



Considering Climate Migration in Kiribati and Tuvalu Through a Victimological Lens

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Abstract

The Pacific Islands of Kiribati and Tuvalu face issues of migration due to the likelihood of their land becoming uninhabitable because of climate change. By adapting criminologists Cohen and Felson's routine activity theory (RAT) to the context of climate change impacts on the sustainability of Kiribati and Tuvalu, we provide insights on the interplay between Pacific Islanders, greenhouse gas (GHG) emitters and the regional governments and organizations supporting adaptation strategies. The multifaceted coexistence of these three groups accounts for the complexity to develop migration options with acceptable conditions for Pacific Islanders. Grounded primarily in secondary literature, this study provides conceptual insights into structural vulnerabilities and empowerment pathways in Pacific Islands. While recognizing data limitations, this article posits that considering the question of climate migration through a victimological lens enables us to disentangle and discuss some of the key dynamics within climate migration identifying the victimization and empowerment processes for Pacific Islanders.

Keywords: Climate migration; climate victimology; Pacific Islands; routine activity theory.

Introduction

Pacific Islands face key challenges in their pursuit of sustainable development, making them vulnerable to external stressors, particularly the impacts of climate change. Pacific Islands are characterized by their small size, remote locations, limited resources and dependence on traditional livelihoods, such as fisheries. Despite contributing less than 1% of global greenhouse gas (GHG) emissions, Pacific Islands are disproportionately affected by climate change impacts, including sea-level rise, ocean acidification and increasingly frequent and intense extreme weather events (IPCC, 2023). The stark disparity between their minimal contribution to climate change and the severe consequences they face, due to other nations' negative environmental impacts, underscores the urgent need to consider how to manage climate change impacts.

One of the most sizeable climate change impacts for Pacific Islands is sea-level rise, which not only degrades and floods the land, but also disrupts freshwater supplies, as salt infiltration compromises drinking water, affecting agriculture and fisheries and thus ongoing food security. These chronic negative impacts on livelihood sustainability will undoubtedly result in Pacific Islanders being forced to emigrate (Bronen, 2014; Campbell & Barnett, 2010; Warner & Afifi, 2014). Popovski and Mundy (2012) describe this process as a threat to "secure behavioral space" (p. 7).

Some areas in the Pacific have already become uninhabitable due to land and livelihood loss, as illustrated by the Carteret Islands in Papua New Guinea, the population of which was the first to be internationally recognized as going through climate change-induced migration (Nabi et al., 2024; Popovski & Mundy, 2012). Climate change-induced migration, referred to as climate migration in the rest of this article, is not a near-future risk, it has been a reality for decades in the South Pacific and



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other at-risk areas (Nabi et al., 2024; Tong, 2008), yet the international and regional communities are still exploring how to react appropriately (e.g. Kamara et al., 2024; Simpson et al., 2024). This article questions how victimology can help to decipher the complex dynamics faced by Pacific Islanders in the face of climate migration. To achieve this, two case studies are considered: Kiribati and Tuvalu. These two nations present similar vulnerabilities and resilience characteristics and have started to adapt to the situation in different ways. The article contributes an original conceptual framing by applying a traditional criminological framework, routine activity theory (RAT), and climate victimology perspectives to the context of climate migration in Kiribati and Tuvalu. Drawing from scholarship focused primarily on legal, political and vulnerability mapping perspectives, our approach seeks to better understand the complexity of the process and outcomes of climate migration in the Pacific as the product of interacting forces among migrants, prospective host countries and global climate actors, rather than a simple response to environmental threats or policy gaps. This article will start by delving in depth into the background of the case studies describing the foundations of the current question of climate migration in Kiribati and Tuvalu. Following a short presentation of our disciplinary and methodological approach, we then apply a victimological theoretical framework to explore the intersection of factors and vulnerabilities, followed by reflections on the victimization and empowerment processes in the face of the growing uninhabitability of Pacific Islands.

Background

Geography and Peoples

Oceania is a vast region in the Pacific Ocean, split into several areas: Micronesia (including Kiribati), Polynesia (including Tuvalu), Melanesia (including Fiji) and Australasia (including Australia and Aotearoa New Zealand). The geopolitical contexts of Kiribati and Tuvalu inherently foster a high likelihood of climate migration simply because of their location and topography. Both countries are scattered over vast maritime areas but with a modest amount of available land. Considered one of the smallest and most isolated Pacific Islands, Tuvalu has nine scattered islands over 26 km² and 11,000 inhabitants. Kiribati, composed of 33 atolls 3 metres above sea level on average and one raised island, extends over only 810 km² of land, but spreads over 3.5 million km² of ocean. Kiribati's population is approximately 120,000 (United Nations, 2024). These countries are limited in arable land, housing space and options for internal migration (Allgood & McNamara, 2017; Hermann & Kempf, 2019; Wyatt, 2014). Kiribati and Tuvalu's socio-political situation is marked by a focus on traditional culture while having limited domestic economic resources and reliance on international aid, which constrains the countries' ability to implement effective climate adaptation strategies. These countries record low per capita income and low life expectancy, and are among the 44 least-developed countries listed by the United Nations (Allgood & McNamara, 2017; United Nations, 2024; Wyatt, 2014).

