Residents of Kiribati are on the front line of climate change in Oceania. Photo by Jonas Gratzer/LightRocket via Getty Images.

Forced Climate Migration in Oceania

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18 May 2020

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Executive Summary

As the side effects of climate change increasingly threaten the lives of people around the world, those living in at-risk areas may be increasingly forced to leave their homes and relocate elsewhere. In the context of Oceania and the diverse set of island states that make up the region, climate change threatens to make life in many communities unsustainable in the very near future. As such, we aim to examine the connections between the impacts of climate change and migration from affected or threatened communities.

Report Purpose and Structure

The purpose of this report is to determine which populations and communities across Oceania would likely need to relocate, where relocation would likely occur, and what the expected consequences of relocation are for recipient countries. We divide the report into three sections of examination and one section of analysis and recommendation.

Part 1 provides an overview of migration within Oceania, both through historical and contemporary lenses. Mobility throughout the region has been an integral part of the Pasifika culture for generations - long before national borders constrained the flow of goods and people. Notable Fijian scholar Epeli Hau'ofa famously referred to the region as "sea of islands," given how people would constantly and seamlessly move between the islands within the larger subregions of Melanesia, Micronesia, and Polynesia.[1] Although movement became more restricted under colonial rule, each polity still maintained a collection of islands around which people could still move. Following the Second World War and the transition to the post-colonialism era, many of these island nations began creating ties with the larger regional powers such as Australia and New Zealand. These historic ties form the backbone of ongoing commercial and seasonal migration to this day.

Part 2 depicts Oceanic migration within the context of climate change and the regional migration decisions taken to mitigate and adapt against it. There is currently a serious debate between those in favor of mitigation (i.e. reducing greenhouse gases) and those in favor of adaptation (i.e. adapting to the consequences). Namely, the current administration under President Maamau in Kiribati is vehemently against managed retreat and any discussion of climate change that suggests it, rather than adaptation, is immediately disregarded. Conversely, Fiji, Vanuatu, Tuvalu, and others are open to both mitigation and adaptation and work closely with the UN to determine the steps necessary for both grassroots and international adaptation solutions for their 'at risk populations.'

Part 3 discusses the impacts of Oceanic climate migration within the larger context of international relations, including impacts on likely host nations. There is currently no widely-accepted definition of a "climate migrant," nor are there international legal protections afforded to anyone under this category. The UN has taken steps to address climate change as a driver for migration, via the non-binding UN Global Compact for Migration. Nevertheless, based on historical relationships and current avenues of migration, this section discusses the most likely recipient countries for displaced migrants. Australia and New Zealand are the most likely recipient states due to their proximity and economic importance to Oceanic states and the pre-existing seasonal migration patterns that define their relationships with these island-nations. In addition, the United States, France, and the United Kingdom are also likely hosts due to

[1] Epeli Hau'ofa, "Our Sea of Islands," 1994, http://scholarspace.manoa.hawaii.edu/handle/10125/12960.

pre-existing legal agreements and historical colonial ties with certain island nations. Fiji may also play a limited role in the resettlement of migrants from other Pacific Island states despite facing adverse threats from worsening climate itself.

Lastly, Part 4 discusses five key takeaways and the five policy recommendations we advise within this report, further explained below.

Key Findings

The key takeaways of our report are as follows:

1) *Some polities are more at-risk than others.* According to the United Nations Trust Fund for Human Security, five of the most at-risk nations are Kiribati, Tuvalu, Vanuatu, Fiji, and the Marshall Islands. These states were chosen not only for the risks they face from increased natural disasters and phenomena, but also because of other underlying socioeconomic factors that may drive increased movement and displacement. These five polities are the most likely "sending" nations for migration and, due to their historic ties with larger nations, the U.S., Australia, New Zealand, and parts of Western Europe are the most likely recipients of these long term migrants;

2) *Climate change is difficult to separate from other drivers of migration.* Although climate change will continue to contribute to migration in Oceania, it may be impossible to separate from other drivers of migration. Most short-term migration in Oceania is likely performed for economic or familial reasons. It is therefore difficult to determine which communities move for purely economic purposes, which move following the effects of climate change, or which move resulting from a combination of issues;

3) *Climate change will become a driver of long-term migration from Oceania by 2050*. If greenhouse gas emissions and other drivers of climate change are left unaddressed, climate change will contribute to increased levels of long-term migration from communities in Oceania by 2050;

4) *The preference for migration is internal and intra-regional with extra-regional migration a last choice*. Migration is a personal decision made by individuals and families and has numerous sources of influence. The typical preference for climate migration is internal, intra-regional, and extra-regional, in this order;

5) *Understanding the impacts of migration requires more qualitative data from both sending and receiving communities.* Perceptions and sentiments both from migrants and those within host nations are difficult to assess. The best course of action is to determine a nation's stance on migration and climate change, broadly, and then piece together a more specific analysis in order to understand more fully the picture of migration related to climate change in Oceania. More qualitative data is needed in this field to more accurately measure the potential impact of climate change-induced migration in Oceania.

Recommendations

There is not much that the Department of Defense can accomplish in this region, in terms of migration, that cannot be accomplished with less money through another branch of the U.S. government. However, there are avenues through which the DoD can assist these nations and other branches of the U.S. government in order to not lose a foothold in the region overall. The migration policy recommendations for the United States are as follows:

1) *The U.S. should play a more active role in supporting Pacific Island governments logistically in their long term migration processes.* The U.S. should act as moderator between Oceania and larger nations as they discuss location, timeframe, and resource allocation for the various populations. In certain nations, the topic of climate change is a contentious political issue and discussions of large scale migration will cause tension. The U.S. can ensure its influence by acting as an unbiased mediator as decision-making becomes more difficult in the coming years.

2) *The U.S. should focus on increased diplomatic engagement to address the consequences of migration in Oceania*, rather than the primarily financial and/or military engagement within the region we currently observe. As climate change increases threats within our own borders through hurricanes on the East Coast and wildfires in the Southwest, dedicating money to foreign endeavors that do not directly help our citizens will become more difficult politically. Diplomatic relations are more cost effective than military efforts and maintain our influence in the region with a small number of U.S. personnel. However, while DoS would serve as the primary actor here, DoD personnel are vital for effective logistical engagement. Therefore, an important note is that military attaches and DoD civilians are as important as DoS officials; and, as diplomatic engagement is increased, there should be a comparable number of DoD officials as DoS officials in the region.

3) *The pre-existing COFA agreements should include specific funding for climate change mitigation and adaptation efforts.* The current agreements have a framework for these efforts, but they should be revisited, with the express approval of the DoD, to determine what are realistic improvements and the logistic details to the U.S. accepting long term migrants from these nations.

4) *The U.S. should support alliances that are influential in the region: Australia, New Zealand, and certain European Union members who are doing a majority of the work in managing the challenges to inhabitability in the region.* As China continues its Belt and Road Initiative and expands its sphere of influence into the Pacific, U.S. allies are the most effective, and lowest-cost, option to ensure that China does not displace the U.S. foothold in the region. This support takes the form of a) military and diplomatic officials traveling to these nations and assisting in the planning of population movements; b) hosting summits and practice scenarios to help prepare these allies for the incoming migrants; and c) fractionally increasing aid to both governmental and non-governmental organizations within these host nations to help with the logistics of resource allocation, development, or any other area in which they are financially burdened with supporting migrants.

5) *The U.S. should facilitate increased research on migration drivers and consequences in Oceania.* In terms of both quantitative and qualitative data, the U.S. Government can contribute to the development of migration research in Oceania, with a focus on the people of Oceania and U.S. regional interests. Quantitative research should focus primarily on defining at-risk populations, increasing understanding of migration trends, and better understanding the effects of climate change on habitability in Oceania.

Qualitative research can contribute to understanding how climate change affects third parties and extra-regional states, including the U.S., the role of climate change in the decision to migrate, the development of international compacts on migration, and public sentiment in probable recipient states. Lastly, migration research should focus on filling gaps in existing governmental and non-governmental migration data.

Part 1: Introduction and Methodology

Nearly three decades ago, the Intergovernmental Panel on Climate Change contended that above all else, climate change will likely have the largest disproportionate impact on human migration.[2] Since then, the increasing accuracy of future predictions of the impacts of anthropogenic climate change have only intensified ongoing existential debates across the greater Oceanic region. Concerns over rising sea levels, the increasing frequency and intensity of natural disasters, freshwater salinization, drought, and other major threats have driven the global conversation for decades over the future of the most at-risk populations in the Pacific.

In order to properly develop the international community's response to these looming threats, it remains imperative that policymakers develop a comprehensive understanding of how local preferences, historical and cultural connections to land, regional relationships, economic opportunities, legal frameworks, and other key factors influence how Pacific island states are drafting their responses and preparing themselves for the worst. This issue is often framed as a struggle between affected states calling on the international community to reduce consumption and help strengthen adaptation measures or, instead, developing a plan to relocate threatened populations through managed retreat. Given the extreme sensitivity of this issue across the region, the ongoing debate and political discourse is complex and often contradictory.

This report aims to serve as a comprehensive, cross-disciplinary review of migration in Oceania in the context of increasing threats from climate change induced natural disasters. Pacific Island Countries and Territories (PICTs) face increasing existential threats from natural phenomena that have been largely exacerbated by the effects of anthropogenic climate change. Low-lying atoll PICTs, several of which are highlighted in this report, are in urgent need of time-sensitive global action plans to mitigate the worst effects of increasingly frequent natural disasters. The potential uninhabitability of many communities across the region raises the question of how climate change-induced migration might affect human well-being and security in this context.

While the population of Oceania is relatively low compared to the rest of the world, the long-term effects of climate change threaten to uproot communities across the region. Entire cultures and ways of life are endangered if proper precautions are not taken. Through analyzing migration in Oceania, this report aims to provide a broad overview of migration in Oceania (Part 1), interpret the impact of climate change on migration-related decision making at multiple stakeholder levels (Part 2), and discuss the subsequent impacts of migration on the international relations within the region (Part 3). This report was supported in part by the Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM), a direct reporting unit of the U.S. Defense Department's Indo-Pacific Command.

Section 1.1: Introduction to Oceania

As a whole, the region of Oceania is divided into three subregions: Melanesia, Micronesia, and Polynesia, each with their own distinct cultural histories, interconnections, and level of risk to climate change. Oceania comprises 21 PICTs, eight of which are territories of extra-regional nations (Figure 1, Table 1). For the purpose of this study, the region of Oceania excludes Papua New Guinea, New Zealand, and Australia.

[2] Oli Brown, "The Numbers Game," *Forced Migration Review*, 2008, 2.

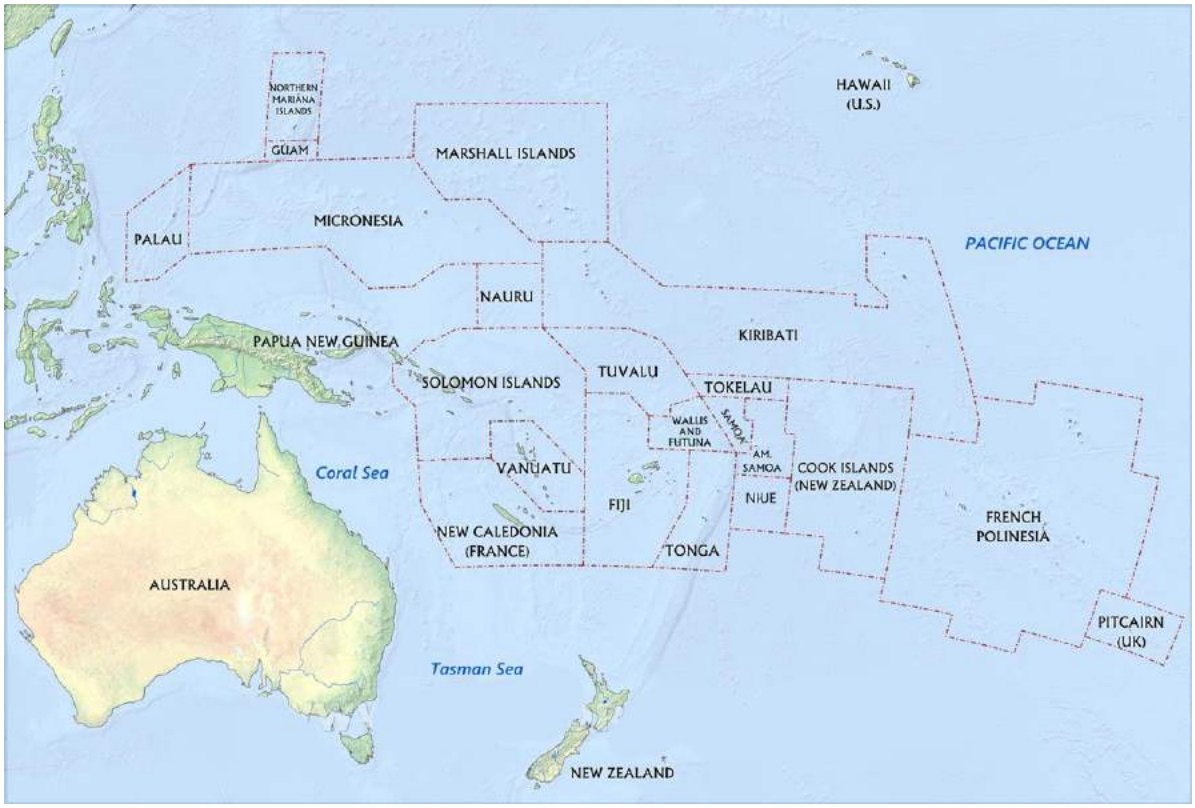

Figure 1. The PICTs of Oceania. Map adapted from FreeWorldMaps.net

Table 1. Interconnectivity between PICTs in Oceania, with emphasis on links to the United States.

PICT	Region	Status	U.S. Association
Cook Islands	Polynesia	Independent	
Federated States of Micronesia	Micronesia	Independent	COFA
Fiji	Melanesia	Independent	
Kiribati	Micronesia	Independent	
Marshall Islands	Micronesia	Independent	COFA
Nauru	Micronesia	Independent	
Niue	Polynesia	Independent	
Palau	Micronesia	Independent	COFA
Samoa	Polynesia	Independent	
Solomon Islands	Melanesia	Independent	
Tonga	Polynesia	Independent	
Tuvalu	Polynesia	Independent	
Vanuatu	Melanesia	Independent	
American Samoa	Polynesia	Territory - US	Territory
French Polynesia	Polynesia	Territory - FR	
Guam	Micronesia	Territory - US	Territory
New Caledonia	Melanesia	Territory - FR	
Northern Mariana Islands	Micronesia	Territory - US	Territory
Pitcairn	Polynesia	Territory - UK	
Tokelau	Polynesia	Territory - NZ	
Wallis and Futuna	Polynesia	Territory - FR	

While Papua New Guinea is frequently analyzed as part of the region, its population exceeds 7 million and the issues it faces are somewhat distinct from the rest of the small islands in the region that have a combined population of about two million.

Subsection 1.1.1: Migration in Oceania

Migration has long been integral to Pacific Islander culture, identity, and history. This study considers three types of migration: 1) intra-national migration, movement within an island nation, 2) intra-regional migration, movement within Oceania, and 3) extra-regional migration, movement outside of Oceania to Australia, New Zealand, the United States, and other nations beyond the Pacific Ocean.

Before examining the historical and contemporary contexts of Oceanic migration through an analytic lens, it is important to first understand the role that movement has played in broader Pasifika culture for centuries. Renowned Fijian scholar Epeli Hau'ofa challenged imperialist views of Oceania, which often viewed the region as scattered, isolated islands in a sea. In his seminal work, Hau'ofa emphasizes a "world of difference between viewing the Pacific as "islands in a far sea" and as "a sea of islands.""[3] Pasifika people have long been incredibly mobile in search of resources and inter-community connections. For centuries, "peoples and cultures moved and mingled, unhindered by boundaries of the kind erected much later by imperial powers."

