

Climate Change and Conflict in Oceania

Challenges, Responses, and Suggestions for a Policy-Relevant Research Agenda

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Summary

The interrelationships between climate change, conflict, security and peace are gaining increased attention both in academia and politics. This field of research and political practice is of particular importance for the people and societies in Oceania, with the region being a climate change hotspot. So far, however, issues of climate change – induced conflict and conflict-sensitive climate change policies in Oceania have not received the attention they deserve. A new program of the Toda Peace Institute wants to change this. With a regional focus on Oceania, it will make a specific contribution to both the scholarly debate and the elaboration of policies in this emerging field of research and practice. This Policy Brief is the first in a series which will address the climate change – conflict nexus in the regional context of Oceania. It provides some basic contextual information, gives a brief overview over the state of relevant research, and suggests an agenda for further policy-relevant research, with emphasis on a relational approach and the need to include indigenous Oceania-specific knowledge and concepts.

Introduction

It is generally acknowledged that islands and coastal regions will be particularly severely impacted by climate change. This holds true first and foremost for the Pacific Island Countries (PIC). Many PIC are particularly vulnerable due to their extreme exposure and their rather constrained options for adaptation. Sea level rise, the increased frequency and severity of extreme weather events such as tropical cyclones and storm surges, floods and droughts, coastal erosion, salt water intrusion and salinization and other natural hazards challenge island economies and habitats as well as the livelihoods of people in the region. Food, land and water security everywhere are under pressure, and a broad spectrum of newly arising economic, social and cultural problems can be attributed to the effects of climate change.

The economic, social, cultural and other effects of climate change generate ripe conditions for conflict. Conflicts over land and scarce natural resources, conflicts due to climate change – induced migration, or conflicts arising from poor environmental governance or poorly designed and implemented climate change adaptation and mitigation responses are cases in point. These hold true for Oceania as well as other parts of the world. However, while there is already quite comprehensive research on climate change and conflict, and climate change and security, at a global level and with specific regional foci on Sub-Saharan Africa, the Sahel Zone and the Middle East, Oceania so far has attracted far less attention (Adams et al. 2018). This is somewhat surprising, given the specific vulnerability of the region to the conflict-prone effects of climate change.

Practitioners and policymakers need more input from the academic realm so that they can develop well-informed policies, strategies, governance and adaptation measures. The new Toda program is geared towards providing such input, taking on “the urgent challenge to move from analysis to action on addressing climate-fragility risks” (Vivekananda 2017, 2). It will contribute to the development of policies and strategies for grappling with the negative impacts of climate change, based on the conviction that climate change related policy and practice has to be conflict-sensitive, that it has to encompass conflict prevention and resolution and, if possible, has to foster peacebuilding and sustainable peace.

This policy orientation necessitates specific research approaches. In order to grasp the connections between climate change, its social effects, governance, and conflict, for example, it is vital to address local environmental, social, political and cultural contexts. Fine-grained ethnographic research which pays attention to the complexity of local contexts can fill current gaps in knowledge and provide locally specific recommendations for policy and practice. Such research not only has to address the conflict-prone effects of climate change, but also the conflict potential of climate change adaptation and mitigation policies and technologies. Furthermore, research will also have to include dimensions of the climate change-conflict nexus which so far have been widely ignored or underestimated, such as cultural and spiritual aspects, indigenous knowledge and indigenous ways of adapting to climate change. In this context, non-Western, non-anthropocentric, relational concepts warrant particular attention. So far, however, non-Western cosmologies, ontologies and epistemologies have been widely ignored in the international discourse on climate change and its effects. Pacific perspectives can change this. They may even provide avenues for the development and implementation of climate change programs that can support peacebuilding in innovative ways.

This Policy Brief is the first in a series which will address the climate change – conflict nexus in the regional context of Oceania. It provides some basic contextual information, gives a brief overview over the state of relevant research, and suggests an agenda for further policy-relevant research: research that can support policymakers and practitioners in the region - civil society/NGOs, states/governments and international/regional organisations - in their climate change mitigation and adaptation efforts in conflict-sensitive and conflict-relevant ways.