Countries Marked by Centuries of Human Mobility

Human movement is an ancient and reasonable consequence of contextual changes preventing survival in their current environment, as affected people seek improved socio-economic conditions in another environment (McLeman & Hunter, 2010). The settlement of Melanesia, Polynesia and Micronesia communities evolved across many waves of vast human migrations across the South-East Asia Pacific area. Australoid people were the first to migrate to the region 50,000 years ago, followed by the Mongoloid people 3000 to 4000 years ago (Siméoni, 2012). The first Tuvaluan settlers arrived from Kiribati, Tonga and Samoa in the fourteenth century, followed by many migratory waves including the first Europeans two centuries later. For centuries, people migrated to other lands to find more resources and kinship, and to flee from violence and persecution. Some movements were forced, such as in the nineteenth century, when Tuvalu was marked by a substantial decrease of Islanders who were enslaved and sent to work in the surrounding British colonies (Islam et al., 2023). These regional human movements spread cultural values and livelihood techniques, resulting in the distinct cultures of the Pacific Islands that exist today.

Migration, whether temporary, permanent, domestic or international, remains a current practice among Pacific Islanders for socio-economic purposes (Allgood & McNamara, 2017; Farbotko & Lazrus, 2012). More recently, labor mobility has been a key incentive for Pacific Islanders to migrate – often (although not always) temporarily – to Australia and Aotearoa New Zealand for seasonal work. Kiribati and Tuvalu are subjects to special schemes – for instance, under the Aotearoa New Zealand Recognised Seasonal Employer Scheme, workers from Kiribati and Tuvalu can stay up to nine months, compared with seven months for those from other countries. A similar exception is granted under the Australian Seasonal Worker Programme. Aotearoa New Zealand also introduced the Pacific Access Category Resident Visa, which is a visa lottery for Kiribati, Tuvalu, Tonga and Fiji, drawn once a year. As part of Pacific history and culture, voluntary migration, where Pacific Islanders make the decision to relocate based on personal or economic opportunities, can be a positive and manageable process. It is when circumstances force individuals or communities to leave their homes without a clear strategy to prevent harm within the process that we talk about forced migration.

Climate Migration in the Pacific Islands

In 2010, climate change-induced human mobility was explicitly acknowledged for the first time as part of the Cancun Adaptation Framework (Warner, 2017). Climate migration refers to the movement of people driven by the impacts of climate change, including both sudden and gradual environmental changes (Huang, 2023). Sudden events such as floods, wildfires and hurricanes can lead to immediate but often temporary displacement, while slower processes such as sea-level rise, desertification and temperature increases gradually undermine livelihoods and living conditions, raising the question of permanent migration. This phenomenon is particularly pronounced for vulnerable people, who often bear the brunt of climate change impacts (Agnew, 2012). Climate change-induced human mobility is currently primarily internal displacement, with people moving within the borders of their own country and with the hope of eventually going back home. However, the Pacific Islands, being low-lying countries with small land areas, are forced to consider permanent external migration as climate adaptation.

The discrepancy between Pacific communities' vulnerability to climate change impacts and their contribution to global emissions prompts discussion around climate justice regarding migration. Part of this discussion evolves around the responsibility, with regard to the Pacific Islands, of those contributing the most to anthropogenic climate change – a discussion in which global consensus is yet to be reached (Murali et al., 2021; Popovski & Mundy, 2012). In the Pacific region, two countries are the main targets: Australia and Aotearoa New Zealand, which are respectively the first and fourth biggest GHG emitters per capita of all Organization for Economic Co-operation and Development (OECD) countries (Statista, n.d.). Internationally, however, responsibility for climate change contributions is not recognized as a crime that has legal consequences, and no legal framework currently exists to protect those affected.

While there is a lack of official recognition of climate migrant status or a legal framework to facilitate the settlement of migrants in new homes, forced migration due to climate change will be inevitable for many Pacific communities. This complex situation brings the need to proactively plan for migration as advised by former I-Kiribati president Tong: “the sooner we act, the less stressful and the less painful it would be for all concerned” (Tong, 2008, p. 3). Evacuation completed in urgency would indubitably involve more physical and psychological trauma, political and economic stress and consequent humanitarian costs compared with a well-planned migration plan (Wyett, 2014).