In the modern context, Pacific migration can continue to be viewed through the cultural context that Hau'ofa laid out in 1993. He notes that modern conveniences such as air travel have only changed Pacific migration in the sense that "Islanders have broken out of their confinement, are moving around and away from their homelands, not so much because their countries are poor, but because they were unnaturally confined and severed from many of their traditional sources of wealth, and because it is in their blood to be mobile [sic]."

With this contextual backdrop, we can begin to delve into the intricacies of historical Oceanic migration and contemporary patterns of movement. Intra-national and intra-regional travel between islands predates the colonial era and has persisted to varying degrees.[4] Most migration today is driven by a mixture of economic opportunities, historical and cultural linkages, legal opportunities, and labor mobility. Migration also occurs for various durations with differing rates of frequency, either seasonal and repetitively, temporary, or permanent.

Intranational and intraregional migration represents the least disruptive form of migration for Pacific Islander populations. Existing avenues of intranational and intraregional migration are derived from familial, cultural, historical, religious, and economic ties between different islands and regions. These chains were solidified when national boundaries were drawn following imperial rule.

Extant channels of extra-regional migration are largely based on the absence of economic opportunities within the region. For instance, remittances from Tongan migrants represented roughly 40% of Tonga's 2018 GDP. Across the region remittances account for an average of 10% of the GDP of Pacific island states.[5] New Zealand, Australia, and the United States play the most significant extra-regional role in hosting Oceanic migrants, but other states may become increasingly relevant in the region over the coming decades as climate change prompts migration.

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[3] Epeli Hau'ofa, "Our Sea of Islands," 1994, http://scholarspace.manoa.hawaii.edu/handle/10125/12960.
[4] Campbell, John, and Richard Bedford. "Migration and Climate Change in Oceania." People on the Move in a Changing Climate Global Migration Issues, 2013. P304
[5] "Countries Ranked by Personal Remittances, Received (% of GDP) - Oceania," accessed May 12, 2020, https://www.indexmundi.com/facts/indicators/BX.TRF.PWKR.DT.GD.ZS/rankings/oceania.

If climate change leads to the forced migration of at-risk populations, existing avenues of migration are inadequate to handle a demand for significant outward migration from Oceanic states. Excluding Papua New Guinea, the regional population could reach 4 million people by 2050 - nearly 200% higher than current levels.[6] For host nations, increasing capacity of migrant absorption is imperative. Furthermore, while a slow onset of inhospitable conditions may not require full utilization of logistical capabilities, a rapid onset of such conditions would severely tax logistical capabilities of host states.

Estimates indicate that some PICTs such as Kiribati may be uninhabitable by humans by 2050.[7] Forced migration resulting from climate change has already been observed in other PICTs, such as Papua New Guinea's Cartaret Islands, which began experiencing forced migration from climate change over a decade ago.[8]

Subsection 1.1.2: Climate Change in Oceania

Of the myriad of possible impacts of climate change in Oceania, rising sea levels, increased ocean temperature, and ocean acidification are likely to affect habitability the most across the region. The combination of these threats complicates the ability of at-risk populations to enact adaptation measures and remain at home in the long term.

Sea Level Rise

Sea level rise threatens the habitability of Oceania as some low-lying islands may "sink" into the ocean. The IPCC predicts that sea levels will rise between 0.4 m and 0.84 m by 2100, relative to baseline levels from 1986-2005. Many atoll islands, for instance, never exceed two meters in elevation above average sea level. While other states may not experience the impacts of flooding the same way, rising sea levels threatens to salinize freshwater sources. Inundation of fresh water sources impacts the ability of local populations to sustain themselves while also adversely impacting crop and livestock cultivation.[9] [10]

Increasing Ocean Acidity and Warmer Ocean Temperatures

The world's oceans take on an undue role to mitigate the impacts of greenhouse gases emissions, absorbing 93% of the heat trapped by atmospheric carbon dioxide.[11] As a result, oceans are becoming more acidic, oxygen levels are decreasing, currents are shifting, and sea surface temperatures are on the

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[6] "How Does Climate Change Affect Migration in the Pacific? - Research and Education to Reduce Environmental Risks" (United Nations University - Institute for Environment and Human Security (UNU-EHS), n.d.), https://unfccc.int/files/science/workstreams/research/application/pdf/part2_unu-ehs_oakes_vandergeest_poster.pdf

[7] "Chapter 3 — Global Warming of 1.5 °C," accessed May 12, 2020, https://www.ipcc.ch/sr15/chapter/chapter-3/.

[8] "Carteret Islanders - First Climate Refugees," *Solomon Times*, May 6, 2009, https://www.solomontimes.com/news/carteret-islanders--first-climate-refugees/3964.

[9] "Observations: Oceanic Climate Change and Sea Level." Observations: Oceanic Climate Change and Sea Level, by N. L. BINDOFF et al., IPCC, 2007, pp. 385–432, www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter5-1.pdf.

[10] IPCC, "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities," https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/.

[11] M. Barange et al., "Impacts of Climate Change on Fisheries and Aquaculture: Synthesis of Current Knowledge, Adaptation and Mitigation Options," *FAO Fisheries and Aquaculture Technical Paper (FAO) Eng No. 627*, 2018, https://agris.fao.org/agris-search/search.do?recordID=XF2018002008.

rise. Ocean acidification further threatens the distribution of fish, the survival of sea coral, and the predictability of weather patterns.

The combination of a coral bleaching and altered distribution of fish populations in Oceania is expected to have a detrimental effect on subsistence and commercial fisheries. Oceania is home to the largest tuna fishery on the planet, with over half of the world's tuna stocks native to the region and accounting for approximately 60% of global tuna catch annually.[12] [13] The region's large Exclusive Economic Zones (EEZs) provide an economic backbone for Oceania, with tuna fisheries generating approximately $7 billion annually and contributing to 10% of regional GDP.[14] Countries sell access to the tuna resources within their EEZs to extra-regional entities as a key source of domestic revenue. This is a particularly prominent source of income for Kiribati (constituting 42% of government revenue), Nauru (17% of revenue), and Tuvalu (11% of revenue).[15] A 2017 study by the Nippon Foundation found that if emissions continue under a 'business as usual' scenario, Oceania can expect to lose between 50-80% of its marine species by 2100.[16] Within the next 30 years, the Cook Islands, Federated States of Micronesia, Niue, and Tuvalu are expected to undergo a 50% decrease in their maximum fisheries catch.[17]

Aside from the economic and ecological losses to Oceania's fisheries caused by climate change, there will also be regional inequities in how these losses are experienced by Pacific national economies. Climate change in Oceania's commercial tuna fishery will produce distinct winners and losers. Tuna are highly mobile species that favor warm currents and migrate across twenty Pacific Island EEZs and international waters. As climate change prompts a shift in currents, tuna are expected to move in alignment with warmer waters. In the short term, states such as Fiji, Vanuatu, Cook Islands, French Polynesia, Tuvalu, and Kiribati will benefit from increased numbers of tuna in their EEZs. In comparison, nations such as Palau that have traditionally benefited from an abundance of tuna in their EEZs will see their economic staple diminish as tuna move eastward. In the long term, as tuna migrate east they may vacate Pacific Islands' EEZs to the point where these nations' EEZs are no longer profitable tuna fisheries at all, which will have significant negative impacts on national economies, unemployment, and possibly migration to islands where tuna fisheries remain functional and profitable.

Additionally, changing weather patterns could exacerbate issues with the food chain by increasing the frequency of severe weather events as well as changing existing precipitation patterns. Combined with the threat of saltwater inundation, irregular precipitation patterns threaten the long-term viability of vital agricultural activities. As such, the less predictable peripheral aspects of climate change may represent a greater threat to the survival of regional populations than sea level rise.

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[12] "Sustainable Fishery in the Pacific Saves Global Tuna Stocks and Small Islanders' Livelihoods," Global Environment Facility, March 1, 2019, https://www.thegef.org/news/sustainable-fishery-pacific-saves-global-tuna-stocks-and-small-islanders-livelihoods.
[13] "Disappointing Outcome at Pacific Fisheries Meet," accessed May 12, 2020, https://thediplomat.com/2014/12/disappointing-outcome-at-pacific-fisheries-meet/.
[14] "Sustainable Fishery in the Pacific Saves Global Tuna Stocks and Small Islanders' Livelihoods."
[15] Robert Gillett, *Marine Fishery Resources of the Pacific Islands*, FAO Fisheries and Aquaculture Technical Paper 537 (Rome: Food and Agriculture Organization of the United Nations, 2010).
[16] "Pacific Island Countries Could Lose 50 -- 80% of Fish in Local Waters under Climate Change," ScienceDaily, accessed May 12, 2020, https://www.sciencedaily.com/releases/2017/11/171115133853.htm.
[17] Rebecca G. Asch, William W. L. Cheung, and Gabriel Reygondeau, "Future Marine Ecosystem Drivers, Biodiversity, and Fisheries Maximum Catch Potential in Pacific Island Countries and Territories under Climate Change," *Marine Policy* 88 (February 1, 2018): 285–94, https://doi.org/10.1016/j.marpol.2017.08.015.

Section 1.2: Understanding Migration in Oceania

The purpose of this study is to investigate the impact of climate change as a driver of migration in Oceania and better understand the subsequent effects of this regional upheaval. As climate change threatens further damage to the region through rising temperatures and sea levels, ocean acidification, and other related challenges, it is increasingly likely that Oceanic populations may increasingly need options for relocation in the next thirty years.

Subsection 1.2.1: Framing the Problem

In the face of climate change impacts, PICTs are developing national strategies to address options for climate change adaptation and mitigation. Nonetheless, such measures may not prove effective enough to prevent the need for populations to be relocated in the wake of increased environmental threats. Policymakers at all levels are having to choose to integrate plans for managed retreat into local strategies or, often implicitly, prepare to deal with the consequences of forced migration. Despite the regional preference for adaptation described in Part 2, this study focuses on the effects of migration in the region.

This study also focuses on climate change as a long-term, slow-onset natural disaster requiring longer-term commitments and permanent actions. Rather than integrating the consequences of sudden-onset natural disasters in the region as part of this analysis, the emphasis on this study is on the effects of climate change in the form of sea level rise, ocean acidification, and other impacts mentioned previously. The presence of climate change as a slow-onset natural disaster has the potential to interact with other sudden-onset disasters, such as storms and cyclones, which may precipitate rapid migration. However, for the purpose of this study, we focus primarily on the consequences of climate change as a slow-onset potential driver of migration.

Due to variability with projections for impacts of climate change effects and the role of adaptation and mitigation, this study makes a set of key assumptions which inform the subsequent analysis. In addition to the preference for migration as an option to deal with climate change, compared to adaptation or mitigation, this study assumes that over the long-term:

1. Unabated climate change will result in a forced migration or managed retreat within Oceania for some PICT populations;
2. Migration occurs at three levels: intra-nationally, intra-regionally, and extra-regionally; and
3. Migration is inevitable for at least some communities within Oceania, but may ultimately be inclusive of the entire Oceania region.

Subsection 1.2.2: Study Methodology

Data collection for this report was created from a mix of content of content analysis and key informant interviews. First, we read UN databases, historical documents and agreements pertaining to Oceanic migration, the ever-developing decisions and work to combat climate change on the international level, legal frameworks for migration in various nations and polities, and existing analyses on relationships, both domestic and international, within and surrounding Oceania. There is little direct analysis of pre-existing climate migration policies because this category of mobility is new, and the international community has yet to come to a consensus on the scope, limitations, and entitlements that this category

entails. As a result, this report pieces together different existing work to demonstrate how climate migration would most likely operate under the current laws and norms in place.

Second, we conducted interviews with representatives currently working to address the uncertainty around climate migration in Oceania. Representatives included various country delegations to the UN dealing specifically with climate change, members of the United Nations Trust Fund for Human Security (UN-TFHS), representatives of specific island-nations within Oceania, officers for the UN Department of Political and Peacebuilding Affairs, and representatives of the new UN climate-security-migration group. Each of the interviewees worked in a specific area pertaining to climate change and/or Oceania and provided insights that allowed us to further piece together the likely climate migration scenario for Oceania. For example, Respondent A worked with climate security and understood which global powers were willing to work toward a consensus and which rejected climate science altogether. The respondent provided insight into the overall international climate debate and the likely movements from the global powers depending on certain domestic factors. Conversely, Respondent D worked within Oceania and understood both the domestic forces within the island-nations as well as their relationships with one another.

While many of the interviewees overlapped in their regional expertise, each respondent provided a unique point of view and vital insight for the researchers. An important note on this research: Although the research team was able to conduct virtual interviews with a number of respondents, many interview opportunities were lost as a result of the COVID-19 virus and travel cancellations to various locations. When the pandemic ends, further primary research should be conducted on the ground in Oceania to further prepare the world for this new climate migration category.

Through these methods, the research team found the United Nations Trust Fund for Human Security's (UN-TFHS) Oceania group report that labeled five island-nations as the primary recipients of UN aid for climate change in Oceania. These nations are: Kiribati, Republic of the Marshall Islands, Tuvalu, Vanuatu, and Fiji (Figure 2). The UN-TFHS Oceania group chose these five nations because they are four of the most at-risk nations and Fiji is the regional leader. In addition, each of these five nations represents a different form of climate migration. The current government of Kiribati advocates more for mitigation as opposed to adaptation and migration. The Marshall Islands, as a member of a Compact of Free Association (COFA), are a prime example of extra-regional migration as their citizens have the opportunity to move to the United States. Tuvalu advocates for the preservation of culture and sovereignty of the island-nations that are forced to migrate. In this respect, they champion intra-regional migration to maintain their authority and identity as Pacific Islanders. Vanuatu agrees with Tuvalu and supports intra-regional migration, but also stresses the importance of internal migration, as many of their citizens move from the outer islands into the capital city. Finally, Fiji also advocates for intra-regional migration and serves as the host for many of the smaller island-nations that are forced to migrate but wish to remain within Oceania.[18]

[18] Interviewee #4, virtual interview by researchers, March 2020

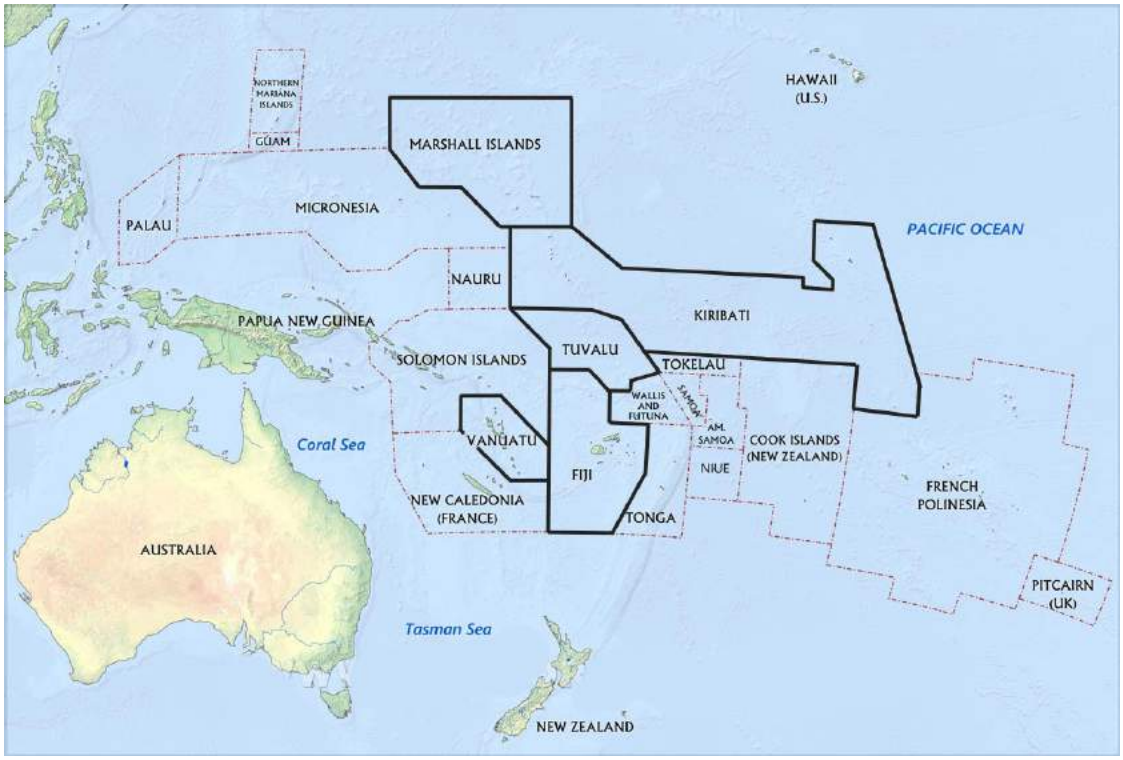

Figure 2. UN-TFHS focus nations are outlined. Map adapted from FreeWorldMaps.net

Throughout this report, the research team analyzes many facets of migration in Oceania and highlights these five nations within each discussion. Far too often, studies on climate change in Oceania ignore the perspectives of regional policymakers in regards to possible responses to the effects of climate change.[19] Interviews to supplement more holistic research were an attempt by the research team to be inclusive to more local voices, which was ultimately limited by the team's inability to travel for primary research interviews.