The Policy Brief is structured as follows. First, the environmental and social effects of climate change on Pacific Island Countries are sketched very briefly. Secondly, the climate change – conflict nexus will be discussed. Thirdly, governance and intervention policies aimed at preventing climate change-induced conflict will be explored. It is argued that governance is the decisive link in the climate change - conflict nexus. Flowing from that, some thoughts on a policy-relevant research agenda will be presented which can contribute to conflict-sensitive approaches to the challenges of climate change policies in Oceania, with an emphasis on the need to include indigenous Oceania-specific knowledge and concepts. A case will be built for relationality, both with regard to research on the

climate-conflict nexus and to policy and practice; and it will be argued that non-Western concepts can be of major policy relevance for addressing the climate change-conflict field.

The environmental and social effects of climate change in Oceania

If the small islands states of the Pacific are on the radar of politics and the wider public outside of the region, then it is first and foremost in the context of climate change. The sinking islands of Oceania have become a symbol for the severe and unprecedented consequences of man-made global warming, foreshadowing climate change-related environmental and social developments that will affect other parts of the world sooner rather than later.

Oceania is extremely diverse in many respects – geographically, economically, socially, politically, linguistically and culturally. 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. The 22 countries and self-governing territories altogether have a population of approximately 10 million people who inhabit 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 land mass which makes up the remaining two per cent, Papua New Guinea (PNG) alone comprises about 95 per cent. With its approximately seven million inhabitants PNG has by far the biggest population. None of the other PICs has a population of over one million. Oceania 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, as is New Caledonia/Kanaky, albeit with a special political status and the option for a referendum on independence (due in November 2018). 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

All the islands in Oceania are subject to the environmental effects of climate change, in particular sea level rise, 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).²

¹ Australia and New Zealand are not understood here as being PICs, although the islands of New Zealand are geographically Pacific islands, and Australia has a long Pacific coastline and some islands in the Pacific. Both, however, are industrialised countries of the 'first' or OECD world. 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 At the same time, the 22 PICs are extremely low emitters of CO₂, they only contribute a tiny 0.04 per cent of the total global greenhouse gas emissions, and ranked by tonnes of CO₂ emitted per person they also are among the lowest (Foreign Affairs Committee 2010, 100).

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 results in increased coral bleaching and reef degradation, leading to a reduction of fish stocks and as a consequence declining fish catch (ibid.). 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 islands in Oceania is due to their extreme exposure and their rather constrained options for adaptation. This holds particularly true for atoll islands which are of extremely low elevation and often also of rather limited area. The highest point of the Pacific island country of Tuvalu is 1.50 metres above sea level, for Kiribati it is three metres, and the average island width of Kiribati islands is less than 1000 metres. 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, particularly along their coastlines.

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 include water security and food security, as well as health. Land security is under threat 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.

Fertile soils are scarce on many islands, and sea water intrusion causes soil salinization and contamination of freshwater lenses which provide people with water for drinking and agriculture. Most people depend on traditional subsistence agriculture, supplemented by some cash cropping. This is the basis of their way of living. It is under growing pressure as yields from gardens and freshwater supplies decline. As a consequence, increasing numbers of people become more and more dependent on aid from outside.

Of course people try to adapt to the impacts of climate change. But given the geographical conditions, options for *in situ* technical adaptation⁴ - such as planting mangroves in order to reduce coastal erosion, building seawalls in order to contain storm surges and king tides, setting up rainwater tanks to improve fresh water supply - are limited. In many cases they are technically not feasible or too costly, and sometimes they only work as interim measures. Consequently, migration or resettlement to locations that are less exposed might be the better – or even the only – option of long-term sustainable adaptation in certain cases.

³ Vulnerability is understood as the propensity or predisposition to be adversely affected, a system’s sensitivity or susceptibility to harm and its lack of capacity to cope with the undesirable impacts of change (World Bank 2018, x).

⁴ Adaptation is the “process of adjustment to actual or expected climate change and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities” (World Bank 2018, vii). Adaptation and adaptive capacity is not only a technical issue, but has also political and social dimensions (Petzold and Ratter 2015, 36). This is an important point which will be elaborated on later in this brief.

Migration can be seen as an alternative to *in situ* adaptation or as another adaptation strategy. Views vary on whether it is an adaptation measure among others (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 fact, relocation in “some extreme circumstances (...) 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).