Climate Change Impacts in Kiribati and Tuvalu

Already situated in a high-risk area, known as the Ring of Fire and the Pacific Cyclone Belt, the Pacific Islands will face increased frequency and intensity of cyclones, storms, floods, drought, volcanic and seismic activities due to climate changes, threatening human safety and livelihoods (Islam et al., 2023). The warming and acidification of oceans further endanger coral reefs, which are essential to island stability, biodiversity and critical income from tourism. This threat is particularly great for Kiribati and Tuvalu, which are two of the few nations composed almost entirely of coral atolls.

Tuvalu has a long history of coping with extreme events, such as floods, cyclones or droughts, but these events are exacerbated by climate change (Islam et al., 2023). The country's topography means Tuvalu is highly vulnerable to sea-level rise, making its islands uninhabitable. Tuvaluan land is predicted to be underwater in the next 25 to 50 years. The Tuvaluan Government has undertaken several adaptation initiatives, such as the National Strategy for Sustainable Development 2016–2020 (Te Kakeega III), which focused on coastal protection and the establishment of sea defences, including securing maritime boundaries to preserve Tuvalu's economic zone.

Scientists have discussed that low-lying islands such as Kiribati and Tuvalu have been at risk of disappearing due to climate change since the 1980s (Farbotko, 2022). Climate change impacts and disasters are routine concerns for I-Kiribati, and come before concerns for unemployment, poverty, sanitation and other socio-economic issues (Allgood & McNamara, 2017).

Current Options and Strategies for Kiribati and Tuvalu

Both the Kiribati and Tuvalu Governments are looking into climate migration as a last resort; remaining as long as possible on their islands was found to be a priority for many Islanders (Allgood & McNamara, 2017; Hermann & Kempf, 2019; Roman, 2013). Significant domestic adaptation efforts are conducted in both nations, such as disaster resilient housing, new agriculture techniques or protective seawalls. These efforts, however, might not be sufficient in the face of current climate change (Adams et al., 2023). Facing the future inhabitability of the Pacific Islands, two different potential migration plans can be considered: “voluntary labor migration” and “relocation” (Hermann & Kempf, 2019, p. 294). Both plans are relevant for this article as the former is being actioned in Tuvalu and was considered by Kiribati, and the latter was contemplated in Kiribati. Although Kiribati and Tuvalu differ in migration policy approaches, this article does not conduct a comparative analysis. Kiribati and Tuvalu are discussed together to illustrate different dynamics within a common conceptual framework.

Tuvalu explored various strategies to address sea-level rise threats, including international advocacy and seeking assistance from neighbouring countries. While investing in adaptation efforts, Tuvalu's government also invested in proactive measures and leadership to provide options for its communities should the islands become uninhabitable. In 2023, Tuvalu and Australia signed the Falepili Union Treaty, in which a special visa was created for Tuvaluans to live, work and study in Australia (DFAT, 2023). While not officially creating a climate migration pathway, the Falepili Union treaty acknowledges the need for Australia to support Tuvalu in face of "current and emerging security challenges, such as climate change" (p. 1) and to commit to a "shared understanding and commitment to ensuring human mobility with dignity" (p. 2). Another key step in the migration process is a plan called Tuvalu 2.0, which explores digital governance solutions to safeguard culture and sovereignty despite losing the physical country under water.

The approach of the Kiribati Government is marked by two key relocation strategic milestones: former president Tong's Migration with Dignity (Kupferberg, 2021) and current president Maamau's Kiribati 20-year vision 2016–2036 (Kiribati Government Ministries and Agencies, 2023). Through Migration with Dignity, Tong emphasized the need to show necessary precautions towards the existential threat posed by climate change, although recognizing communities' desire to remain in Kiribati as long as possible. Migration with Dignity proposed a strategy for I-Kiribati, when forced to emigrate, to be best equipped to integrate in the host countries – particularly Australia and Aotearoa New Zealand – focusing on up-skilling, education and qualifications. Migration with Dignity directly aimed to develop migration options with acceptable conditions for islanders. This strategy fits with voluntary labour migration, where migrants have more choices and control about where they would go and what they would do when leaving their countries compared with during an emergency displacement. Simultaneously, a relocation strategy was integrated with the purchase of 5461 acres of land in the Fijian island of Vanua Levu in 2014, intended to provide a potential refuge for I-Kiribati when domestic adaptation efforts could no longer address climate impacts.

In 2016, Migration with Dignity was replaced by Maamau's Kiribati 20-year Vision, focused on the communities' desire to remain in Kiribati. The question of international migration due to climate change impacts is no longer mentioned, and only "migration between islands in order to improve social and economic benefits" is considered (Kiribati Government Ministries and Agencies, 2023, p. 44). In his Kiribati 20-year Vision, Maamau expresses confidence that communities will be able to remain in their country with investments in sustainable development and climate change adaptation, and provides a new interpretation of Vanua Levu purchase, henceforth presented as a possible "offshore food basket."