[19] Amy Louise Constable, "Climate Change and Migration in the Pacific: Options for Tuvalu and the Marshall Islands," *Regional Environmental Change* 17, no. 4 (April 1, 2017): 1029–38, https://doi.org/10.1007/s10113-016-1004-5.

Part 2: Migration in the Face of Climate Change

To accurately estimate expected migration in Oceania, it is necessary to first identify which populations are at most risk. Secondly, it must be determined if retreat is possible within the same island, the same country, or intra-regionally. If none of these are possible and adaptation and mitigation action is not adopted or unsuccessful, extra-regional migration becomes the most likely course.

Section 2.1: Identifying At-Risk Populations

As a result of the likely effects of climate change on Oceania, it is necessary for policymakers to ascertain which islands and populations are the most vulnerable to possible future conditions induced by the changing climate.

Distance from coastline and juxtaposed images of population density and topographic data are the most reliable measure of risk available today. Though there is a large standard deviation with this data, most official policy plans of island nations in the region - specifically, Vanuatu- note that there is not an abundance of strong data on this topic and therefore predictions of this type are difficult to precisely determine.

While this method ignores coastline and island morphology, it provides a combination of empirical values along with visual data. When paired with juxtaposed images of population density and topographic data, distance from coastline can provide significant insight into which populations are at risk. This is particularly evident for atoll states, such as Kiribati and Tuvalu, which have 100% of their population within 1 kilometer of the coast and an average elevation of less than 5 meters. For larger islands, such as Tutuila, the main island of American Samoa, juxtaposing population density and elevation can provide further insights into the locations and numbers of at-risk individuals. The figures on the next page represent how the juxtaposition of such maps effectively portrays at-risk populations.

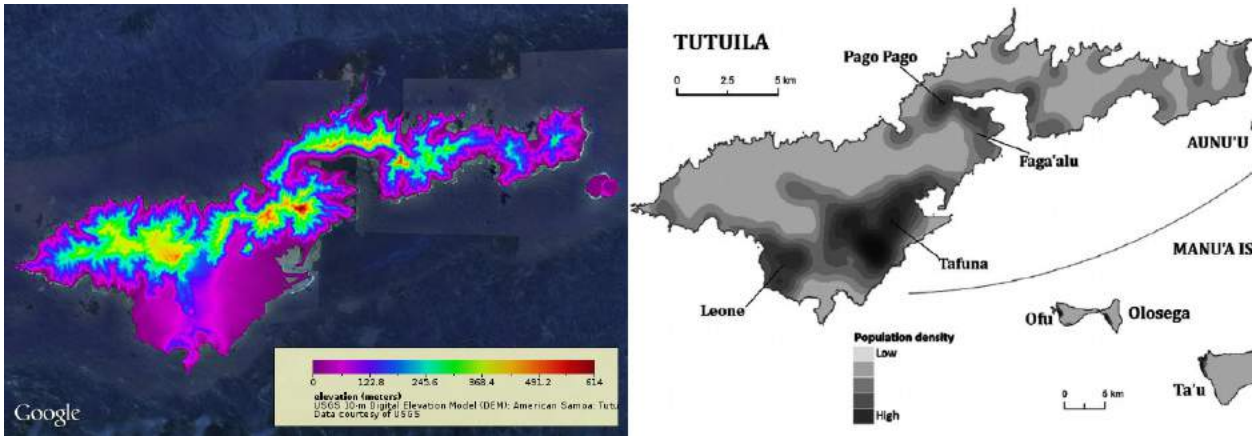

Figure 3. Topographic image of Tutuila[20] and image of population density of Tutuila[21]

The image on the left represents Tutuila's topography, showing a central spine running the length of the island with a highpoint of over 2,000 feet along low-lying areas adjacent to the coast. The image on the right showcases the population density of Tutuila in grayscale. The darkest areas in the right image represent the major settlements on Tutuila, including the capital of American Samoa, Pago Pago.

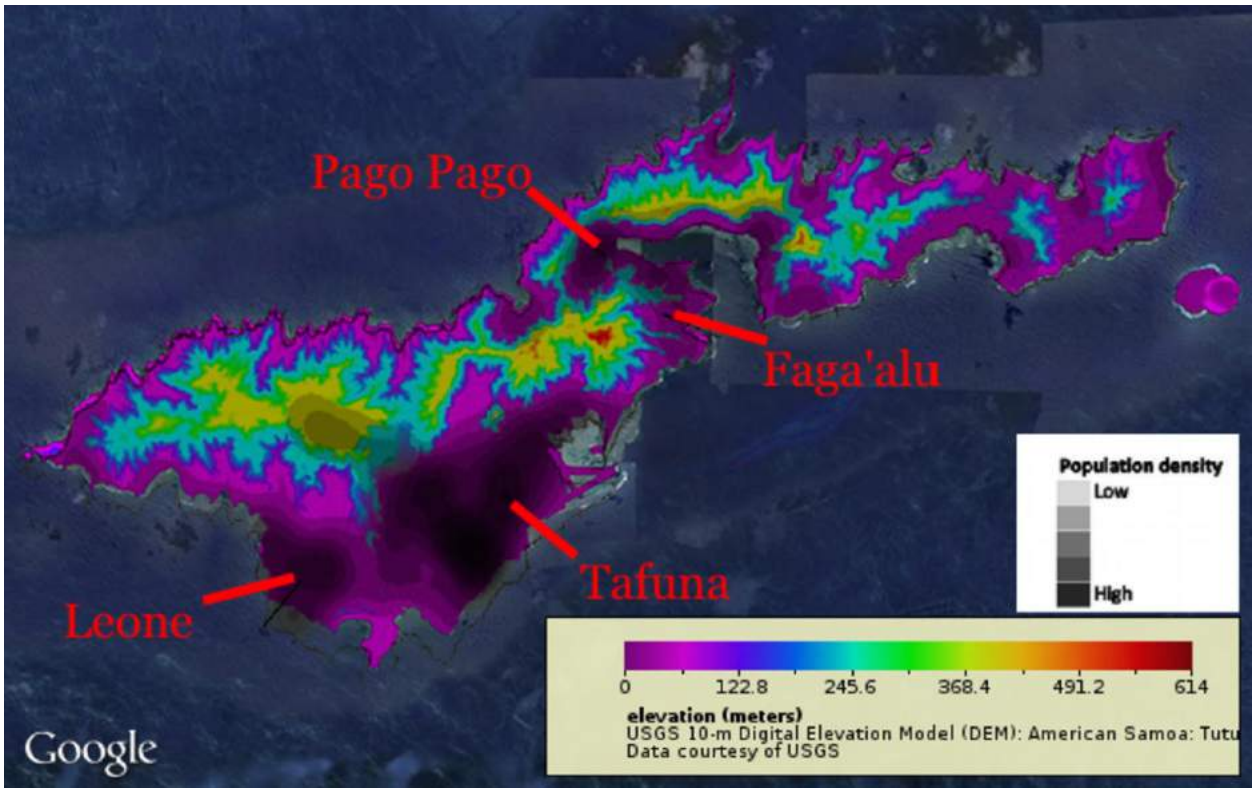

Figure 4. Juxtaposition of images in Figure 3.

[20] *USGS 10-m Digital Elevation Model (DEM): American Samoa: Tutuila*, www.pacioos.hawaii.edu/metadata/usgs_dem_10m_tutuila.html.
[21] Public Library of Science (PLoS). https://doi.org/10.1371/journal.pntd.0003297.g003

The juxtaposition of the images from Figure 3 in Figure 4 showcases the at-risk nature of some populations on Tutuila. Furthermore, Figure 4 elucidates how the majority of populated areas on Tutuila are in low-lying coastal areas. The location of the settlements on Tutuila is likely to result in the relocation of significant populations as sea levels rise. However, Tutuila may represent a case for internal migration as the higher elevation areas are sparsely populated, with the exception of A'oloau which is visible on the map as the populated area north of Leone, extending from Tafuna.

Additionally, juxtaposition of the topographic and population density maps allows insight into which islands may have overpredicted populations at risk and vice versa. Table 2 breaks island groups into three tiers of risk level based on the percent of population that is within one kilometer of the coastline. The tiers are:

- Tier 1: 75-100% of population within 1km of coastline
- Tier 2: 50-75% of population within 1km of coastline
- Tier 3: 0-50% of population within 1km of coastline

Table 2. Table of population within 1 kilometer of the coast. Adapted from data by Pacific Communities.[22]

PICT	Pop. % w/in 1 km	Pop. w/in 1km	Total Population	Threshold
Kiribati	100	109,693	109,693	1
Tuvalu	100	109,640	109,640	1
Marshall Islands	100	53,158	53,158	1
Pitcairn Islands	100	50	50	1
Tokelau	100	1,500	1,500	1
Nauru	93	9,206	9,899	1
Palau	93	16,510	17,753	1
Cook Islands	91	13,588	14,932	1
Fed. St. of Micronesia	89	91,059	102,314	1
Tonga	84	84,859	101,023	1
French Polynesia	79	211,092	267,206	1
Northern Mariana	69	37,243	53,976	2
Wallis and Futuna	67	8,231	12,286	2
Solomon Islands	65	335,613	516,328	2
Vanuatu	64	149,967	234,324	2
Samoa	61	114,843	188,268	2
American Samoa	61	33,618	55,112	2
New Caledonia	57	153,615	269,500	2
Guam	30	48,219	160,730	3
Fiji	27	227,984	844,386	3
Niue	25	360	1,440	3

Including elevation and population density shows that a Tier 2 state such as the Wallis and Futuna Islands may have a much higher at-risk population due to a low average elevation on Wallis Island, which hosts about two-thirds the territory's population. Conversely, with 93% of its population within one kilometer of the coastline, Nauru is defined as a Tier 1 PICT, but it is a rock island with an approximately 30-meter plateau just off the coast. Internal migration appears quite feasible in the case of Nauru.

The figure below represents the combination of the aforementioned factors in determining at-risk populations to sea-level rise by 2050. Notably, a significant portion of the population of the Marshall Islands, a COFA state, is identified as at-risk based on these data. Compounding aspects of sea-level rise, such as salinization of freshwater sources, are not included in this figure, likely resulting in an underestimation of at-risk populations.

[22] "Pacific Coastal Populations." Story Map Journal. Pacific Community, n.d. https://pacstats.maps.arcgis.com/apps/MapJournal/index.html?appid=2b5cad0e20e642de96db85b377fc128c#.

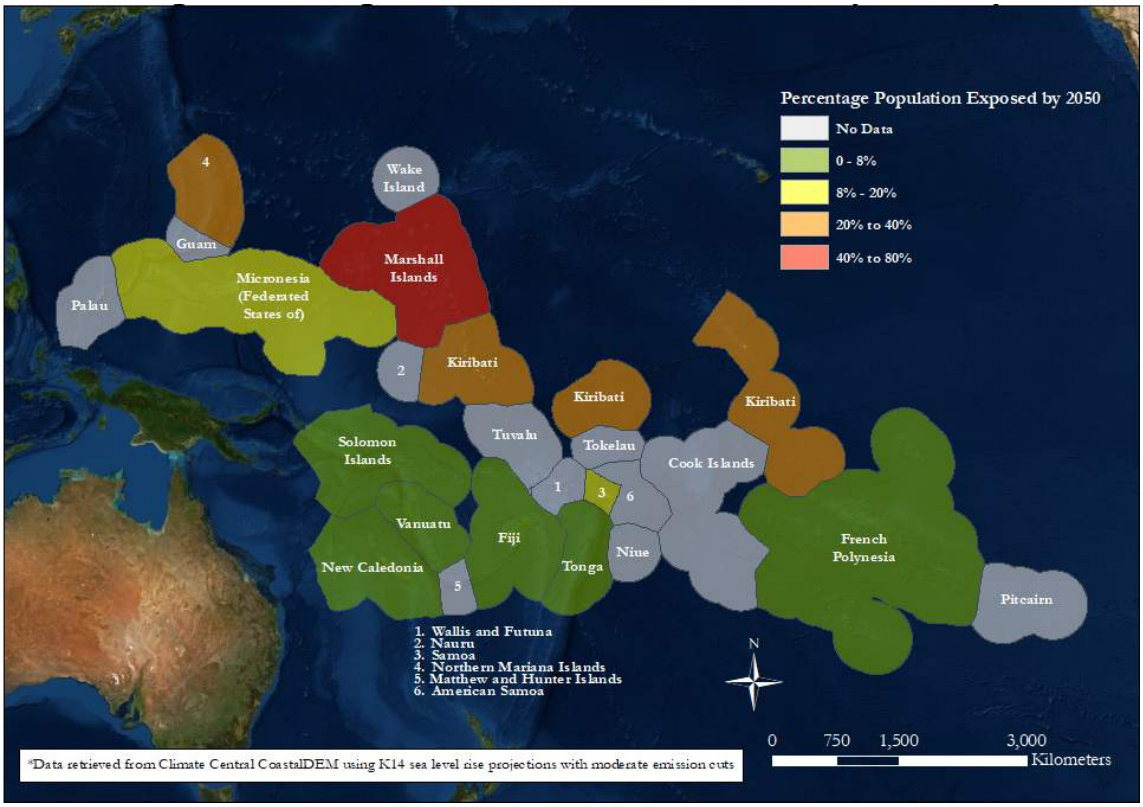

Figure 5. Population exposure due to sea level rise.

Additionally, regardless of this study's perception of their risk, local populations have a preference to remain at home for reasons of culture and identity. A recent study of local populations in Tuvalu found that forecasts of future uninhabitability had a limited effect on migration.[23] Juxtaposed with aforementioned issues with identifying at-risk populations, preferences to remain and endure environmental hardship increase local resiliency. Yet, they may also result in forms of economic and other migration as economies are battered by issues such as depleted fish stocks that negatively affect the traditional livelihoods of local populations. Finally, forecasts regarding sea level rise are often disputed in terms of pace and breadth,[24] while studies on salinization, changing weather patterns, changes in fish stocks, etc. in Oceania are limited in quantity and lack prescriptive power.