Some communities actually have been forced to relocate already, and climate change-induced migration (climate migration)⁵ will become a growing concern, given that many islands and even entire small island states are under threat of becoming uninhabitable or even submerged by rising seas.⁶

Climate change-induced (violent) conflict

Over the last decade, research into the climate change – conflict nexus has gained considerable attention in peace and conflict studies (as well as in security studies).⁷ 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).⁸ Research points to the environmental effects of climate change (e.g. sea level rise), which in turn have economic and social effects (e.g. economic decline, loss of livelihood or forced migration), and these effects can lead to violence and violent conflict if certain political and societal conditions prevail, such as fragile statehood, poor governance or deep horizontal or vertical social fragmentation.⁹

Taking migration as an example for a crucial link in the climate – conflict chain, 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 such violent conflict leads to migration (the climate change – conflict – migration chain) (Reuveny 2007, 660).

In fact, migration is seen as “one of the most plausible links from climate change to conflict” as Nils Petter Gleditsch and colleagues found more than a decade ago (Gleditsch, Nordas and Salehyan 2007, 4). And Dan Smith and Jani Vivekananda, also in 2007, identified migration as a key conflict-relevant risk of climate change (Smith and Vivekananda 2007, 21-22). More recent takes on this topic are 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), or a USAID Discussion Paper from November 2016, which addresses

⁵ In the following, the shorthand ‘climate migration’ will be used for climate change-induced migration, which is “migration that can be attributed largely to the slow-onset impacts of climate change on livelihoods owing to shifts in water availability and crop productivity, or to factors such as sea level rise or storm surge” (World Bank 2018, vii).

⁶ For more recent stories of climate migrants see Caritas Oceania 2017.

⁷ The debate on climate change and security and the securitization of climate change policies cannot be addressed here. It will be the topic of another Toda Policy Brief.

⁸ As elaborated examples of such endeavours of disentangling these causal chains see Buhaug, Gleditsch and Theisen 2010; Scheffran, Link and Schilling 2012; Theisen, Gleditsch and Buhaug 2013;

⁹ See e.g. Theisen, Gleditsch and Buhaug 2013, 615.

“climate, migration, and conflict”, presenting an in-depth analysis of the high-profile cases of Darfur and Syria (Null, Schulyer and Risi 2016).¹⁰

Other “causal chains” in the climate change – conflict nexus mention soil degradation and desertification, caused by climate change, leading to food insecurity and conflicts over water, pasture and arable land, or degradation of freshwater resources, caused by climate change, leading to conflicts over water.¹¹ One has to be careful, however, not to oversimplify such causal chains and fall into the trap of naive determinism.

Researchers are in agreement today that there is no direct causal link between climate change and violent conflict, hence talk about ‘climate wars’ should be avoided. Rather, the term ‘climate change-induced violent conflict’ seems more appropriate. This term both stresses the significance of climate change for certain conflicts and puts climate change into perspective as one among other causal factors. In other words: Climate change and its environmental, social and other effects can be factors in a complex conflict-prone societal constellation and a multi-staged process which can lead to the violent conduct of conflict, or even war. To approach such conflicts from the ‘climate change’ angle and through the lens of ‘climate change and conflict’ is valid if it can be hypothesized that climate change and its effects play a dominant role in the conflict constellation and the escalation of conflict; whether this is actually the case can only be explored by thorough case study research. Hence one has to avoid reductionist and deterministic narratives (such as: climate change leads to resource scarcity leads to violent conflict) and instead pay due attention to the entirety of factors which constitute conflict-prone constellations and pathways. In particular, one has to take note of “the importance of institutions and quality of governance” (Buhaug 2015, 271). I’ll come back to that in the next section.

The most recent risk assessment comes to the conclusion “that climate fragility risks persist and are worsening” (Vivekananda 2017, 41). And the greatest 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 and even violent conflict” (Ruettinger et al. 2015, 1).

For Oceania, however, the climate change – conflict nexus has not yet been explored explicitly. Violent conflict in Oceania 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 global power centres. For the people in the region, however, the violence they have to face is of major concern.

In Oceania today violent conflict is mostly inter-group in the local context, usually at a relatively low level of intensity, or it is everyday dispersed violence, such as domestic violence against women and children. This everyday violence and these local low-intensity violent conflicts can often be linked to the social effects of climate change, in particular to climate migration.

