Hamburg.

Ide, T. & Scheffran, J. (2013): *Climate Change: Source of Conflict or Promoter of Cooperation?*, submitted. Working paper **CLISEC-26**, Research Group Climate Change and Security, University of Hamburg.

Yang, L., Scheffran, J., Qin, H. & You, Q. (2014): Climate-related Flood Risks and Urban Responses in the Pearl River Delta, China, *Regional Environmental Change*, **15** (2), pp. 379-391. Working paper **CLISEC-27**, Research Group Climate Change and Security, University of Hamburg. Ide, T., Schilling, J., Link, J.S.A., Scheffran, J., Ngaruiya, G. & Weinzierl, T. (2014): *On Exposure, Vulnerability and Violence: Spatial Distribution of Risk Factors for Climate Change and Violent Conflict Across Kenya and Uganda,* submitted. Working paper **CLISEC-28**, Research Group Climate Change and Security, University of Hamburg.

Boege, V. (2015): *Climate change, migration (governance) and conflict in the South Pacific,* submitted. Working paper **CLISEC-29**, Research Group Climate Change and Security, University of Hamburg.