Section 2.2: Migration Responses to Climate Change

Migration in Oceania can only occur in three possible ways: a) internal migration: retreat within an island or country; b) intra-regional migration: retreat to another country in Oceania; or c) extra-regional migration: retreat to a country outside of Oceania. The following sections will detail the current migration patterns under these three avenues of migration and issues that remain unaddressed by the international community.

[23] Mortreux, Colette & Barnett, Jon. (2009). Climate change, migration and adaptation in Funafuti, Tuvalu. Global Environmental Change.

[24] Robinson Meyer, "A Terrifying Sea-Level Prediction Now Looks Far Less Likely," *The Atlantic*, January 4, 2019, https://www.theatlantic.com/science/archive/2019/01/sea-level-rise-may-not-become-catastrophic-until-after-2100/579478/.

Subsection 2.2.1: Internal Migration

Internal migration can occur either when there is enough distance from the coastline to move inward or when land at a higher elevation is available for settlement on the same island or on another island in the same country.

Vanuatu is the main country with a successful internal migration structure as they have created the National Policy on Climate Change and Disaster-Induced Displacement which includes planned "internal displacement" as one of the main responses to gradual climate change threats. The nation consists of 83 islands. Citizens living on the smaller islands are moving inward to the capital city, Port Vila. The nation has experienced a recent wave of urbanization and many younger people on the outer islands are moving to the capital both for economic and environmental purposes.[25]

This raises a two-fold issue. First, Vanuatu only has a finite amount of high elevation space available for habitation; and the space that is available is contingent upon both mitigation and adaptation of climate change practices. If the highest carbon output nations do not adjust their industrial practices, all of Vanuatu will need to migrate because all of the habitable islands will sink below the ocean surface. Second, half of the urban populations in Vanuatu and other Melanesian urban centers live in poverty in informal settlements. A continuous increase in population in these urban centers will only increase the number of informal settlements as the government struggles to support those already living in its center.

For many of the atoll islands such as Kiribati and Tuvalu, this option is not feasible as elevations on the islands do not differ enough protection to result in hospitable conditions for the entire population. This was confirmed during interviews for this study. Respondents D and E work closely with the governments in Oceania for the UN-TFHS and they described particular challenges in this regard with the government of Kiribati. The leaders are pushing for only mitigation policies as opposed to adaptation, and as a result any discussion of migration is challenged at the highest levels of government. They advocate for the safety of their people, but only in a way that will allow for Kiribati to remain both a sovereign nation and physically intact, disregarding the reality that these two options are almost mutually exclusive.

While internal migration is important and PICTs such as Vanuatu are performing it successfully, this analysis will focus on intraregional and extra-regional migration as a primary focus for the United States and our partners.

[25] "National Policy on Climate Change and Disaster Induced Displacement" (Republic of Vanuatu, 2018), https://www.iom.int/sites/default/files/press_release/file/iom-vanuatu-policy-climate-change-disaster-induced-displacement-2018.pdf.

Subsection 2.2.2: Intra-Regional Migration

Figure 7. The three subregions of Oceania. Map obtained from Britannica Online.

Intra-regional migration occurs when people from one island to another within the same subregion or within the larger region of Oceania as a whole (Figure 7). This can happen on two levels: within Oceania as a collective unit and within each of the three smaller subregions: Melanesia, Polynesia, and Micronesia. Though there is an abundance of research about migration within the smaller sub-regions, this analysis will focus on the movement within Oceania as a region for several reasons. First, most researchers include Papua New Guinea as the largest nation in Melanesia, but this analysis does not factor Papua New Guinea into the larger Oceania region, in alignment with the decisions on other research teams for this project. Second, the five nations of focus for this analysis are spread across the three subregions and require a general lens of Oceania as a unit.

The basis for all intra-regional migration is the 2018 Boe Declaration. This agreement was posed by the Pacific Islands Forum, the intergovernmental organization aimed to increase peace and cooperation between the nations and territories of the Pacific Ocean, and outlines the major goals and expectations of Oceania as a whole in regard to climate change. The declaration, a reaffirmation of the 2000 Biketawa Declaration, states that climate change is the single most pervasive threat to the lives of the people of Oceania.[26] [27]

The Boe Declaration does not specifically detail migration policy, but it binds the island nations together as one political unit. In this unit, some members advocate for intra-regional migration as the best option for Oceania as a whole. The primary destinations for most intra-regional migration are Fiji, New Caledonia, and French Polynesia. Since the 2000 coup d'état, the Fijian government has been a large advocate for regional solidarity within Oceania in order to offset Australian and New Zealand influence

[26] Murray Ackman, Anna Naupa, and Patrick Tuimalealiifano, "Boe Declaration: Navigating an Uncertain Pacific," October 3, 2018, https://www.lowyinstitute.org/the-interpreter/boe-declaration-navigating-uncertain-pacific.
[27] "Boe Declaration Action Plan" (Pacific Islands Forum, October 2019).

over the inner workings of the region.[28] Fiji works multilaterally with different UN groups focusing on climate change and bilaterally with the different island nations to determine the location and timeframe for climate migrants.

Through this engagement, Fiji has offered two primary migration routes to other nations in Oceania. The first route is through a pre-existing community within Fiji. In the capital, Suva, there is a large Tuvaluan population and there are discussions about joining this population in Suva if forced migration becomes the reality for the islands of Tuvalu. The second route is through the purchase of Fijian land. In 2014, the government of Kiribati, under the previous government led by the outspoken Anote Tong, purchased land in Fiji for future security, in case their population was forced to migrate. While the current government in Kiribati rejects this purchase and criticizes its predecessor, other Pacific Island nations and international organizations are waiting for another government shift to thaw relations between Kiribati and those island nations advocating for adaptation as well as mitigation.

While New Caledonia and French Polynesia have agreed to serve as hosts for Vanuatu, Fiji is the main actor working with the UN and other international organizations to spearhead a concerted effort to plan for migration as a region. Other than these three primary locations, the next best destinations for forced migrants will be extra-regional.

Subsection 2.2.3: Extra-Regional Migration

Extra-regional migration occurs between the states of Oceania and actors outside the region. The primary host states of extra-regional migration are the United States, France, New Zealand, and Australia.

The United States has COFAs with three states, maintains two territories, and has a commonwealth in the region. Australia maintains deep ties to Nauru, but also has developed recent ties with a number of Commonwealth states in the region. New Zealand, likewise, has significant ties to a number of the Commonwealth states in addition to its own ties with island territories. France maintains three overseas territories in Oceania: New Caledonia, Wallis and Futuna, and French Polynesia. Finally, the UK has limited its engagement in the area, but the Queen is legally the head of state in a handful of Oceanic states, including Pitcairn. These ties are not immaterial; they represent historical linkages binding the people of the region to extra-regional states.

Australia and New Zealand are also expanding their roles in the region by forming strong regional connections. New Zealand has begun to form significant ties by a combination of the provision of citizenship, establishment of specialized quota systems, and the provision of special temporary enjoyment privileges that provides for short-term employment opportunities. Australia's connections to Oceania are largely through Pacific Islanders who obtain citizenship in New Zealand and subsequently migrate to Australia through existing visa-free travel arrangements. However, within the last two decades Australia has increased its programs that allow work and other permits to Pacific Islanders.

Data on migration from independent nations in Oceania to the United States is limited, but data freely available from the Department of Homeland Security is detailed below in Table 3 and Table 4. Several nations are not listed on the DHS tables, yet are counted in the tabulation at the regional level. Persons

[28] Amy Searight, Brian Harding, and Kim Mai Tran, "Strengthening the U.S.-Pacific Islands Partnership," *Center for Strategic & International Studies*, May 2019, 33.

from Freely Associated States under the Compacts of Free Association -- the Federated States of Micronesia, Marshall Islands, and Palau -- are omitted from these tables and discussed in Section 3.2.

Table 3. Persons obtaining lawful permanent residence in the United States, adapted from Table 3 of DHS Yearbook of Immigration Statistics 2018.[29]

PICT	2016	2017	2018
Cook Islands	Data deficient	Data deficient	Data deficient
Fiji	866	805	730
Kiribati	9	Data withheld by DHS	Data withheld by DHS
Nauru	Data deficient	Data deficient	Data deficient
Niue	Data deficient	Data deficient	Data deficient
Samoa	219	194	179
Solomon Islands	Data deficient	Data deficient	Data deficient
Tonga	283	262	225
Tuvalu	Data deficient	Data deficient	Data deficient
Vanuatu	Data deficient	Data deficient	Data deficient
Oceania	5,588	5,071	4,653
Global Total	1,183,505	1,127,167	1,096,611

[29] "Table 3. Persons Obtaining Lawful Permanent Resident Status by Region and Country of Birth: Fiscal Years 2016 to 2018," Department of Homeland Security, December 19, 2019, 3, https://www.dhs.gov/immigration-statistics/yearbook/2018/table3.

Table 4. Persons naturalized in the United States, adapted from Table 21 of DHS Yearbook of Immigration Statistics 2018.[30]

PICT	2016	2017	2018
Cook Islands	Data deficient	Data deficient	Data deficient
Fiji	996	841	875
Kiribati	Data deficient	Data deficient	Data deficient
Nauru	Data deficient	Data deficient	Data deficient
Niue	Data deficient	Data deficient	Data deficient
Samoa	192	164	168
Solomon Islands	Data deficient	Data deficient	Data deficient
Tonga	Data deficient	Data deficient	Data deficient
Tuvalu	Data deficient	Data deficient	Data deficient
Vanuatu	Data deficient	Data deficient	Data deficient
Oceania	3,953	3,327	3,762
Global Total	753,060	707,265	1,096,611

Other possible host states of Pacific Islanders include China, India, and Indonesia. Most existing avenues of extra-regional migration occur as part of economic migration on specified quotas. Forms of extra-regional migration that are not directly based on an economic opportunity are then directly related to family ties.[31]

While existing forms of extra-regional migration in Oceania are most frequently based on economic incentives, the demands required by a slow-onset disaster in the form of climate change would quickly surpass existing capabilities. With slightly over 2 million people living within Oceania, the migration of a significant portion of the population would dwarf the quota systems currently in use by host states. Furthermore, expected population growth of 150-200% in Melanesia will exacerbate the distance between current regional capabilities and likely future requirements.[32] As such, the role of

[30] "Table 21. Persons Naturalized by Region and Country of Birth: Fiscal Years 2016 to 2018," Department of Homeland Security, December 23, 2019, 21, https://www.dhs.gov/immigration-statistics/yearbook/2018/table21.
[31] Lee, Helem, and Steve Tupai Francis, eds. Migration and Transnationalism: Pacific Perspectives. ANU Press, 2009. p10.
[32] Bruce Burson and Richard Bedford, "Clusters and Hubs: Toward a Regional Architecture for Voluntary Adaptive Migration in the Pacific," *The Nansen Initiative*, 2013, https://www.pacificclimatechange.net/document/clusters-and-hubs-toward-regional-architecture-voluntary-adaptive-migration-pacific.

extra-regional states, especially those likely to host, is paramount in ensuring the safety of at-risk populations.

Section 2.3: Migration Decision-Making

In order to further understand the nature of migration in Oceania, we considered it to be important to analyze the interconnected nature of Oceania's history, the legal structures dictating movement in the region, and the preferences of PICTs in migration.

Subsection 2.3.1: Legal Frameworks for Migration in Oceania

The purpose of this section is to examine the legal frameworks in place for migration pertaining to Pacific Island countries and territories. We begin with a description of the interconnectivity among PICTs in international laws and agreements governing movement both within Oceania and to extra-regional countries, primarily the United States and its three territories in Oceania, followed by analysis of legal structures of migration pertaining to the five focus countries: Kiribati, Tuvalu, the Republic of the Marshall Islands, Vanuatu, and Fiji.

Subsection 2.3.1.1: The United States and its Compacts of Free Association

The Compacts of Free Association between the United States, the Federated States of Micronesia, Republic of the Marshall Islands, and the Republic of Palau are agreements dictating the bilateral relationship between the United States and each of these three nations. The COFAs afford unique migration privileges for citizens of the Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau, which are detailed below.

Historical Perspective: From the Trust Territory of the Pacific Islands (TTPI) to Compacts of Free Association

On 2 April 1947, the United Nations passed Resolution S/RES/21 that established the Trust Territory of the Pacific Islands and the TTPI was ratified by the United States Congress on 18 July 1947.[33] Under the League of Nations, Japan held territory in the Pacific, which included modern day Marshall Islands, the Federated States of Micronesia, Palau, and Northern Mariana Islands. After World War II, Japan "ceased to exercise any authority in these islands"[34] and these territories under TTPI were placed under the administering authority of the United States. TTPI was initially administered by the United States Navy in Guam then later was transferred to the United States Department of the Interior office located in Saipan, on the Northern Mariana Islands.[35]

The Pacific Island members of TTPI were divided into seven Districts, in alignment with previous colonial divisions: the Marshall Islands District, the Ponape District, the Truk District, the Mariana Islands District, the Yap District, and the Palau District, with the Kosrae District added later.

[33] United Nations Security Council Resolution S/RES/21
[34] United Nations Security Council Resolution S/RES/21
[35] "Trust Territory of the Pacific Islands. 7/18/1947-12/22/1990," accessed May 12, 2020, https://catalog.archives.gov/id/10478927.

Beginning in 1986, the United States ended administration of the Marshall Islands, Chuuk, Yap, Kosrae, Pohnpei, and Mariana Island Districts, with the Marshall Islands released from TTPI on 21 October and the Mariana Islands on 3 November.

The Marshall Islands entered into a Compact of Free Association with the United States in 1983 and gained independence as the Republic of the Marshall Islands when the Compact with the United States entered into force in 1986.[36] The United States and the Marshall Islands renegotiated a COFA from 1999-2003, and the amended Compact entered into force in 2004.[37] The Federated States of Micronesia also gained independence as the COFA between the United States and the Federated States of Micronesia entered into force in 1986, with an amendment in 2004.[38] Both the Republic of the Marshall Islands and the Federated States of Micronesia gained member state status at the United Nations in 1991. Palau, after voting to remain separate from the Federated States of Micronesia in 1978[39], became an autonomous republic in 1981. Palau established a COFA with the United States in 1982, which entered into force in 1994 and granted independence from TTPI and the United States.[40] Palau became a United Nations member state in 1994.

COFAs and the Freely Associated States (FAS)

The FAS-United States relationship through the COFAs is a mutually beneficial relationship, covering government relations, economic relations, and security and defense relations. In exchange for military protection and economic assistance through grants and support of Compact Trust Funds, the United States maintains military access to the land, air, and sea around the FAS.

Under the Compacts, Freely Associated States are recognized by the United States as self-governing nations with authority to conduct their own foreign relations. This sovereignty is reflected in membership in the United Nations and in the Pacific Community, as well as FAS interactions with other nations, detailed in our peer report by the Grand Strategy team. The United States may limit FAS sovereignty if the United States determines that FAS foreign affairs behavior inhibits the ability of the United States to maintain defense and security responsibilities for the FAS, as required by the COFAs.