There are alarming reports, for example, of increasing domestic violence in the overcrowded squatter settlements of the few urban centres in PIC. These settlements are also often the sites of violent, sometimes deadly, conflicts between communities from different islands – communities many of whose members have left their home islands because of the effects of climate change.

¹⁰ The latter publication also reminds us, on the other hand, that “migration can be a successful and peaceful means of climate adaptation if enabled by smart policy” (Null, Schulyer and Risi 2016, 5).

¹¹ Another type of causal chain which cannot be addressed here leads from climate change adaptation and mitigation to violent conflict. On the issue of the conflict potential of climate change mitigation and adaptation see Dabelko et al. 2013.

Localised violent conflicts occur not only in the urban settlements of migrants from climate change affected islands, but also on the islands themselves. Here conflicts over the scarce natural resource - land - emerge between people moving from the coast to higher ground and the people already living there. In Kiribati water scarcity has led to conflicts over water between neighbouring communities forced to encroach on each other's land (Foreign Affairs Committee, 2010, 102).

Of particular concern is the situation in the Solomon Islands and the Autonomous Region of Bougainville in Papua New Guinea which both experienced large-scale internal violent conflicts not long ago and which still are in post-conflict peacebuilding situations.

In Solomon Islands, the island and province of Malaita was a conflict hotspot during the civil war of the early 2000s. Currently some outer islands of Malaita province are becoming uninhabitable due to sea-level rise and its effects, and people have started to relocate to mainland Malaita. On occasions, there have been outbursts of sporadic violence. Malaita is the most densely populated island in 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 Solomon Islands, mainly to the capital city Honiara on the island of Guadalcanal, and conflicts between Malaitan settlers and the local population on Guadalcanal was a major factor in the large-scale violent conflict of the early 2000s.

In the case of Bougainville, planned relocation from the islands of the Carterets atoll to mainland Bougainville has been going on for a couple of years now. Although this in the main is a relatively successful exercise, there have been disputes over land which led to the re-relocation of Carterets islanders back to their islands from the resettlement site in Tinputz on mainland Bougainville. And people from another Carterets relocation site on Buka island (a major island adjacent to Bougainville 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. Migrants were the target of hostilities from their neighbours who destroyed their houses and food gardens or their produce when they took it to the market or attacked their young people or raped the women (Lange 2009, 104). As a consequence, "many families returned to the Carteret Islands due to difficulties integrating with the host community" (ibid.).

These examples demonstrate that even planned relocation can lead to local conflicts between settlers and recipient communities. And they demonstrate that one has to look beyond state-based violent conflict (interstate or intra-state wars) and to also take into account inter- and intra-group violence in local and everyday contexts. This kind of "intergroup violence below the state level", however, usually remains under the radar of research into the climate change - conflict nexus (and it slips through the grids of large-N studies).¹²

Violent conflict escalation is particularly probable in fragile post-conflict environments such as in Bougainville or Solomon Islands, or in other conflict-prone situations. Here climate change is a 'threat multiplier', and climate migration, as well as other effects of climate change, 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 between different groups of newcomers, particularly under conditions of scarcity and (perceptions of) inequality.

¹² Gleditsch posits that "while so far there is not much evidence that robustly links climate change to major armed conflict (...), there is a more plausible argument that it may influence intergroup violence below the state level" (Gleditsch 2012, 5; see also Theisen, Gleditsch and Buhaug 2013, 622; Brzoska and Froehlich 2015).

Whether such conflicts will actually escalate violently or not, however, is dependent on a host of additional elements and their relations and interactions, on the actions and reactions of affected communities, including the history of relations between them, the (dis)functionality of customary, state and civil society dispute resolution mechanisms, the adaptive capacity of affected communities (including options for long-distance migration or planned relocation), the capabilities and preparedness to use physical force in conflict situations, and not least the stability or fragility of the overall societal and political environment.

Flowing from these preliminary observations in the context of Oceania, we can hypothesise that the potential of climate change-induced conflicts to become violent depends primarily on the four following variables:

1. The gravity and urgency of the climate change-induced environmental degradation;
2. The vulnerability and adaptive capacity of affected communities (what are the options to adapt, to change lifestyles or to relocate?);
3. The capacity and willingness to use violence as a means to conduct conflict and to 'solve' problems;¹³
4. The fragility or stability of the societal and political context.¹⁴

Whereas the first point lies beyond the reach of political intervention (at least in the local context), the other points can be addressed by conflict-preventive and conflict-sensitive politics. In other words: Whether there will be a violent escalation of climate change-induced conflicts or not, in the first place depends on governance. Governance is a crucial node in the complex network of elements and relations which constitute emergent conflict constellations. Talking about governance has to include, but at the same time 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. This is what I'm going to turn to in the next section.