Research Discipline and Theoretical Framework

Climate Victimology: A Subfield of Green Criminology

Climate migration is often viewed through the lens of existential threats and ontological security (Boege, 2022). This perspective considers the profound impacts of climate change on people – particularly those in vulnerable regions, such as low-lying Pacific Islands. The concept of ontological security refers to a sense of stability and continuity in individual identity and environment. Climate change threatens ontological security by forcing Pacific Islander individuals to leave their islands, which are integral to their cultural and social identities (Baleinakorodawa & Boege, 2024). Threats to this security have already been identified as a key issue by green criminologists, who have expanded the traditional understanding of crime and victimization by focusing on environmental harm and ecological justice. Green criminologists argue that environmental crimes often produce more widespread harm and victimization than conventional street crimes (Lynch, 2020; Lynch et al., 2013). They have identified various causes of environmental harm, including corporate disregard for ecosystems, excessive consumption and pollution (Lynch, 2020).

A subfield of green criminology is green victimology, which studies the human and ecological impacts of environmental degradation from the perspective of the victims, emphasizing the importance of recognizing and addressing the status, rights and vulnerabilities of those harmed (Brisman et al., 2018; Johnson, 2017). Victims of green crimes are diverse and can include humans, non-human species, entire ecosystems and even future generations (Johnson, 2017; Lynch, 2020; Skinnider, 2013; Skinnider et al., 2011). Within green victimology, scholars have focused on climate victims who are facing environmental degradation due to, or exacerbated by, climate change (Popovski & Mundy, 2012).

Victimization due to climate change can be diffuse, delayed, or cumulative, making it challenging to identify and address (Skinnider, 2013; Skinnider et al., 2011). Vulnerabilities to environmental harm in general, and climate-induced harm in particular, are often unequally distributed, with marginalized communities facing disproportionate impacts (Brisman et al., 2018; Lynch, 2020). This broader perspective on environmental harm and victimization challenges traditional criminological approaches and calls for more comprehensive legal and policy responses.

Climate change disproportionately affects low-income communities and populations that are more likely to experience the adverse effects of climate change, such as food and water insecurity, health risks, and economic instability. Climate change tends to fuel social conflict, exacerbate existing social and economic inequalities, increasing vulnerability among already marginalized groups, and increase likelihood of crime (Agnew, 2012; Popovski & Mundy, 2012). For instance, women and children in certain regions may face increased risks from human trafficking and exploitation as climate change disrupts traditional livelihoods and social structures (Sheu et al., 2021). Furthermore, climate change can create new conflicts over resources, leading to increased exposure to crime and violence for migrants and host communities, whose access to basic services might be critically under pressure (Brisman et al., 2018). Climate change-induced victimization is the product of slow, repeated and cumulative processes involving culprits over multiple generations and across borders, in a context where causality between consumption, climate change and victimization is a political rather than scientific debate (Popovski & Mundy, 2012). Victimologists do not just focus on the harm done to victims; they study processes of empowerment, such as engaging with lived experience, protective measures, providing victims with choices, respecting their voices by actively listening, amplifying their perspectives and incorporating their experiences into policy and recovery processes, and allowing them to actively participate in their healing process. Victimology identifies victims' inherent strengths and its application supports them in their journey from trauma to recovery, seeking to support them in regaining control over their lives, moving forward after experiencing crime and violence, and potentially even experiencing post-traumatic growth (Canadian Resource Centre for Victims of Crime, 2009; Hill, 2009; Nascimento et al., 2023; Popovski & Mundy, 2012; Wemmers et al., 2023; Yilmaz, 2021). Looking at empowerment while clearly understanding the victimization processes is critical to recognizing the complex specificities of the question of climate migration; reducing Pacific Islanders to a status of "victims" or "refugees" only in the context of climate change could undermine their agency in decision-making and is a denial of the complex specificities of climate migration (Farbotko & Lazrus, 2012; Munoz, 2021).

Adapting the Routine Activity Theory to Explore the Question of Climate Migration

In this article, we adapted a classical criminology framework, the routine activity theory (RAT), to the context of climate migration. Developed by Cohen and Felson (1979), the RAT explains the occurrence of a core problem, a crime, through the convergence in space and time of the three minimal elements of direct-contact predatory violations: (1) motivated offenders, (2) suitable targets, and (3) the absence of capable guardians against a violation (Cohen & Felson, 1979, p. 589). When these three elements overlap, a crime is more likely to occur. Instead of focusing on factors that make individuals offenders, Cohen and Felson utilized the RAT to focus on the spatio-temporal nature of situations where the core problem – usually a crime – occurs.