The COFAs with RMI, FSM, and Palau are set to expire soon, pending a renewed agreement between the United States and each respective nation. The COFAs for FSM and RMI are set to expire at the end of fiscal year 2023 and the Palau COFA is set to expire at the end of fiscal year 2024. After the first COFA with RMI and FSM expired on September 30, 2003, it set off a four-year long period of negotiations between the U.S. Department of State, the U.S. Department of the Interior (Office of Insular Affairs), and governments of RMI and FSM.[41] This process resulted in the amended COFAs with significant

[36] "U.S. Relations With Marshall Islands," *United States Department of State* (blog), accessed May 12, 2020, https://www.state.gov/u-s-relations-with-marshall-islands/.
[37] "U.S. Relations With Marshall Islands."
[38] "U.S. Relations With the Federated States of Micronesia," *United States Department of State* (blog), accessed May 12, 2020, https://www.state.gov/u-s-relations-with-the-federated-states-of-micronesia/.
[39] Brian Hunter, "Palau," in *The Statesman's Year-Book: A Statistical, Political and Economic Account of the States of the World for the Year 1996–1997*, ed. Brian Hunter, The Statesman's Yearbook (London: Palgrave Macmillan UK, 1996), 1010–11, https://doi.org/10.1057/9780230271258_143.
[40] "U.S. Relations With Palau," *United States Department of State* (blog), accessed May 12, 2020, https://www.state.gov/u-s-relations-with-palau/.
[41] "Compacts of Free Association," October 15, 2015, https://www.doi.gov/oia/compacts-of-free-association.

improvements to program oversight and accountability.[42] The relationship between the United States, Federated States of Micronesia, and Republic of the Marshall Islands has evolved in the decades since these COFAs were negotiated and with the evolving climate change crisis occurring in Oceania, it is worth tracking COFA negotiations to see what potential role climate change and migration may play in the negotiation process. If the COFAs are allowed to expire and not renewed, the FAS will lose economic assistance and potentially the special migration privileges into the United States detailed in the next section.

COFAs and Migration to the United States

As FAS citizens, travelers from the Federated States of Micronesia, Republic of the Marshall Islands, and Palau are given privileged rights of entry into the United States. For FAS citizens, no entry visa is required. They are able to live, work, or study in the United States, with work visa requirements waived by the United States yet are liable for deportation if deemed unable to support themselves.[43] COFA citizenship also does not equate to lawful permanent residency in the United States, nor does time spent in the United States count toward residency requirements for naturalization.

Migration from COFA nations to the United States, including its territories in Oceania, is a small percentage of movement from countries in Oceania. Individuals from COFA nations combined to account for only 1% of all persons obtaining lawful permanent residence from Oceania in the United States in 2018 (Table 5), and 2% of all persons naturalized from Oceania in the United States in 2018 (Table 6).

Table 5. Persons obtaining lawful permanent residence in the United States, adapted from Table 3 of DHS Yearbook of Immigration Statistics 2018.[44]

FAS	2016	2017	2018
Federated States of Micronesia	11	6	19
Republic of the Marshall Islands	32	23	23
Palau	14	13	7
Oceania	5,588	5,071	4,653
Global Total	1,183,505	1,127,167	1,096,611

[42] "The Marshall Islands and Micronesia: Amendments to the Compact of Free Association with the United States," accessed May 12, 2020, https://www.everycrsreport.com/reports/RL31737.html.
[43] Derek Grossman et al., *America's Pacific Island Allies: The Freely Associated States and Chinese Influence* (RAND Corporation, 2019), https://doi.org/10.7249/RR2973.
[44] "Table 3. Persons Obtaining Lawful Permanent Resident Status by Region and Country of Birth," 3.

Table 6. Persons naturalized in the United States, adapted from Table 21 of DHS Yearbook of Immigration Statistics 2018.[45]

FAS	2016	2017	2018
Federated States of Micronesia	67	53	34
Republic of the Marshall Islands	27	16	21
Palau	43	32	28
Oceania	3,953	3,327	3,762
Global Total	753,060	707,265	1,096,611

Subsection 2.3.1.2: Territorial Holdings of the United States

Three of the five United States territories (excluding Puerto Rico and the U.S. Virgin Islands) are located in Oceania: Guam, the Northern Mariana Islands, and American Samoa. The United States acquired Guam by deed of cession in 1898 at the end of the Spanish-American War, gained American Samoa in 1929 from Germany, and added the Northern Mariana Islands to its territorial holdings as part of the TTPI and officially became a territory in 1986. These three island territories were home to nearly 270,000 people as of July 2020 (Table 7).

Table 7. Population size of United States territories in Oceania.

U.S. Territory	Population, as of July 2020	Region
American Samoa	49,437[46]	Polynesia
Guam	168,485[47]	Micronesia
Northern Mariana Islands	51,433[48]	Micronesia

All persons born in Guam and the Northern Mariana Islands are citizens of the United States, while persons born in American Samoa are considered 'noncitizen nationals.' Residents of American Samoa have this designation, in comparison to the United States citizens on Guam and the Northern Mariana Islands, as a result of the territories' classification under the Immigration and Naturalization Act (INA).

[45] "Table 3. Persons Obtaining Lawful Permanent Resident Status by Region and Country of Birth," 3.
[46] "CIA World Factbook - American Samoa," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/print_aq.html.
[47] "CIA World Factbook - Guam," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/gq.html.
[48] "CIA World Factbook - Northern Mariana Islands," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/cq.html.

Guam and the Northern Mariana Islands are 'States' under the INA, while American Samoa is an 'outlying possession' of the United States.[49]

Individuals from these territories are able to travel freely between the United States territories and continental United States, including persons from American Samoa whose passports carry the disclaimer that "the bearer is a United States national and not a United States citizen."[50]

In terms of employment within the 50 states, individuals from Guam and the Northern Mariana Islands are able to work freely in the continental United States, with no stipulation for work visa requirements, due to their status as United States citizens. American Samoans also have the ability to work in the continental United States without a work visa, yet are prohibited from obtaining positions in the federal government that require citizenship.

Subsection 2.3.1.3: Territorial Holdings of France

The three French overseas territories in Oceania -- French Polynesia, New Caledonia, and Wallis and Futuna -- have their roots as colonial holdings and protectorates of France. The French acquired modern day Tahiti in 1842 and constituted the full island chain as French Polynesia, which became a territory of France, along with New Caledonia, in 1946. Wallis and Futuna followed in 1961.

The French approach to its territories manifests itself today in the idea of 'indivisibility of French citizenship,' where persons born in these three territories are fully vested French citizens, and by extension members of the European Union.[51] Their distinction as French citizens allows the nearly 600,000+ individuals (Table 8) living in French overseas territories freedom of movement between the other French territories, the French mainland, and the European Union. Within the French territories of Oceania, movement for the purpose of employment has been a significant driver of migration to New Caledonia from Wallis and Futuna and French Polynesia.[52]

[49] Burson, Bruce and Richard Bedford, Clusters and hubs: Toward a regional architecture for voluntary adaptive migration in the Pacific, The Nansen Initiative, 9 December 2013. https://www.pacificclimatechange.net/document/clusters-and-hubs-toward-regional-architecture-voluntary-adaptive-migration-pacific

[50] Michael Levenson, "American Samoans Should Be Granted U.S. Citizenship, Judge Rules," *The New York Times*, December 13, 2019, sec. U.S., https://www.nytimes.com/2019/12/13/us/american-samoa-us-citizenship.html.

[51] Bruce Burson and Richard Bedford, "Clusters and Hubs: Toward a Regional Architecture for Voluntary Adaptive Migration in the Pacific," *The Nansen Initiative*, 2013, https://www.pacificclimatechange.net/document/clusters-and-hubs-toward-regional-architecture-voluntary-adaptive-migration-pacif

[52] Burson and Bedford

Table 8. Population size of French territories in Oceania.

French Territory	Population, as of July 2020	Region
Wallis and Futuna	15,854[53]	Polynesia
New Caledonia	290,009[54]	Melanesia
French Polynesia	295,121[55]	Polynesia

Subsection 2.3.1.4: Territorial Holdings of the New Zealand and the United Kingdom

Tokelau was made a British protectorate in 1889, then was transferred to New Zealand in 1925. Tokelau is a non-self governing territory of New Zealand, and the estimated 1,647[56] residents of Tokelau are New Zealand citizens by birth with the same rights of travel as other Kiwis. As citizens of New Zealand, Tokelauans are not required to have a visa to enter, live, or work in New Zealand. Though not territorial holdings, both the Cook Islands and Niue are independent and self-governing states in free association with New Zealand, whose citizens are conferred citizenship in New Zealand at birth.[57] As Kiwi citizens, residents of the Cook Islands and Niue have the ability to enter, live, and work in New Zealand without restriction.

Pitcairn is the only inhabited island of the larger Pitcairn Islands Group, with approximately 50 residents.[58] In 1838, Pitcairn became the first British colony in Oceania and is the only remaining territory of the United Kingdom in Oceania today. Residents of Pitcairn are not full British citizens and residence on Pitcairn does not grant eligibility for a British passport.[59]

Subsection 2.3.1.5: Focus Countries and Legal Frameworks for Migration

Six prominent migration schemes exist in Oceania: New Zealand's Recognized Seasonal Employer (RSE) Scheme and the Pacific Access Category (PAC), Australia's Seasonal Worker Program (SWP) and the Pacific Labor Mobility Scheme, the Melanesian Spearhead Group (MSG) Skills Movement Scheme, and the United States' previously mentioned COFAs. In addition to several other nations, these agreements directly impact migration opportunities for citizens of this study's five focus countries: Vanuatu, Kiribati, Tuvalu, the Marshall Islands, and Fiji.

[53] "CIA World Factbook - Wallis and Futuna," n.d., https://www.cia.gov/library/publications/the-world-factbook/geos/wf.html.
[54] "CIA World Factbook - New Caledonia," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/nc.html.
[55] "CIA World Factbook - French Polynesia," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/fp.html.
[56] "CIA World Factbook - Tokelau," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/tl.html.
[57] Burson and Bedford
[58] "CIA World Factbook - Pitcairn Islands," accessed May 12, 2020, https://www.cia.gov/library/publications/the-world-factbook/geos/pc.html.
[59] "Pitcairn Islands Immigration - FAQ," accessed May 12, 2020, http://www.immigration.pn/FAQ.php.

The Recognized Seasonal Employer Scheme - New Zealand

New Zealand's RSE came into effect in April 2007 with the purpose of allowing "horticulture and viticulture industries to recruit workers from overseas for seasonal work when there are not enough New Zealand workers."[60] When first introduced, RSE included Samoa, Tonga, Kiribati, Tuvalu, and Vanuatu, with Solomon Islands added in 2010 and Papua New Guinea added in 2013.

Approved employers within RSE have permission from the government of New Zealand to recruit seasonal workers from the participating countries, and individuals from countries outside of the RSE may not be allowed to work in New Zealand under this program except for in extenuating circumstances. RSE workers also do not have the ability to transition from the short-term visa provided under RSE to residency in New Zealand.

Under the RSE Scheme, workers employed in New Zealand may stay in the country for seven months across an 11-month period, with the exception of citizens of Kiribati and Tuvalu, owing to the high cost and long distance of travel back home.

Due to "the success of RSE" according to the New Zealand government, the administrative cap on the number of workers admitted through the program has increased from the initial 5,000 workers to 14,400 as of the most recent reporting in October 2019.[61] Of the participating countries, in the 2017/2018 reporting disaggregated by country, Tonga and Samoa had the largest numbers of individuals entering New Zealand to work under the RSE Scheme (Table 9). Over the four years reported in Table 9, every participating country sent an increasing number of workers to New Zealand.

Table 9. Number of workers participating in the RSE Scheme, by sending country. Adapted from Government of New Zealand "Statistics for Recognized Seasonal Employers Arrivals" Table.[62]

Country	2014/2015	2015/2016	2016/2017	2017/2018
Kiribati	136	162	189	231
Samoa	1,238	1,454	1,690	1,878
Tonga	1,563	1,687	1,822	1,899
Tuvalu	70	64	80	80
Vanuatu	3,435	3,726	4,171	4,445

Citizens of other nations outside of the five participating countries have sent workers to participate in the RSE Scheme, as reported by the Government of New Zealand in the Statistics for Recognized

[60] "Recognised Seasonal Employer (RSE) Scheme Research," Immigration New Zealand, accessed May 12, 2020, https://www.immigration.govt.nz/about-us/research-and-statistics/research-reports/recognised-seasonal-employer-rse-scheme.
[61] "Recognised Seasonal Employer (RSE) Scheme Research."
[62] "Statistics for Recognised Seasonal Employers (RSE) Arrivals" (Immigration New Zealand, n.d.), https://www.immigration.govt.nz/documents/statistics/statistics-rse-arrivals.pdf.

Seasonal Employers Arrivals" table.[63] These include Nauru and Solomon Islands, as well as extra-regional countries Papua New Guinea, Indonesia, India, Malaysia, Philippines, Taiwan, Thailand, and Vietnam.

The Pacific Access Category - New Zealand

The Pacific Access Category (PAC) pre-dates the RSE Scheme in New Zealand, coming into force in 2002, and grants admission and residency in New Zealand from the four participating countries: Kiribati, Tuvalu, Tonga, and Fiji.

The PAC is a resident visa program. A principal applicant, after receiving a valid offer of work from an employer in New Zealand, registers for a ballot in the program. If the ballot is selected, the government of New Zealand offers that individual, and their partner and dependents if applicable, the opportunity to obtain a resident visa. To be admitted under PAC, the principal applicant must meet criteria such as: be 18-45 years of age, be able to read, write, and speak English, and be of good character and in good health. As part of the employment requirements, the principal applicant must have a job offer with an income sufficient to support themselves and any dependents who will be accompanying them to New Zealand.

Annually, the quota for principal applicants, their partners and any dependents is 75 Kiribati citizens, 75 Tuvaluan citizens, 250 Tongan citizens, and 250 Fijian citizens.[64] In light of the COVID-19 pandemic, registration for ballots amidst this program has been suspended.[65]

Seasonal Worker Program - Australia

Australia's Seasonal Worker Program originated in 2008 as the Pacific Seasonal Worker Pilot Scheme, which evolved into the SWP in 2012. Ten countries in addition to Australia are involved in the program: Kiribati, Samoa, Tuvalu, Tonga, Fiji, Vanuatu, Nauru, Solomon Islands, Papua New Guinea, and Timor Leste (the lone non-Pacific Island nation in the program). The SWP "assists employers in the agricultural and accommodation sectors to fill employment gaps unable to be met by the Australian workforce."[66] In addition to those two sectors, the SWP includes the agriculture and aquaculture, cane, cotton, horticulture, and tourism sectors.

In order for an applicant to be eligible to participate in the SWP, they must be recruited for a seasonal position in Australia, be of good character and health, be 21 years of age or older, and must be a citizen of a participating country with intentions to return home after the end of the time period allotted through the program. Employment terms for workers in the SWP is up to nine months. Since it began in 2012, over 33,000 workers have gained employment through the SWP.[67] Of the countries participating in the program, the largest transfer of workers has come from Tonga and Vanuatu (Table 10).

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[63] "Statistics for Recognised Seasonal Employers (RSE) Arrivals."
[64] "Pacific Access Category Resident Visa," Immigration New Zealand, accessed May 12, 2020, https://www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/visa-factsheet/pacific-access-category-resident-visa.
[65] As of this writing, on April 22, 2020.
[66] Skills and Employment Department of Education, "Seasonal Worker Programme | Department of Education, Skills and Employment, Australian Government," Department of Education, Skills and Employment, April 4, 2020, https://www.employment.gov.au/seasonal-worker-programme.
[67] "Pacific Labour Mobility | DFAT," accessed May 12, 2020, https://www.dfat.gov.au/geo/pacific/engagement/pacific-labour-mobility/Pages/default.