Climate change related governance and peacebuilding

The starting point for engaging with the centrality of climate change governance in relation to the climate change – conflict nexus is the insight that “(p)olitical, economic, and social contexts are as important to understanding vulnerability as exposure to the physical effects of climate change itself” (Null, Schuyler and Risi 2016, 5).

In a fragile post-conflict environment (such as in Bougainville or Solomon Islands), or under conditions of state fragility more generally, climate change governance poses particular challenges. PICs with their limited institutional capacities have much more difficulty in dealing with the effects of climate change than stable states (the 'climate-fragility risk' (Rüttinger et al. 2015)). Lack of capacities and the ensuing lack of effectiveness diminishes the legitimacy and trustworthiness of state institutions in the eyes of the people on the ground, and this lack of legitimacy makes it more difficult for state institutions to effectively implement adaptive measures, for example planned relocation.

In such fragile situations non-state actors can and do play important roles. This not only includes civil society organisations in the Western understanding of the term, but also traditional authorities

¹³ Small indigenous minorities or absolutely poor slum dwellers in general have less options to resort to large-scale violence than bigger homogenous ethnic groupings under an effective leadership and with access to weapons.

¹⁴ In fragile situations in which state institutions are weak and lack capacity, effectiveness and legitimacy and in which other – non-state customary and/or civil society – avenues for addressing the effects of climate change and for the non-violent conduct of conflict are also absent or insufficient, violent conflict escalation is most probable.

and institutions from the local customary sphere of societal life. In Oceania the resilience of communities and their adaptive capacity very much rests with densely knit customary societal networks of support and reciprocity, with customary authorities and institutions as effective and legitimate governance actors and mechanisms. Hence climate change and its effects are not issues that can be dealt with in the framework of the state and its institutions only, but local customary non-state, as well as civil society, institutions have to be included.

Traditional authorities – chiefs and elders, tribal leaders, religious authorities, healers, big men and wise women – are of major importance for the organisation of everyday life in the weak states – or better: hybrid political orders - of Oceania.¹⁵ They are in charge of the governance of communities, natural resources and the environment, they regulate resource use and solve disputes (not least disputes over land and other natural resources) according to local custom. They are of major significance for a holistic approach to the ‘land’ issue with all its aspects, including the ‘soft’ – cultural, psychological, spiritual – dimensions.¹⁶ Hence communities’ adaptive capacity – seen not as a technical issue, but in its political, cultural and social dimensions – to a large extent rests with such customary actors and institutions.

This of course is not to say that governments and state institutions do not matter in climate change governance. They have the power to set framework conditions for climate mitigation and adaptation at the national level, and they provide the link between the 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 in the PIC increasingly comprises climate change – related programmes and projects.

Finally, the role of the churches as the most important civil society organisations in PIC cannot be overestimated. The vast majority of Pacific Islanders are devout Christians. State institutions in PIC might not reach far beyond the urban centres, but the churches are everywhere on the ground.

The churches, as well as other locally grounded networks and associations of civil society, can act as “bridging organisation(s)” (Petzold and Ratter 2015, 40), which connect local customary life-worlds and the ‘outside’ world of state and international climate change policies under conditions of hybrid political order.¹⁷

¹⁵ Political order and governance in PIC are often hybrid, combining state and non-state actors and institutions. 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. 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. 2008; 2009; 2010).

¹⁶ The latest IPCC assessment report in its chapter on Human Security stresses the importance of culture and cultural sensitivity, 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 small islands and coastal communities, has well documented negative cultural and well-being impacts” (Adger/IPCC 2014, 2).

¹⁷ 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.

What is needed is the collaborative effort of such bridging organisations, non-state customary as well as civil society institutions and state institutions in planning, decision-making and implementation of climate policies. Good climate change governance depends on such collaboration. International donors, international organisations and INGOs can come into this mix in order to give financial, technical and other support.