In our study, the core interest is not a crime, but a problem: forced climate migration in the Pacific, a multidimensional crisis that extends beyond the relocation of populations to encompass an existential threat to entire nations. Forced climate migration describes human movement where those affected by the migration do not have full control over the process and migration options with acceptable conditions may not be available for all. Utilizing the RAT to identify and describe the dynamics within the coexistence of these three elements helps us understand why it is difficult to develop migration options with acceptable conditions.

While originally developed to explain conventional crime, the RAT provides a valuable heuristic for understanding climate migration as resulting from the coexistence in space and time of three groups of stakeholders. The RAT's emphasis on structural conditions and actor roles clarifies accountability and highlights protective or neglectful forces involved in harms (Brisman et al., 2018). Thus, the RAT shifts analysis beyond individual or natural disaster lenses to a discussion on systemic responsibility and justice. In this context, the terminology normally associated with the RAT has been altered, with "suitable targets" becoming "climate migrants", "offenders" becoming "GHG emitters" and "guardians" becoming "climate change adaptation bodies". "Climate migrants" in this article represent Pacific Islanders, more particularly I-Kiribati and Tuvaluans, who have been and will be severely affected by climate change with negative impacts on their safety and livelihood, while playing a minimal role in GHG emissions. "Climate migrants" are people who must navigate the consequences of their forced migration and whose departure shapes challenges for those left behind in conditions of involuntary immobility (Baleinakorodawa & Boege, 2024; Brisman et al., 2018; Popovski & Mundy, 2012).

"GHG emitters" are the key regional emitters, mainly Australia and Aotearoa New Zealand, which are known for their climate change contributions, through intensive coal and gas industry, agriculture or deforestation; they are often targets of Pacific Governments' criticisms for their contributions and lack of action (O'Keefe, 2019). This analysis also focuses on the coexistence of the three elements, rather than their convergence, to describe the simultaneous presence of risk factors, reflecting overlapping conditions rather than interactive processes. While non-regional GHG emitters also carry responsibility for the climate change impacts in the Pacific Islands, we are focusing on regional emitters to explore the main spatio-temporal

dynamics at play in the forced migration faced by I-Kiribati and Tuvaluans. Finally, “climate change adaptation bodies” represent government and non-government actors involved in climate change adaptation and risk reduction, such as the United Nations or Pacific Commissions, as well as governments such Australia and Aotearoa New Zealand, which have bilateral and multilateral agreements with Pacific Islands to keep their communities safe and build resilience.

In this preliminary exploration, based on the existing literature, we highlight key issues related to the experiences of those affected by climate migration and their need to reach a place where they have a sense of control over their life and the choice to adapt to climate change with acceptable conditions. The coexistence of the three RAT elements is analysed to understand how the spatio-temporal situation influences the victimization and empowerment of climate migrants.

Offenders: GHG Emitters

A motivated offender will not only have the inclination, but also the capacity and resources to commit their crime (Cohen & Felson, 1979). GHG emitters are responsible for activities that contribute to climate change, as well as for putting their economic and political interests above emissions reduction targets. Australia and Aotearoa New Zealand are the two biggest gas emitters per capita in Oceania, with intensive coal, agriculture, and farming industries. Australia is the eighth largest GHG emitter per capita domestically, and the third largest gas exporter (Grant & Hare, 2024), and records a higher increase of emissions than other high-income countries (Murali et al., 2021). Both Australia and Aotearoa New Zealand have signed onto the global fight for climate change adaptation, through the ratification of the Paris agreement and numerous bilateral and multilateral agreements, but their commitment in practice remains ambiguous.

In 2023, Australia developed its Future Gas Strategy, undermining efforts to reach the Paris Agreement goals (Hare, 2023). Australia is expected to fail to align with the 1.5°C goal regarding the global carbon budget between 2024 and 2035 (Grant & Hare, 2024). Australia and Aotearoa New Zealand have started to invest in their energy transition, but this is a slow process due to financial and political constraints. Further, Australia has often been accused of obstructing climate activism, such as arresting and sentencing climate protesters (Hutchens, 2024), and both Australia and Aotearoa New Zealand are suspected to have engaged in fraudulent carbon markets (Martin & Walters, 2013; Simmons & Young, 2016).