Table 10. SWP participants, by country of origin. Adapted from the World Bank "Table 1. Participants in the Seasonal Worker Programme by year and country."[68]

Country	2012/2013	2013/2014	2014/2015	2015/2016
Fiji	0	0	<5	160
Kiribati	34	14	11	20
Nauru	10	0	0	17
Papua New Guinea	26	26	35	42
Samoa	22	162	185	140
Solomon Islands	42	9	21	61
Timor-Leste	21	74	168	224
Tonga	1,199	1,497	2,179	2,624
Tuvalu	0	20	7	<5
Vanuatu	119	212	567	1,198
Total	**1,473**	**2,014**	**3,177**	**4,490**

Pacific Labor Mobility Scheme - Australia

The Pacific Labor Mobility Scheme began in 2018 as an extension of the SWP and is the long-term complement to the SWP, offering low and semi-skilled employment in Australia to citizens of the ten SWP participating countries for one to three years.[69]

The Australian government expressed interest in "uncapping the scheme and expanding it to more Pacific Island countries [in order to] help deliver more workers to fill shortages in rural and regional Australia."[70] Today, however, membership in the PLM Scheme remains with the nine SWP Pacific Islands and Timor-Leste. The program was off to a slow start, placing only 140 workers by the end of 2018.[71] As of April 4, 2020, the Australian government issued a notice of temporary changes to visa policy in lieu of COVID-19. Pacific workers under both the SWP and PLM Scheme who are employed in the Australian

[68] Shiji Zhao et al., "What Difference Does Labour Choice Make to Farm Productivity and Profitability in the Australian Horticulture Industry?," February 2018, 52.
[69] "What Is Pacific Labour Mobility and How Does It Work? - Pacific Labour Scheme," accessed May 12, 2020, https://pacificlabourmobility.com.au/about/
[70] "Pacific Labour Mobility | DFAT."
[71] Pacific Labour Scheme, "Pacific Labour Mobility: Supporting Regional Australia."

agricultural sector will be allowed to remain in their roles "until the coronavirus has passed," covering a term of up to 12 months beginning April 4.[72]

Melanesian Spearhead Group Skills Movement Scheme - MSG

The Melanesian Spearhead Group is a grouping of Melanesian states - Papua New Guinea, Solomon Islands, Vanuatu, and Fiji - which originated through an agreement in 1988. The MSG primarily acts as an internal Melanesian trade bloc, but in 2012 signed an MOU creating the MSG Skills Movement Scheme.

The MSG Skills Movement Scheme allows for temporary movement of skilled nationals, in occupations including medical professionals, teachers, engineers, and managers in a wide range of industries, from MSG member countries for the purposes of employment while abiding by each country's national immigration laws.[73] The goal of the scheme is to address the issue of underemployed or unemployed with trade and professional skills in Melanesian countries. The Scheme provides quotas of 400 workers from each country to be employed through the program in other MSG states, with governments of Melanesia pledging to take steps to fill these quotas and ensure the viability of the scheme.[74]

Subsection 2.3.2: Understanding Preferences: Adaptation, Managed Retreat, or Adapting to Managed Retreat

Developing a better understanding of individual and national preferences for how to best confront climate change will help to drive a coordinated international response to these looming threats. Measuring preferences, in this case, refers to both gauging how affected states (and individuals within these states) seek to react in the short term through adaptation measures and, if uninhabitability becomes a reality, what avenues for managed retreat might be taken.

To be clear, this analytic overview does not seek to provide recommendations to Pacific island states based on projections of future inhabitability. Instead, by focusing on perspectives from the five states identified by the United Nations Trust Fund for Human Security (UN-TFHS) as the most likely Pacific island states to be impacted by the future effects of climate change (Vanuatu, Kiribati, Tuvalu, Marshall Islands, and Fiji), international policymakers can be better equipped to protect human lives.

In March of 2019, the International Organization for Migration (IOM), a related organization of the United Nations, established the Climate Change and Migration Project (CCMP) with the aim of protecting and empowering Pacific communities in the wake of looming existential threats.[75] The CCMP focuses broadly on Oceania but specifically targets the five states outlined by the UN-TFHS. The project aims to "support a regional human security-based response to climate change and disaster-related migration, displacement and planned relocation, ensure that migrants and communities benefit from safe labor

[72] Skills and Employment Department of Education, "New Visa Arrangements for Seasonal Workers," Text, Department of Education, Skills and Employment (Department of Education, Skills and Employment, ?), https://www.dese.gov.au/news/new-visa-arrangements-seasonal-workers.
[73] "MSG Skills Movement Scheme – Melanesian Spearhead Group Secretariat," accessed May 12, 2020, https://www.msgsec.info/msg-skills-movement-scheme/.
[74] Carmen Voigt-Graf, "Melanesians on the Move," *Devpolicy Blog from the Development Policy Centre* (blog), February 1, 2015, https://devpolicy.org/melanesians-on-the-move-20150202/.
[75] "Climate Change and Migration Project Launched to Protect, Empower Pacific Communities," International Organization for Migration, March 26, 2019, https://www.iom.int/news/climate-change-and-migration-project-launched-protect-empower-pacific-communities.

migration where appropriate, and contribute to the evidence-base of good practices in these areas."[76] In short, this initiative aims to build regional consensus and cooperation while ensuring that the concerns and priorities of vulnerable populations are adequately voiced. The following section outlines the stated national preferences of each of the countries within the CCMP, aiming to understand how migration is viewed within national strategy and within the greater national community.

Subsection 2.3.2.1: Focus Countries and Migration Preferences

Tuvalu

Tuvalu's unique, extremely low-lying geography poses an existential threat to all Tuvaluans in the wake of projected sea-level rise and other natural factors exacerbated by climate change. As the world's fourth smallest country, all of Tuvalu's islands are 3 meters or less above average sea level. Coastal erosion, loss of land, drought, soil evaporation, and freshwater salinization are just some of the immediate threats posed to island communities across the nation.

The island state released its most recent national policy on climate change in 2012, titled *Te Kaniva: Tuvalu Climate Change Policy 2012-2021*. Drafted in late 2012, *Te Kaniva* was Tuvalu's first comprehensive climate change policy drafted on a national scale. Drafted during the Tuvalu Climate Change Summit in 2011, this policy takes into account the wishes and recommendations of a broad base of actors, including chiefs, presidents and representatives of Island Councils, representatives of civil society and the private sector, and members of regional and international organizations. The report stresses the importance of mitigation and adaptation strategies while also presenting recommendations for overcoming the high cost of such measures, calling on the international community to follow international commitments and provide key financial support. *Te Kaniva* falls into the country's broader strategies for long-term, sustainable economic development (*Te Kakeega II*) and its National Strategic Action Plan for Climate Change and Disaster Risk Management (NSAP), the country's roadmap for managing "geological and anthropoligical hazards and related disasters."[77]

Of the seven overarching goals outlined in the strategy report, the final goal focuses on "guaranteeing the security of the people of Tuvalu from the impacts of climate change and the maintenance of national sovereignty."[78] Under this goal, the report implicitly recognizes that effects of climate change are already being felt, making life unsustainable for many Tuvaluans and creating a need to address the potential implications of future migration and forced relocation. Migration is becoming an increasingly popular option for many residents, and the country seeks to address the lack of international framework for managing forced migration due to climate change impacts. This priority is meant not only to address the well-being of Tuvaluans abroad, but also to preserve Tuvalu's national identity and culture in the wake of existential threat. Markedly, Tuvalu seeks to establish an international level framework for resettlement and sovereign recognition in the event that the islands of Tuvalu disappear due to rising sea levels.

[76] "Enhancing Protection and Empowerment of Migrants and Communities Affected by Climate Change and Disasters in the Pacific Region | Environmental Migration Portal," accessed April 17, 2020, "Enhancing Protection and Empowerment of Migrants and Communities Affected by Climate Change and Disasters in the Pacific Region | Environmental Migration Portal," accessed April 17, 2020, https://environmentalmigration.iom.int/projects/untfhs-pacific-project.
[77] "Te Kaniva: Tuvalu National Climate Change Policy 2012 - 2021" (Government of Tuvalu, 2011).
[78] "Te Kaniva."

The seventh goal also stresses a need to develop a strategy surrounding Tuvalu's preparedness for any migration or displacement due to climate change impacts. The government aims to lobby for a "Special Pacific Access Category (PAC) for Tuvaluans considering climate change vulnerability and forced climate migrants." Citizens of Tuvalu are currently eligible for New Zealand's Pacific Access Category Resident Visa, which admits 75 Tuvaluans per year under a quota system.[79] Given its longstanding cultural and economic ties to Tuvalu, New Zealand is likely to be the most attractive recipient country for such an arrangement in the future. However, the likelihood of political roadblocks to a Tuvalu-specific PAC will likely push Tuvalu policymakers to work with a diverse set of potential recipient countries.

It is important to note, however, that the Tuvaluan government has long resisted the development of relocation programs.[80] Former Prime Minister Apisai Ielemia publicly rejected the notion of being considered climate refugees. While it is easy to conclude that a certain degree of migration is expected to occur from Tuvalu in the wake of rising threats, failure to engage with policymakers, local leaders, and everyday citizens is likely to lead global response efforts in the wrong direction. Many Tuvaluan leaders and individuals would never consider the prospect of leaving their ancestral land, even when facing direct threats from climate change.[81]

Nonetheless, in 2019, the top five host countries for Tuvaluan migrants were New Zealand (1,515), Russia (581), Fiji (419), Kiribati (302), and Australia (211).[82] In the wake of increased displacement, future patterns of Tuvaluan migration may take advantage of existing overseas relationships and economic ties, thus following similar patterns already observed. New Zealand and Australia's positions as regional economic powerhouses have made them attractive locations for Tuvaluans to resettle. Through their role in the FRANZ Arrangement, New Zealand and Australia are also likely to play key support roles in managing the resettlement process for displaced Tuvaluans, however temporary. Tuvalu's well-publicized reversal of its recognition of the Russian-controlled breakaway regions of South Ossetia and Abkhazia along the Russia-Georgia border will likely make future cooperation on any policy issue somewhat untenable, despite a recent history of Tuvaluan migration.[83] While migration has historically occurred from Tuvalu to other island states such as Fiji and Kiribati, these are not likely to be long term partners for managed retreat.

Marshall Islands

The Marshall Islands is a chain of 29 extremely low-lying atolls. Like other parts of the greater Oceanic region, parts of the Marshall Islands face an immediate threat from rising sea levels and intensifying and frequent natural disasters. The capital, Majuro, and the country's main airport is located on the Majuro Atoll, the majority of which is less than 500 feet across and less than five feet above sea level.[84] Over the

[79] Isabelle Sin and Judd Ormsby, "The Settlement Experience of Pacific Migrants in New Zealand: Insights from LISNZ and the IDI," March 2019, http://motu-www.motu.org.nz/wpapers/19_02.pdf.
[80] Constable, "Climate Change and Migration in the Pacific."
[81] Constable.
[82] "United Nations Population Division | Department of Economic and Social Affairs."
[83] Oliver Bullough, "This Tiny Pacific Island Nation Just Gave Russia a Big Bruise," *The New Republic*, April 2, 2014, Oliver Bullough, "This Tiny Pacific Island Nation Just Gave Russia a Big Bruise," *The New Republic*, April 2, 2014, https://newrepublic.com/article/117238/tuvalu-bruises-russia-establishing-diplomatic-ties-georgia.
[84] Renee Lewis, "'Nowhere to Move': Marshall Islands Adapts amid Climate Change Threat," *Al Jazeera America*, May 19, 2015, Renee Lewis, "'Nowhere to Move': Marshall Islands Adapts amid Climate Change Threat," *Al Jazeera America*, May 19, 2015, http://america.aljazeera.com/articles/2015/5/19/Marshall-Islands-climate.html.

past decade, the country has tried to use their position on the international stage to push for worldwide emissions reductions and raise awareness of the immediate threats facing the country.

Nevertheless, the Joint National Action Plan (JNAP) was developed after the country experienced several devastating natural disasters in 2013. The plan outlined a national strategy for addressing risk in the context of climate change-induced natural disasters, ensuring coordination with all relevant stakeholders across the Republic of Marshall Islands. This plan was followed up in 2018 by *Tile Til Eo - 2050 Climate Strategy*, which presents a more comprehensive, long-term approach for ensuring international emissions reduction and meeting the country's pledges under the 2016 Paris Climate Agreement.[85] Like other countries' plans, these two national strategy reports stress the importance of securing international funding and cooperation for building resilience and adaptation capacity.

The JNAP makes little mention of migration as a long-term strategy for the island nation, other than the fact that migration to the United States has long been a pressure release valve on the rapid urbanization of Majuro and Ebeye that has occurred over the last decade.[86] Unlike the other countries reviewed in this piece under the framework of the UN-TFHS, citizens of the Marshall Islands have the right to freely live and work in the United States under the COFA agreement mentioned earlier in the report. Given this arrangement, the top five host countries for Marshallese migrants in 2019 were the United States of America (7,761), followed by Guam (245), the Federated States of Micronesia (94), Australia (56), and Northern Mariana Islands (46). Despite referring to relocation as an option of last resort, the 2050 Climate Strategy called for a renewed National Action Plan that incorporates a strategy for [ensuring] continued opportunity for migration for those who so choose to relocate."[87] Although the current population sits at around 58,000, the country has recognized that a projected population of over 75,000 by 2050 is likely to be unsustainable in the long term, particularly in the wake of increased natural threats. The economy of the Marshall Islands also relies heavily on a steady stream of outward migration to the United States. Less than 15% of the country's entire GDP can be accounted for in national industry and agriculture.

In the wake of increased displacement, future patterns of Marshallese migration will likely take advantage of existing overseas relationships and economic ties. Naturally, such migration relies on individuals having the necessary funds and connections to facilitate a move across the globe. Access to funds remains one of the key barriers restricting Marshallese from taking advantage of the COFA agreement.[88] A Marshallese resident living on one the most at-risk outer atolls, for instance, would not only need the money to get themselves and their belongings to the international airport in Majuro, but also the necessary funds to buy an expensive flight to their end destination and support themselves while in the United States. The COFA cannot be the sole viable long-term managed retreat pathway when the most vulnerable populations cannot afford to take advantage of the arrangement. Therefore

[85] IISD's SDG Knowledge Hub, "Marshall Islands Becomes First Country to Submit Second, More Ambitious NDC | News | SDG Knowledge Hub | IISD," IISD's SDG Knowledge Hub, "Marshall Islands Becomes First Country to Submit Second, More Ambitious NDC | News | SDG Knowledge Hub | IISD," accessed April 18, 2020, https://sdg.iisd.org:443/news/marshall-islands-becomes-first-country-to-submit-second-more-ambitious-ndc/.
[86] "Republic of the Marshall Islands Joint National Action Plan for Climate Change Adaptation & Disaster Risk Management 2014 - 2018" (Republic of Marshall Islands, 2013), "Republic of the Marshall Islands Joint National Action Plan for Climate Change Adaptation & Disaster Risk Management 2014 - 2018" (Republic of Marshall Islands, 2013), https://pafpnet.spc.int/attachments/article/782/RMI-JNAP-CCA-DRM-2014-18.pdf.
[87] "Tile Til Eo - 2050 Climate Strategy" (The Republic of the Marshall Islands, 2018).
[88] Constable, "Climate Change and Migration in the Pacific."

the country has developed long-term strategies for managing population growth while pushing for nationwide adaptation and resilience measures.

Vanuatu

In 2018, Vanuatu Minister of Climate Change and Acting Prime Minister Ham Liñi Vanuaroroa unveiled the country's National Policy on Climate Change and Disaster-Induced Displacement.[89] The policy document aimed to serve as a comprehensive and dynamic roadmap for the distribution of responsibilities in the wake of increased threats from climate-change related hazards for both government and community leaders within Vanuatu and for international stakeholders. The publication is a follow-up to Vanuatu's Climate Change and Disaster Risk Reduction Policy (VCCDRRP), which called for the "development of a national policy on resettlement and internal displacement."[90] While the Vanuatu government acknowledges that its primary responsibility is reduce displacement in the first place through adaptation measures and other preventative practices, it also recognizes that "planned relocation is an option of last resort…[and] that movement takes place with dignity and with appropriate safeguards and human rights protections in place."