Integrated and holistic climate change governance which builds on the complementarity and collaboration of all actors is essential for the prevention of climate change-induced violent conflict and for culturally sensitive as well as conflict-sensitive adaptation.

Accordingly, external actors such as international donors, international organisations and INGOs which come in with good intentions, willing to provide financial and technical support, are well advised to overcome a narrow technical and economic approach in favour of an integrated and holistic approach which pays due attention to governance issues as well as to culture and spirituality. Only then can climate change policies and climate change adaptation and mitigation be carried out in a conflict-sensitive manner.

Conflict sensitivity has to be built into any planning for climate change adaptation. In societal contexts where peacebuilding (post-conflict or otherwise) is of relevance, what is critical is how conflict-sensitive adaptation contributes to peacebuilding. The aim is to overcome the vicious circle of climate change and conflict through processes of mutually supportive adaptation and peacebuilding.

“Adaptation measures therefore must take into account fragility and conflict risks, while peacebuilding and conflict prevention measures need to factor in climate risks” (Taenzler, Ruettinger and Scherer 2018, 4). In the best case the outcome will be peacebuilding that supports climate change adaptation and climate change adaptation that supports peacebuilding.¹⁸ To identify lessons learned from peaceful and peace-supporting adaptation to the impacts of climate change and from the non-violent conduct of associated conflicts is particularly important from a policy-making and practice perspective (Adams et al. 2018).

An agenda for policy-relevant research

While the importance of non-state customary actors and institutions and of indigenous non-Western approaches to conflict transformation and peacebuilding is increasingly acknowledged in the context of the recent ‘local’, ‘hybrid’ and relational turn’ in peace studies (Mac Ginty and Richmond 2013; Mac Ginty and Richmond 2015; Brigg 2016; Hunt 2017), this so far has not yet filtered through to the study of the climate change -conflict nexus.

In order to grasp the connections between climate change and its social effects, governance and conflict, research has to emphasise the local environmental, social, political and cultural contexts. This calls for a fine-grained ethnographic research approach which pays attention to the complexity and hybridity of local context which 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 a 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”

¹⁸ “Build pathways to peace: Identify and implement climate change programs that can support peacebuilding initiatives” (Dabelko et al. 2013, 4).

(*ibid.*); in particular there is a “need for more work on rural areas, outer islands, and secondary communities” (*ibid.*).

Furthermore, dimensions of the climate change-conflict nexus will have to be included into research which so far have been widely ignored or underestimated, such as cultural and spiritual aspects, indigenous knowledge and indigenous ways of climate change adaptation, of conflict transformation and of peacebuilding.

More than a decade ago, Dan Smith and Janani Vivekananda already pointed 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, they identified the 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). A decade later, researchers repeat the same plea: “Appreciating local agency and perspectives also allows for including indigenous and informal knowledge into the assessment of risks and the development of strategies to enhance resilience” (Schilling et al. 2017, 114).

The IPCC also 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). It holds that “mutual integration and co-production of local and traditional and scientific knowledge increase adaptive capacity and reduce vulnerability” (Adger/IPCC 2014, 10). Taking local knowledge seriously also means giving due consideration “to locally appropriate means for knowledge transmission” (McCarter et al. 2014, 8).

These insights and commitments have to be translated into concrete research agendas and into policies informed by applied research. This necessitates qualitative, in-depth case study research that delves into the local complexities 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). This not least means to engage with indigenous cosmologies, ontologies and epistemologies.

So far, however, different cosmologies, ontologies and epistemologies have not been given much attention in the international discourse on climate change and its effects, including conflict. Pacific perspectives can change this, especially in terms of the concept of Oceanian relationality. This concept embraces “both individuality and communality, unity and diversity, visibility and invisibility, male and female, top and bottom, secular and sacred, heaven and earth, God and the world, (...), tangible and intangible. Relationality is a both/and way of thinking” (Vaai and Nabobo-Baba 2017, 11). Being relational “is about wrestling to understand the ‘individual’ as part of the ‘community’ and the ‘community’ as imaged in the ‘individual’ (...) it is about being able to have a fluid and holistic grasp of both” (Vaai 2017, 26). Affects, emotions, feelings are integral to such a relational understanding of self, community and, consequently, peace.