Some news articles try to minimize Australia’s share of responsibility for climate change by suggesting that changes within Australia would have limited impact on the global climate (Murali et al., 2021). Some narratives argue that “Australia is doing more than its fair share to combat climate change” – for example, citing the export of “good quality coal” as preferable to “poorer quality coal” used elsewhere (Murali et al., 2021, p. 8). However, this perspective is part of a broader debate about the global significance of Australian emissions and fossil fuel exports, which needs to be understood within the context of ongoing discussions about international climate responsibilities. The nuanced debate about GHG emitters’ responsibility for climate change has gained momentum with recent landmarks rulings and litigation underscoring the state’s legal obligations to prevent climate harm. Notably, the 2024 advisory opinion of the International Tribunal for the Law of the Sea affirmed that states must enforce “all necessary measures” to control GHG emissions under the United Nations Convention on the Law of the Sea (ITLOS), recognizing anthropogenic emissions as marine pollution with transboundary impacts (ITLOS, 2024). In July 2025, an advisory opinion by the International Court of Justice (ICJ, 2025) declared that all nations bear binding legal duties under international law to mitigate climate change impacts, protect vulnerable populations, and prevent environment harm, with failure to act potentially resulting in legal liability and obligations to provide reparations to those affected (ICJ, 2025; Gifford & Shanks-Dumont, 2025). This decision, prompted by a request from the Pacific Islands in the face of climate change impacts, explicitly reframes climate action as a matter not only of political need but of international legal accountability, reinforcing principles of equity and differentiated responsibility. Such decisions exemplify a critical shift where the international community holds GHG emitters accountable and allowing affected communities to seek justice for climate-related harm (Jaynes, 2024).

Suitable Targets: I-Kiribati and Tuvaluans Facing Forced Climate Migration

Climate change impacts, such as sea-level rises, increased storm surges, and saltwater intrusion in freshwater supplies, are environmental stressors that significantly disrupt daily routines and livelihoods for I-Kiribati and Tuvaluans. Pacific Islanders’ reliance on traditional livelihood, such as fishing and agriculture, makes them particularly at risk from the consequences of climate change, but also may limit their options for resettlement in the case of migration. Local governments are limited in their action for adaptation strategies other than migration due to a lack of financial and physical resources. For instance, the Tong government did not have the financial capability to implement an elevation project to create additional space within Kiribati (Hermann & Kempf, 2019).

Due to their minor participation in GHG emissions, Kiribati and Tuvalu governments have little leverage when it comes to mitigating climate change through domestic emissions reduction (Allgood & McNamara, 2017). Either way, given the current amount of GHG in the atmosphere, climate change is predicted to persist even if massive global emission reductions occur (IPCC, 2023), which means that adaptation to the impacts, forcing islanders to alter their lives, is currently the only option for action for these countries.

I-Kiribati and Tuvaluan cultural foundations rely on the human–land bond, resulting in potential negative impacts for climate migrants separated from their land, but more particularly due to the fact that should their land become permanently uninhabitable, migrants would not have the option to return and host ceremonies (Allgood & McNamara, 2017; Wyett, 2014). Furthermore, communitarian cultures do not fit with an individual migration process, such as that proposed by the Falepili Union treaty, where individuals would be resettled internationally but collective relocation may not be possible, which means they are exposed to inappropriate migratory conditions (Hermann & Kempf, 2019; Wyett, 2014). Studies found a reluctance to relocate internationally among I-Kiribati (Hermann & Kempf, 2019) and Tuvaluans (Allgood & McNamara, 2017; Mortreux & Barnett, 2009) due to the fear of losing both human–land and individual–community bonds.

This position is emphasized by the strong religious belief among a large sector of I-Kiribati and Tuvaluans communities that God has always provided for them, and will do so again, saving the Islanders from the loss of their land (Allgood & McNamara, 2017; Hermann & Kempf, 2019; Mortreux & Barnett, 2009; Roman, 2013). To quote President Maaumau: “[I-Kiribati] don’t believe in their islands sinking. It is an insult to them” (HE Taneti Maamau, Interview, 17 November 2017). By not mentioning the question of climate migration, Kiribati’s 20-year vision denies the need to proactively plan for a possible forced migration, which might result in a lack of options with acceptable conditions for those who escape sea-level rises.

Scholars found that another key challenge that needs to be considered is the impact of the departure of climate migrants on those who remain behind (Baleinakorodawa & Boege, 2024; Brisman et al., 2018; Flavell et al., 2020; Popovski & Mundy, 2012; Simpson et al., 2024). Those who remain behind in areas affected by climate change can broadly be categorized into two groups: those who exhibit voluntary immobility and those experiencing involuntary immobility. Voluntary-immobile people consciously chose to stay to due to strong attachments to place, culture and community (Blondin, 2021). These cultural ties, however, can be affected by the departure of climate migrants, necessitating greater attention to these challenges in adaptation planning. Involuntary-immobile people are often those facing physical and/or economic constraints, such as poverty, resource limitation, old age or disability (Thalheimer et al., 2025). The departure of climate migrants can exacerbate the vulnerabilities of involuntary-immobile people by weakening community support systems and reducing production and access to shared resources, leaving those who remain with increased exposure and vulnerability in the face of climate change impacts.