Interestingly, the Vanuatu government also chose to broaden their working definition of 'disaster' for the purposes of this policy, expanding the concept of a 'disaster' to include "a range of crises affecting communities, including evictions, land conflicts and development-induced displacement." Figure 8 details the continuum of human mobility outlining the spectrum of control that individuals tend to have over their outcomes in the wake of different levels of displacement. This spectrum was developed in order to avoid common pitfalls associated with the creation of an artificial dichotomy of voluntary vs. involuntary movement, instead presenting a continuum of the varying degrees of control people may have in different displacement contexts.

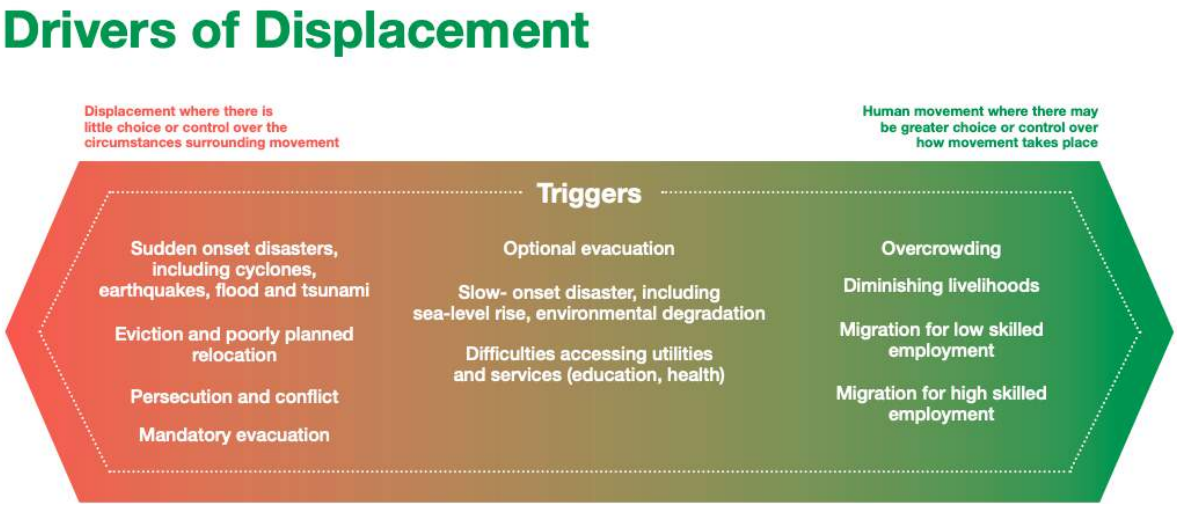

Figure 8. Vanuatu Continuum of Human Mobility.[91]

[89] "Vanuatu Launches National Policy on Climate Change and Disaster-Induced Displacement," International Organization for Migration, September 28, 2018, https://www.iom.int/news/vanuatu-launches-national-policy-climate-change-and-disaster-induced-displacement.
[90] "National Policy on Climate Change and Disaster Induced Displacement 2018," n.d., 60.
[91] National Policy on Climate Change and Disaster-Induced Displacement, Republic of Vanuatu

Vanuatu was ranked in 2016 as the country in the world most at risk to natural hazards by the World Risk Report published by United Nations University and Bündnis Entwicklung Hilft – a consortium of German development organizations. The National Policy on Climate Change and Disaster-Induced Displacement reflects climate change risk through its comprehensive, all-hands-on-deck approach for minimizing the impacts of this risk. While the policy outlines the national response for handling internally displaced peoples (whether displaced within a community, island/region, or within the country itself) in the wake of perceived threats, it is also important to gather a better understanding for how displaced ni-Vanuatu, wherever they lie on the human mobility continuum, may take advantage of international migration opportunities.

The UN Department of Economic and Social Affairs (UNDESA) regularly measures international migration stocks, breaking down total migration flows by origin and destination. In 2019, the top five host countries for ni-Vanuatu migrants were New Caledonia (3,802), Australia (1,565), France (813), Colombia (221), and French Polynesia (218).[92] Ni-Vanuatu moved to these countries for a myriad of reasons, economic or otherwise, which highlights the difficulty in separating climate change from other drivers of mobility in the region. In the wake of increased displacement, one could imagine that future patterns of ni-Vanuatu migration may take advantage of existing overseas relationships and economic ties, thus following similar patterns already observed. France, both through its membership in the FRANZ Arrangement (an arrangement between France, Australia, and New Zealand to coordinate disaster reconnaissance and relief assistance in the Pacific when requested by partner countries) and through its presence in New Caledonia and French Polynesia is likely to play a key role in receiving a potential uptick in displaced migrants from Vanuatu. The proximity of Vanuatu to New Caledonia, their common past as former French colonies, and New Caledonia's better economic opportunities has likely caused the territory to be the most common destination for ni-Vanuatu migrants thus far. As a regional powerhouse, Australia is likely to also play a key role in managing disaster response if Vanuatu is adversely impacted.

Kiribati

Kiribati has played an incredibly unique role in helping to set the global discourse on planned retreat as a way for managing the side effects of climate change. As a nation made up of 33 low-lying atolls, Kiribati's topographic landscape rarely rises above two meters. The 2019 Special Report on the Ocean and Cryosphere by the Intergovernmental Panel on Climate Change (IPCC) estimates a potential rise in sea level of 1.1 meters by 2100, threatening to submerge over two-thirds of the country in the near future.[93]

These immediate threats to long-term habitability have put Kiribati at the forefront of the climate change debate. President Anote Tong came to power in 2003 after running on a campaign that promised to create global awareness of the effects of climate change on the lives of i-Kiribati. President Tong quickly became one of the loudest voices on the international stage, working in tandem with larger, more powerful states to advocate for large emissions reductions in the Paris Agreement during COP21. In the leadup to the conference, President Tong met with prominent international leaders including Pope

[92] "United Nations Population Division | Department of Economic and Social Affairs," accessed April 5, 2020, https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.
[93] "Special Report on the Ocean and Cryosphere in a Changing Climate," *IPCC* (blog), accessed May 16, 2020, https://www.ipcc.ch/srocc/.

Francis and President Barack Obama to bring awareness to the Kiribati cause and champion a global response to climate change.[94]

During his tenure as president from 2003-2016, perhaps Tong's most notable and controversial policy measure was establishing the so-called "migration with dignity" strategy.[95] The strategy aimed to prepare i-Kiribati for a scenario in which global climate change mitigation efforts and adaptation measures across Kiribati would prove insufficient to save the country from succumbing to rising sea levels. While the Kiribati government continued to advocate for adaptation and mitigation as the only acceptable policy solutions to combat the worst effects of climate change, Tong's administration aimed to prepare the country to "migrate on merit and with dignity" in the wake of a bleak climate future.[96]

> "*Inherent in the concept of adaptation is having room to adapt. But we don't have room to adapt. Adapting means not doing things that will cause problems later. Don't build on the shore line, move back a little. But we can only move back so far before we are over the other side. Adaptation will be useful over the next decade but not much beyond that.*" *- Anote Tong*[97]

To better prepare for the "migration with dignity" scenario, the Kiribati government worked to provide additional education and training opportunities to make citizens more attractive candidates for migration based on merit, rather than relying on limited availability of visa categories, such as New Zealand's Pacific Access Category. In partnership with the Kiribati Institute of Technology, the government created a program in 2011 to promote technical and vocational education and training to provide youth with more desirable skills to aid in seeking work abroad.[98]

The posture of the Tong administration on the "migration with dignity" strategy was elevated when the government chose to purchase nearly twenty square kilometers on the island of Vanua Levu in Fiji.[99] Many saw the move as a tacit endorsement of planned, managed retreat and a defeat on the front for achieving mitigation and adaptation measures. Nevertheless, President Tong attempted to quell fears surrounding the issue by stating the land was purchased partially as an investment in overseas property, partially for food security purposes given the country's loss of arable agriculture land, and, as a last resort, to potentially be used as a place of resettlement for displaced i-Kiribati.[100]

The Tong administration's actions created a rift in Kiribati politics. The decision to purchase land in Fiji was seen by many to be a step too far in the direction of accepting an untimely end to life on Kiribati. After President Tong's tenure ended after hitting the maximum three-term limit, Taneti Maamau, leader

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[94] "Pacific Island Leaders Meet Obama in Paris," *RNZ*, December 2, 2015, sec. Pacific, https://www.rnz.co.nz/international/pacific-news/291117/pacific-island-leaders-meet-obama-in-paris.
[95] "Statement by H.E. President Anote Tong" (2014), https://www.un.org/en/ga/69/meetings/gadebate/pdf/KI_en.pdf.
[96] "Statement by H.E. President Anote Tong" (2008), https://www.un.org/en/ga/63/generaldebate/kiribati.shtml.
[97] Nick Galvin, "Tide Turning for Paradise," *The Age*, April 14, 2007, sec. Technology, https://www.theage.com.au/technology/tide-turning-for-paradise-20070414-ge4nt4.html.
[98] Kayla Walsh, "Kiribati Prepares for 'Migration With Dignity' to Confront the Ravages of Climate Change," *The Wire*, accessed May 16, 2020, https://thewire.in/culture/kiribati-migration-climate-change.
[99] "Besieged by the Rising Tides of Climate Change, Kiribati Buys Land in Fiji," *The Guardian*, July 1, 2014, sec. Environment, http://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu.
[100] "Making Waves," *The Economist*, accessed May 16, 2020, https://www.economist.com/asia/2016/03/10/making-waves.

of the opposition Tobwaan Kiribati Party, won the national election in 2016 with over 60% of the vote.[101] Although Maamau is a believer in the effects of climate change, he, unlike Tong, subscribes to the view that only God could uproot i-Kiribati from the islands and that the effects of climate change are not man-made. On one of his first days in office, he proclaimed that "we try to isolate ourselves from the belief that Kiribati will be drowned. The ultimate decision is God's."[102]

Maamau's administration has, instead, prioritized other important domestic issues facing i-Kiribati. The country faces high unemployment, constant threat of malnutrition and disease, and chronically poor access to freshwater. As such, Maamau has pushed for increased copra subsidies - an important economic lifeline for many i-Kiribati.[103] Maamau has also been courting international investors to fund major resort development projects, stating the nation "has an ambitious aim to transform Kiribati into the Dubai or Singapore of the Pacific."[104] Above all else, Maamau's administration prioritizes adaptation and mitigation efforts as key components for laying the foundation for Kiribati's economic growth moving forward, despite the poor forecasting of Kiribati's future by 2050.

The faith-based sentiments lauded by Maamau are echoed strongly across the country where 91% of people identify as either Roman Catholic or Protestant.[105] Many i-Kiribati often are reluctant to believe that, in their eyes, God would take away a land given to them. Former president Teburoro Tito suggested "[God] is not so silly to allow people to perish just like that."[106] Even President Tong has acknowledged that "there is always a deep desire to deny," meaning in the eyes of many, it is better to push forward rather than to cut one's losses and abandon ship.

To many, Maamau's narrative has been a refreshing change to Tong's focus on preparing for the eventual loss of ancestral lands. As such, it remains unclear how many i-Kiribati will choose to (or be forced to) deal with the worst side effects of climate change inching closer to their doorstep. i-Kiribati migrants have long been limited by access to capital to fund overseas travel and a lack of preferential visa regimes to nearby countries. In 2019, the top five host countries for i-Kiribati migrants were New Zealand (1,575), Fiji (791), Australia (782), the Marshall Islands (276), and the Solomon Islands (259).[107] Historically, New Zealand's Pacific Access Category visa regime has supported a steady flow of i-Kiribati to New Zealand, although only 75 visas are approved each year. In the wake of increased displacement, future patterns of i-Kiribati migration may take advantage of existing overseas relationships and economic ties, thus following similar patterns already observed with Kiribati and other island nations. However, given the incredible amount of international attention Kiribati has received as one of the countries hit hardest by climate change, international powers may be more willing to provide and support relocation measures as part of greater humanitarian assistance efforts to project soft power to an ever-changing region.

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[101] Ben Walker, "An Island Nation Turns Away from Climate Migration, Despite Rising Seas," *InsideClimate News*, November 20, 2017, https://insideclimatenews.org/news/20112017/kiribati-climate-change-refugees-migration-pacific-islands-sea-level-rise-coconuts-tourism.
[102] Walker.
[103] "Kiribati Opposition Warns of Excessive Copra Subsidy," *RNZ*, August 10, 2017, sec. Pacific, https://www.rnz.co.nz/international/pacific-news/336878/kiribati-opposition-warns-of-excessive-copra-subsidy.
[104] "As Climate Change Threatens Islands, Kiribati's President Plans Development," accessed May 17, 2020, https://www.cbsnews.com/news/climate-change-kiribati-president-taneti-maamau/.
[105] "Climate Change And Faith Collide In Kiribati," *NPR*, February 16, 2011, https://www.npr.org/2011/02/16/133650679/climate-change-and-faith-collide-in-kiribati.
[106] "Climate Change And Faith Collide In Kiribati."
[107] "United Nations Population Division | Department of Economic and Social Affairs."

Fiji

Fiji plays a unique role as one of the most populated and influential countries in the region. Despite having over 300 islands within its territory, Fiji's nearly 900,000 residents are concentrated in just a handful of areas. The lion's share (over 533,000 or 60.3%) of Fiji's 2017 population lived in just three provinces - Ba (which includes Nadi and Lautoka), Naitasiri (which includes Nasinu), and Rewa (which includes Suva) - all of which are on Fiji's largest island of Viti Levu.[108] As Table 11 below shows, Fiji's population became increasingly urbanized between 2007-2017 when the last census was taken.

Table 11. Urban Growth in Fijian Provinces 2007-2017, Acquired from the Fiji Bureau of Statistics.

Province	2007 Urban population	% Urban	2017 Urban population	% Urban	Absolute Change	% Change
Ba	120,998	52.2%	165,411	66.8%	44,413	36.7%
Bua	592	4.2%	625	4.0%	33	5.6%
Cakaudrove	7,034	14.3%	10,999	21.8%	3,965	56.4%
Kadavu	-	-	-	-	-	-
Lau	-	-	-	-	-	-
Lomaiviti	4,397	26.7%	4,250	27.1%	-147	-3.3%
Macuata	28,765	39.7%	27,182	41.2%	-1,583	-5.5%
Nadroga/Navosa	9,622	16.5%	10,293	17.5%	671	7.0%
Naitasiri	135,033	84.0%	148,697	83.7%	13,664	10.1%
Namosi	-	-	-	-	-	-
Ra	4,952	16.8%	5,987	19.7%	1,035	20.9%
Rewa	88,763	88.1%	93,483	86.5%	4,720	5.3%
Serua	6,867	37.6%	7,005	35.0%	138	2.0%
Tailevu	17,823	32.0%	20,320	31.5%	2,497	14.0%
Rotuma	-	-	-	-	-	-
Total	**424,846**		**494,252**		**69,406**	**16.3%**

With a rapidly urbanizing population, the effects of climate change are likely to cause urbanization to be exacerbated at unsustainable levels. Fiji's main population centers of Nadi, Suva, Lautoka, and Nasinu are likely to become overcrowded and unable to properly absorb displaced Fijians from other parts of the country. Overcrowding may exacerbate other economic, public health, and environmental concerns, increasing the frequency in which urban Fijians seek relocation abroad.

[108] "2017 Population and Housing Census" (Fiji Bureau of Statistics, 2018), https://www.statsfiji.gov.fj/.

The Republic of Fiji released the *National Climate Change Policy - 2018-2030* to serve as a roadmap for ensuring the well-being of current and future Fijian generations. The document outlines a plan for climate change adaptation that is "socially inclusive, equitable, environmentally sustainable, [and that incorporates a] net-zero emissions economy."[109] Of the myriad objectives and recommendations outlined in the report, the Fijian government specifically establishes an objective to "reduce climate-change related impacts on human well-being and national sovereignty through robust regional and international policy." In outlying the strategy for achieving these objectives, the government acknowledges a need for incorporating planned relocation into national policies and strategies. Fiji also makes note of its unique position as a state that will likely need to resettle both displaced Fijians and those around the region "supported through the United Nations and the *Global Compact for Safe, Orderly, and Regular Migration*." As such, Fiji sees strong regional cooperation as a key element for managing the movement of people in the wake of climate change-induced natural disasters.