Such a relational ontology gives priority to relations over entities.¹⁹ It takes human beings not as isolated ‘individuals’, but as members of communities, defined through their – not only rational, but also affective and spiritual - relationships with other human beings as well as with actors beyond the human sphere, in nature and the spirit world.²⁰ In Melanesia personhood is (understood as being) genuinely “relational and contextual” (Nabobo-Baba 2017, 163).²¹ And community is not understood in an anthropocentric way, but in a holistic cosmic way, including people, land, ocean, ancestors, spirits, trees, villages, animals, language, mountains, God – who all exist only relationally. Consequently, the ‘environment’ or the ‘climate’ cannot be understood in an anthropocentric, dualistic and substantialist manner (as separate from people, society and the sacred), but cosmologically. This has far-reaching consequences for (the study of) climate change adaptation and governance, conflict prevention and peacebuilding.

In order to fully explore these consequences, it is again of importance to bring in ‘bridging’ institutions and actors and to conduct research in close collaboration with local researchers and affected communities whose voices still are largely absent from the climate change and conflict discourse. They might introduce relational-affective non-anthropocentric perspectives that can provide fundamentally important insights and entry points for policy and practice which so far have been missed by the Western-dominated international discourse.

Such a research approach, informed by the local/hybrid/relational turns in peace and conflict studies, grounded in case-based ethnographic field research/action research, closely aligned with Pacific ways of knowing, can fill current gaps in knowledge and can provide locally specific recommendations for policy and practice. It definitely will provide an alternative (or complement) to the current dominant quantitative research approach in the study of the climate – conflict nexus.²²

Policy-relevant research along these lines will not only have to explore the conflict-prone effects of climate change in the interest of conflict prevention, but also the conflict potential of climate change adaptation and mitigation policies and technologies. And it can even go a step further by exploring the “climate-cooperation nexus” (Ide et al. 2016, 297), that is: exploring the potential of climate change policies for building and sustaining peace.

¹⁹ While relationalism gives ontological precedence to relations, interactions and flows, substantialism in contrast prioritises entities, units and structures that are bound and fixed (Brigg 2016, Hunt 2017, Hunt 2018).

²⁰ On relationality in a Melanesian context and the understanding of the Melanesian ‘va’ – ‘the space between’, that is: a relational space that separates and joins, not least connecting the spiritual and the secular – see the contributions in Vaai and Nabobo-Baba 2017.

²¹For this relational understanding of personhood in a Melanesian cultural context see also Nanau 2017.

²² “Quantitative large-N studies are currently the most widely accepted methodological approach in the research on climate change and violent conflict, although they face severe problems regarding the quality of their data sets and their ability to capture complex human-nature interactions” (Ide et al. 2016, 288).

References

Adams, Courtland et al. 2018. Sampling bias in climate-conflict research. *Nature Climate Change Letters*. <https://doi.org/10.1038/s41558-018-0062-2>

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 Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press, chapter 12 Human Security.

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.

Brigg, Morgan 2016. Relational Peacebuilding. Promise beyond crisis, in: Debiel, Tobias/Held, Thomas/Schneckener, Ulrich (eds): *Peacebuilding in Crisis. Rethinking paradigms and practices of transnational cooperation*, London and New York: Routledge, 56-69.

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

Buhaug, Halvard 2015. Climate – conflict research: some reflections on the way forward. *WIREs Climate Change*, 2015, 6: 269-275.

Buhaug, Halvard, Nils Petter Gleditsch, Ole Magnus Theisen 2010. Implications of climate change for armed conflict. In: Mearns R and A Norton (eds.): *Social dimensions of climate change: Equity and vulnerability. New frontiers of social policy*. Washington D.C.: World Bank, 75-101.

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.

Caritas Oceania 2017. *Turning the Tide. Caritas state of the environment for Oceania 2017 report*. Wellington: Caritas Aotearoa New Zealand.

Dabelko, Geoffrey D. et al. (eds.) 2013. *Backdraft: The Conflict Potential of Climate Change Adaptation and Mitigation*. Environmental Change and Security Program Report Vol. 14, Issue 2.

Foreign Affairs, Defence and Trade References Committee 2010. 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 2012. Whither the weather? Climate change and conflict. *Journal of Peace Research* 49 (1), 3-9.

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.