Guardians: International and Regional Climate Change Adaptation Bodies

Reynald (2009) describes an intensity scale of guardianship: *absent* when there is no supportive body, *available* when a guardian exists but is not able to provide support, *capable* when the existing guardian is able to intervene and could support the victim but is not providing this support and *intervening* when the existing able guardian is supporting victims. The question of climate migration in Kiribati and Tuvalu seems to display several levels of guardianship.

First, the lack of regional and international policies to guide and enforce climate migration processes (Wyett, 2014) can be interpreted as *absent* guardianship. Second, the regional geopolitics and history of human mobility, supported by existing regional institutions such as the Pacific Commission, indicate that guardianship exists, but the lack of explicit climate migration agreements and plans raises the question of *available* guardianship. Even current explicit strategies could be qualified as *available* only in the long-term – for example, the Migration with Dignity strategy,¹ which might prove to be limited in offering a sustainable option to climate migrants. With decades of political instability, Fiji presents risks for climate migrants to land in the middle of existing ethnic tensions, making the migratory transition conflictual and difficult for I-Kiribati and their hosts (Wyett, 2014). Furthermore, Fijians are themselves facing the question of climate migration (Baleinakorodawa & Boege, 2024; McMichael et al., 2019), bringing the sustainability of this adaptation option into doubt. Third, Australia and Aotearoa New Zealand have set-up migratory pathways for Kiribati and Tuvalu, “accepted responsibility” (Wyett, 2014, p. 173) and recognized their “duty of care” (DFAT, 2023, p.1) towards their neighbours, and committed to participation in climate change adaptation and sustainable development on the international and regional scene, thereby bringing these two countries to the level of potential *intervening* guardians. The *intervening* guardianship, however, presents a few caveats. Hermann and Kempf (2019) raise the question of whether the historical power dynamic between international donors and Pacific countries could make climate migrants likely to agree on migration strategies developed externally as part of humanitarian aid, which would prevent Kiribati and Tuvalu from fully controlling the conditions of the agreements.

In the Falepili Union Treaty, a quota of 280 Tuvaluans (2.5% of its population) per year are eligible to relocate to Australia, which does not align with the predictions that half of the country's land could be underwater by 2050 (Guilfoyle & Green, 2023; NASA, 2023). To this are added application conditions targeting islanders in terms of age and physical ability to work, along with their families.

While geopolitics makes Australia and Aotearoa New Zealand the most likely Pacific climate migrant hosts, the populations of Australia and Aotearoa New Zealand tend to demonstrate negative attitudes towards immigrants (Wyett, 2014). Furthermore, there is a level of resistance and routine scepticism about the human contribution to climate change among Australia's political spheres and communities (Leviston & Walker, 2010). These dynamics hinder acceptance by hosts, making settlement and integration quite problematic for climate migrants.

Coexistence Towards Victimization

The coexistence of the three elements in the cases of the *absent* and *available* guardians raises the risk of unplanned evacuation once the climate threat has become overwhelming. Such evacuation would first result in long-term physical and psychological trauma impacts on I-Kiribati and Tuvaluans with regard to unplanned forced migration (Marković et al., 2023). Further, the evacuation of whole communities, carried out in urgency, will cost more than well-planned migration (Wyett, 2014). Australia and Aotearoa New Zealand already have costs related to the immigration of 13,000 and 750 refugees, respectively, every year (Wyett, 2014). The strain on these countries in the case of extensive waves of refugees coming at once would put pressures on existing infrastructure, enforcing the development of ad hoc refugee camps, in turn presenting typical harmful dynamics for refugees with authorities having control over refugees' existence, such as living arrangements, food distribution, healthcare and educational opportunities.

When looking at coexistence including *intervening* guardians, questions remain about climate migrants maintaining control over their existence and migration options with acceptable conditions. The conditions set up in current migrant schemes, such as the Falepili Union Treaty, require migrants to fulfil specific criteria unrelated to their vulnerability and exposure to climate change impacts, such as English proficiency (Rachmawati & Hidayatullah, 2023). There are quotas and eligibility requirements that control whether, when and how many Pacific Islanders can act on these options, and most aspects of the migration process will be under the authority of the immigration department of the host country. The conditions of migration set up by host countries also mean that the most able Pacific Islanders will depart the country, leaving behind those who are already most vulnerable and thereby reinforcing the lack of agency from the perspective of the Pacific Islands to organize a positive migration strategy for vulnerable groups. The lack of explicit discussion and planning among the three elements for those facing forced immobility demonstrates usual invisible victimization in the climate migration process (Baleinakorodawa & Boege, 2024; Flavell et al., 2020; Popovski & Mundy, 2012).

Finally, a critical dynamic is the offender-guardian overlap in which Australia and Aotearoa New Zealand represent both elements. Such overlap has already been discussed in other areas of criminology (e.g. Chan & Gibbs, 2022). One can wonder whether Australia and Aotearoa New Zealand could use – whether intentionally or not – visa pathways to distract from their GHG emissions contribution and lack of commitment towards Paris agreement by hosting climate migrants from Pacific Islands. Hosting climate migrants would be considered a sufficient effort in climate change adaptation, resulting in them acting on the symptoms of climate change impacts rather than participating in mitigation efforts.