Hunt, Charles T 2018. Relational perspectives on peace formation: symbiosis and the provision of security and justice. In: Aning, Kwesi et al. (eds.). *Exploring Peace Formation. Security and Justice in Post-Colonial States*. London and New York: Routledge, 78-99.

Hunt, Charles T 2017. Beyond the binaries: towards a relational approach to peacebuilding. *Global Change, Peace & Security* 29 (3), 209-227.

Ide, Tobias et al. 2016. The Climate-Conflict Nexus: Pathways, Regional Links, and Case Studies. In: Brauch, H. G. et al. (eds): *Handbook on Sustainability, Transition and Sustainable Peace* Springer, 285-304.

McCarter, Joe et al. 2014. The challenges of maintaining indigenous ecological knowledge, *Ecology and Society* 19 (3): 39.

Mac Ginty, Roger and Oliver P. Richmond 2013. The Local Turn in Peace Building: a critical agenda for peace. *Third World Quarterly* 34 (5), 763-783.

Mac Ginty, Roger and Oliver P. Richmond 2015. The fallacy of constructing hybrid political orders: a reappraisal of the hybrid turn in peacebuilding. *International Peacekeeping* DOI: 10.1080/13533312.2015.1099440.

Nabobo-Baba, Unaisi 2017. In the Vanua. Personhood and Death within a Fijian Relational Ontology. In: Upolu Luma Vaai and Unaisi Nabobo-Baba (eds.) *The Relational Self. Decolonising Personhood in the Pacific*. Suva: University of the South Pacific Press, 163-175.

Nanau, Gordon Leua 2017. 'Na Vanuagu'. Epistemology and Personhood in Tathimboko, Guadalcanal. In: Upolu Luma Vaai and Unaisi Nabobo-Baba (eds.) *The Relational Self. Decolonising Personhood in the Pacific*. Suva: University of the South Pacific Press, 177-201.

Null, Schuyler and Lauren Herzer Risi 2016. Navigating Complexity: Climate, Migration, and Conflict in a Changing World. USAID Office of Conflict Management and Mitigation Discussion Paper November 2016.

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 Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press, chapter 29 Small Islands, 1613-1654.

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.

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.

Salehyan, Idean 2014. Climate change and conflict: Making sense of disparate findings. *Political Geography*, 43 (2014), 1-5.

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.

Schilling, Janpeter et al. 2017. Resilience and environmental security: towards joint application in peacebuilding. *Global Change, Peace & Security*, 29 (2), 107-127.

Smith, Dan and Janani Vivekananda 2007. *A climate of conflict. The links between climate change, peace and war*. London: International Alert.

Taenzler, Dennis, Lukas Ruettinger and Nikolas Scherer 2018. *Building Resilience by linking climate change adaptation, peacebuilding and conflict prevention*. Planetary Security Initiative Policy Brief. Berlin: adelphi.

Theisen, Ole Magnus, Nils Petter Gleditsch, Halvard Buhaug 2013. Is climate change a driver of armed conflict? *Climate Change* (2013) 117: 613-625.

Vaai, Upolu Luma 2017. Relational Hermeneutics. A Return to the Relationality of the Pacific Itulagi as a Lens for Understanding and Interpreting Life, in: Vaai and Casimira, Relational Hermeneutics, 17- 41.

Vaai, Upolu Luma and Unaisi Nabobo-Baba 2017. Introduction. In: Upolu Luma Vaai and Unaisi Nabobo-Baba (eds.) *The Relational Self. Decolonising Personhood in the Pacific* (Suva, University of the South Pacific Press, 2017), 1-21.

Vaai, Upolu Luma and Aisake Casimira 2017. Introduction: A Relational Renaissance. In: Upolu Luma Vaai and Aisake Casimira (eds.). *Relational Hermeneutics. Decolonising the Mindset and the Pacific Itulagi*, Suva: University of the South Pacific Press, 1- 15.

Vivekananda, Janani et al. 2017. *Action on Climate and Security Risks. Review of Progress 2017*. Den Haag: Clingendael.

World Bank 2018. *Groundswell. Preparing for internal climate migration*. Washington D.C.: The World Bank.

Yamamoto, Lilian and Miguel Esteban 2010. Vanishing Island States and sovereignty. *Ocean & Coastal Management* 53 (2010), 1- 9.

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