Coexistence Towards Empowerment

The coexistence of the three elements also appears to demonstrate potential for the empowerment of climate migrants. International relocation of individuals poses the problem of sovereignty loss, reflecting a key aspect of victimization of Pacific nations (Allgood & McNamara, 2017). While the purchase of Fijian land was first organized as refuge for I-Kiribati, there was no agreement for an enclaved country settlement. The visa pathways towards permanent residency in Australia and Aotearoa New Zealand would require Pacific Islanders to integrate themselves into the legal and social host structures. Finally, the unavoidable prediction of land disappearance in some Pacific Islands might mean that islanders permanently lose their human-land bond. The potential loss of sovereignty, and what this would entail for Pacific Islanders, was officially recognized by Australia in the Falepili Union Treaty.

Additionally, Australia officially supported Tuvalu's initiative to digitize its institutional, political, cultural and social structures through the Tuvalu 2.0 plan, by preserving sovereignty in article 2b, which posits that "sovereignty of Tuvalu will continue, and their rights and duties inherent thereto will be maintained, notwithstanding the impact of climate change-related sea-level rise" (DFAT, 2023, p. 2). The Pacific Islands Forum also declared its support for the perpetuity of statehood and sovereignty

of Pacific nations despite climate change threats through the 2023 Declaration on the Continuity of Statehood and the Protection of Persons in the Face of Climate Change-related Sea-level Rise (Pacific Island Forum, 2023). This declaration represents a critical step forward, empowering Pacific Islands facing the imperative of climate migration to retain control and decide on their existence as sovereign nations, wherever they may move to. This recognition also opposes the idea of powerlessness of Pacific Islands facing climate change impacts. While Pacific Islanders might be expatriates, with dual citizenship or not, their identity as Tuvaluans and the representation of their nations would persist.

Furthermore, the simultaneous Australian/Aotearoa New Zealand commitment (even if ambiguous) to the Paris Agreement (repenting offender), development of work visa pathways between Kiribati/Tuvalu and Australia/Aotearoa New Zealand (intervening guardian), and upskill initiatives occurring in Pacific Islands to provide islanders with skills fitting with host countries' standard qualifications, such as the collaborative initiative on nursing training (KANI), provides migration options with acceptable conditions (O'Brien, 2013). Even better, given the increasing demand for skilled migrants in Australia and Aotearoa New Zealand (Chand et al., 2021), these strategies provide great control to Pacific Islanders as they move from being receivers to becoming providers.

Finally, Kiribati and Tuvalu benefit from a set of precedents that provides resilience foundations for climate migrants. Australia and Aotearoa New Zealand are already the main hosts of South Pacific emigrants, and Fiji has already welcomed an I-Kiribati migrating community (Moncada & Bambrick, 2019), which means that new climate migrants might be able to integrate cultural groups by providing continuity of their traditional fabrics, and also financially and socially ease the settlement of new groups (Allgood & McNamara, 2017; Fekete et al., 2022; Wyett, 2014). Migration with Dignity conceptualized the need to create social networks among climate migrants in their host countries in order to provide feelings of safety and incentives to move for reluctant Islanders by fitting climate migration within Pacific cultures' history of human mobility characteristics so it occurs when new resources are needed instead of being a forced process.

Conclusion

This research presents key implications for the theory and practice of climate change adaptation for Pacific Islanders by using a victimological lens and disentangling the complex interplay of the different stakeholders. By adapting the RAT to analyse the existing literature, we have highlighted the experiences and needs of those facing climate migration and the role played by the different stakeholders. This article has conducted a multifaceted analysis of Kiribati and Tuvalu, two Pacific Islands facing uninhabitability of their land due to climate change impacts. This analysis brought one key challenge to the fore: the need for climate migration to become a choice with acceptable conditions for Islanders. Further empirical comparative research on the development and outcomes of the different strategies held by these two countries would be a valuable step towards exploring choices and understanding what these acceptable conditions are.

When they coexist, the three RAT elements, adapted to the climate migration context, result in both victimization and empowerment of Pacific Islanders in the face of climate change impacts. Following this preliminary exploration of the Pacific migration context, and to further understand subsets of the systemic issue, we propose that further research is required to assess the legal implications for cultural and sovereignty continuity of bilateral agreements, such as the Falepili Union Treaty, and innovative initiatives, such as the creation of a digital Tuvalu.

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¹ More particularly, its proposal to use Vanua Levu or other areas to host I-Kiribati migrants, allowing for whole I-Kiribati communities to move in similar cultural areas

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