The Fijian government has already played a role in helping to relocate several communities across Fiji. The community of Vunidogoloa, for instance, was forced to relocate in 2014 due to coastal erosion, saltwater intrusion, and flooding.[110] The village was relocated 2 km away to higher lands with the support of the Fijian government and international agencies. In a report published in 2017, the Fijian Ministry of Economy identified roughly 830 communities that were vulnerable and in need of relocation, of which 48 were considered extremely urgent.[111] In the wake of these findings, the Fijian government has released a set of Planned Relocation Guidelines that it developed with support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Although relocation is meant to be a measure of last resort, these guidelines meant to prepare stakeholders for what is likely to become a more common response.

The question remains as to whether the Fijian government's efforts will be enough to reduce the outflow of migrants to states with existing ties to the country. In 2019, the top five host countries for Fijian migrants were Australia (79,424), New Zealand (56,344), the United States of America (50,561), Canada (26,268), and the United Kingdom (6,878). In the wake of increased displacement and lack of economic opportunity, future patterns of Fijian migration may take advantage of existing overseas relationships and economic ties, thus following similar patterns already observed. The widespread Fijian diaspora, concentrated primarily in the English-speaking developed world, may help to ease visa restrictions for family members displaced by natural disasters or other major impacts. Fiji's relative proximity to Australia and New Zealand, as well as long-standing cultural and economic ties, make the two nations likely targets for resettlement, whether temporary or permanent.

Nevertheless, Fiji's economic prominence and regional leadership also makes it a likely host country for migrants from across Oceania - a unique situation among island states in the Pacific. Fiji's national government will likely have to strive to balance the need to resettle displaced Fijians with the provision of humanitarian aid to migrants from across the region, posing threats to the economic and political stability of the island nation.

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[109] "Republic of Fiji National Climate Change Policy: 2018-2030" (Ministry of Economy, Republic of Fiji, 2018), https://www.pacificclimatechange.net/sites/default/files/documents/National-Climate-Change-Policy-2018---2030_0.pdf.

[110] "Rising Seas and Relocation in Fiji," *Policy Forum* (blog), June 27, 2019, https://www.policyforum.net/rising-seas-and-relocation-in-fiji/.

[111] "5-Year & 20-Year National Development Plan - Transforming Fiji" (Ministry of Economy, Republic of Fiji, November 2017), https://cop23.com.fj/wp-content/uploads/2018/03/5-Year-and-20-Year-National-Development-Plan.pdf.

Part 3: Global Impacts of Migration in Oceania

Section 3.1: Implications for Receiving Countries

To better measure the potential impacts of how climate change may influence patterns of human migration in Oceania, one must first build an understanding of how current migration trends have been built off of historical regional relationships, described in Part 2. There have long been robust economic ties between small island states in the Pacific and larger regional powers, notably New Zealand, Australia, and the United States.

Understanding the role climate change induced migration will have on extra-regional states and populations is an essential component of the larger question about climate change and Oceania.

Subsection 3.1.1: Impact of Migration on Extra-regional States: Role of Diaspora Communities

Forced migration or managed retreat from Oceania over the coming decades is likely to require extra-regional host states. Due to the large number of populations at-risk and finite available resources and territory to internal and intra-regional migration, extra-regional migration is likely to become the primary option of many populations in Oceania, despite local preferences for internal and intra-regional migration. Extra-regional migration, as with all forms of migration, is likely to utilize extant migrant networks as at-risk people search for similar communities in the effort to maintain some cultural and societal continuity despite the forced nature of a managed retreat. Notably, these extant migrant networks for countries in Oceania consist of colonial, post-colonial, and friendly-nation relationships. The United States, France, and a combination of the United Kingdom, Australia, and New Zealand are the most likely recipients of significant populations due to pre-existing connections to the region. Other states such as Canada, India, and China may play more significant roles in hosting at-risk populations than predictions based on existing migrant networks forecast due to changing population dynamics and regional political roles.

Diaspora Communities and Legal Connections

The states with existing networks of migration are the most likely to receive future migrant populations due to a combination of the role of diaspora populations and existing legal avenues for migration. Diaspora communities can provide short-term housing and employment opportunities that other communities are less willing or able to provide and, overall, diaspora communities provide more for their conationalists than other unrelated communities in host nations.[112] Firstly, the existing connections with host states allow diaspora communities leeway in terms of accepting possible slack of inbound populations. When new populations are incapable of work or unable to acquire adequate housing, diaspora populations can provide short-term solutions. Diaspora communities can act as interlocutors between recent arrivals and native employers due to their unique position between the two. While these jobs may not provide desired levels of income or be in industries viewed as compatible with those in traditional island economies, they can provide stop-gap income to recent arrivals.

[112] "Diasporas and Development: Bridging Societies and States" (International Organization for Migration (IOM), June 18, 2013).

Secondly, diaspora communities can offer short-term housing in the case of a forced migration that is ineffectively managed. When migration is effectively managed, diaspora communities can provide a social safety net in terms of housing and shelter. In a worst case scenario in which a migrant loses their employment and subsequently is evicted from their residence, diaspora communities can provide a short-term solution short of homelessness. The facilitation of jobs and existence as a social safety net for new arrivals likely makes locations with extant diaspora communities much more attractive to communities undergoing a managed retreat or forced migration from Oceania.

Existing communities of migrants from Oceania exist in significant numbers in New Zealand, Australia, and the United States. In New Zealand, Pasifika populations comprised 7.4% of the total population according to the 2013 census, with the majority (65.9%) settled in the Auckland area. Additionally, the Pasifika population in New Zealand increased 11.4% from the 2006 census data to just under 296,000 people.[113] Pasifika as defined by this study represented just under 1% of the total population of Australia according to the 2016 census, but this number represents around 188,000 people, a significant increase from the approximately 100,000 registered in the 2006 census. The majority of these people live in New South Wales (38%) and Queensland (34%), with most living in urban centers such as Sydney and the suburban area south of Brisbane.[114] In the United States about 700,000 Pasifika were registered in the 2010 census. Pasifika in the United States are relatively dispersed, with most living along the Pacific coast in California and Washington although Texas, New York, and Florida also have significant populations. Despite the dispersion of Pasifika populations throughout the United States, most are congregated within specific urban centers. For instance, more than a quarter of 22,000 Marshallese in the United States as recorded in the 2010 census reside in Springdale, Arkansas.[115]

In addition to the existence of a diaspora community, extant legal avenues of migration are likely to be utilized in the case of a managed retreat or forced migration from Oceania. The utility of existing legal avenues of relocation is rather clear as laws have a tendency to be 'sticky' and remain despite possible opposition. In a worst-case scenario, it is still unlikely that existing avenues of relocation would be completely removed due to the effects of public choice on policymakers. As such, assuming the continued existence of legal avenues of migration, it is likely that in cases that may require a managed retreat or forced migration from Oceania, extant legal avenues of migration may be broadened to allow for the survival of people with few other options.

However, the maintenance and expansion of such forms of legal migration should not be expected as history provides contradictory evidence of expansion and contraction of legal migration. Some cases, such as the migration of people in response to life-threatening political and weather-related events, have resulted in increased avenues of legal migration.[116] Conversely, the US imposed quotas on Jewish refugees from Nazi Germany in the 1930s and continues to maintain stringent quotas on Arab refugees from warzones in places such as Syria, Iraq, and Yemen. However, limitations on quotas in response to emergency situations tend to be based on ethno-religious identities, of which Oceanic people mostly avoid negative stereotypes akin to those of Jews in the 1930s and Arabs in contemporary discourses. In

[113] "Tagata Pasifika in New Zealand." *Ministry of Health NZ*, www.health.govt.nz/our-work/populations/pacific-health/tagata-pasifika-new-zealand.
[114] Batley, James. "What Does the 2016 Census Reveal about Pacific Islands Communities in Australia?" DevPolicy, 27 Sept. 2017, devpolicy.org/2016-census-reveal-about-pacific-islands-communities-in-australia-20170928/.
[115] Hixson, Lindsay and Myoung Ouk Kim. "The Native Hawaiian and Other Pacific Islander Population: 2010." US Department of Commerce, May 2012, www.census.gov/prod/cen2010/briefs/c2010br-12.pdf.
[116] John Podesta, "The Climate Crisis, Migration, and Refugees," *Brookings* (blog), July 25, 2019, https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/.

any case, extant legal avenues of migration provide a possibility for some form of relocation as, even in the cases of imposed quotas, some at-risk populations are provided entry into host states. Quotas, in other words, may limit migration but definitionally allow some form of migration.

Australia, for instance, has limited immigration in recent years despite being the third largest global recipient of refugees, behind the United States and Canada.[117] Its 'Pacific Solution' to host irregular maritime migrants on the islands of Manus in Papua New Guinea and Nauru exemplifies changing public perceptions on uncontrolled migration. The Liberal Party government subsequently imposed additional restrictions on migration to Australia in 2019 based on a reversal of traditionally positive public sentiment on immigration. However, much public opposition to immigration carries an ethno-religious aspect that Pacific Islanders do not share.[118] As evidenced in Subsection 2.3.1.6, Australia has maintained and expanded seasonal and permanent worker visas for Pacific Islanders. Furthermore, recent limitations on Australian immigration may not have as great an effect on Oceania, especially if Australia pivots its refugee and immigrant programs away from Asia and the Middle East towards Oceania. In such a case, Australia's 2019 goal of 160,000 visa approvals could largely absorb significant Pacific Islander populations by 2050. Even assuming a continuance of the downward trends in visa approvals, from over 225,000 in 2017,[119] the limited population of Oceania may be effectively served by Australia, other extra-regional states, and larger regional island states.

Subsection 3.1.2: Impact of Migration on Extra-regional States: The Growing Influence of Extra-Regional Actors

In addition to migration to states with existing diaspora populations and/or legal avenues of migration, some states that are not currently significant players or hosts of Oceanic populations contemporaneously may play more significant roles as climate change has a gradual effect on Oceania over the coming decades. Some states, such as China, may begin to perceive the hosting of at-risk populations as the accompaniment to their efforts to increase influence within the region. Likewise, rising states such as India and Indonesia may see increased interaction in the region as an avenue to counter China and assert their own power into Oceania. Other states, such as Canada or Russia, may view increased population growth as beneficial and subsequently accept significant numbers of at-risk persons as a humanitarian gesture and to increase its own population considering the vast tracts of uninhabited land in both countries. Finally, some countries may attempt to attract educated Oceanic populations to help further development in their own countries. This has already occurred with extra regional migration from Fiji.[120] Regardless of the primary reason, states not including the primary states with existing diaspora populations and/or legal avenues of migration -- the United States, France, United Kingdom, Australia, and New Zealand -- are likely to play some role as host states. Furthermore, unanticipated states such as India, Indonesia, and Canada may play a more significant role as a managed retreat is likely to occur in the coming decades.

In addition to the myriad possibilities concerning the identification of likely host states, forced migration or managed retreat is likely to be a long-term issue. First, although migration is occurring today, it is

[117] Christine Inglis, "Australia: A Welcoming Destination for Some," *Migrationpolicy.Org* (blog), February 12, 2018, https://www.migrationpolicy.org/article/australia-welcoming-destination-some.
[118] Damien Cave and Isabella Kwai, "Why Has Australia Fallen Out of Love With Immigration?," *The New York Times*, April 22, 2019, sec. World, https://www.nytimes.com/2019/04/22/world/australia/immigration.html.
[119] Inglis, "Australia."
[120] Lee, Helen. "Pacific Migration and Transnationalism: Historical Perspectives." 2009, p. 9.

unlikely to begin on a region-wide scale in the short-term. Issues such as ocean acidification, sea level rise, and changing weather patterns will take decades to have deleterious effects on the livelihoods of Oceanic populations. Second, such migration is unlikely to occur in a short time period with the exception of an extremely catastrophic event that has region-wide effects. As such, considerations of forced migration and managed retreat must accept that the nature of the populations at risk is likely to change over the coming decades. Some reports indicate that Melanesia -- Solomon Islands, New Caledonia, Vanuatu, and Fiji -- is expected to witness a population increase of around 1-2 million, or 150-200% the current population, by 2050.[121] This elucidates the changing nature of populations in the region and the requirement of models of forced migration and managed retreat to be able to adapt to such population changes as needed. Furthermore, political changes should be expected throughout the region meaning regional connections may change substantially over the coming decades. As such, it is nearly impossible to predict the role and relationships of major states such as the United States and China in three decades.

The political nature of climate change-induced migration is particularly visible in discourses on migration in likely host states. Australia, with traditionally high levels of public support for immigration, has witnessed anti-immigrant backlash in recent years. A 2018 Lowy poll indicated that a majority of Australians (54%) think immigration should be curtailed, a 17% increase from 2017.[122] Some parties utilize racist rhetoric in their opposition to immigration, but concerns over the effects of population growth on property prices, infrastructure, assimilation, and limited employment opportunities appear to play a larger role.[123] The dynamics of public opinion on emigration from Oceania is difficult to pinpoint yet Pasifika peoples currently appear to avoid anti-East Asian and anti-Muslim sentiments behind increasing opposition to immigration.

New Zealand has experienced comparable issues to Australia on immigration related political issues. Notably, migrants have been blamed for Auckland's housing crisis and congestion.[124] Such blame, however, has resulted in shifts to traditional political alliances as New Zealand's Indian population largely defected from Labour due to its coalition with the anti-immigration New Zealand First party.[125] Such broad defections over anti-immigration policy may indicate that New Zealand is trending in the opposite direction of Australia. Yet, the Indian defection is largely due to the effects of the Labour-New Zealand First coalition's policies that negatively affect the Indian population. The opinion of the majority of Kiwis on climate-induced migration is obscure and its future impacts are not known. The native Maori, about one-fifth the population of New Zealand, will play a significant role in perceptions of such immigration. Their position on immigration has historically been to limit immigration to maintain control over their land. However, the case of Pasifika migration may cause a reversal as the context in which Pasifika may be forced to relocate due to the carbon emissions of historical colonizers may positively impact Maori

[121] Burson and Bedford, "Clusters and Hubs: Toward a Regional Architecture for Voluntary Adaptive Migration in the Pacific."
[122] Oliver, Alex. "2018 Lowy Institute Poll." Lowy Institute. Lowy Institute, October 3, 2018. https://www.lowyinstitute.org/publications/2018-lowy-institute-poll.
[123] "Population Growth, Migration and Refugees: A Political Headache That's Split the Nation." ABC News, April 26, 2019. https://www.abc.net.au/news/2019-04-27/federal-election-policy-explained-immigration-population-growth/10880530.
[124] Fonseka, Dileepa. "Unhappy Indian Voters Eye Shift to National." Newsroom, February 6, 2020. https://www.newsroom.co.nz/2020/02/06/1019249/migrant-votes-critical-to-election.
[125] Ibid.

perceptions of Pasifika immigration and solidarity in an anti-colonial context in comparison to other populations.[126]

Akin to New Zealand and Australia, immigration has been a divisive issue along partisan lines in the United States. Much contemporary opposition to immigration is based on anti-Latino and anti-Muslim sentiment.[127] Such ethno-religiously based rhetoric, however, is fluid as evidenced by the creation of paramilitary organizations in response to Hmong immigration into Texas and Louisiana in the 1970s.[128] As such, perceptions of immigration in the United States have a historical trend of being motivated by the ethno-religious identities of new arrivals. Furthermore, polarization on immigration is much stronger in the United States than in Australia or the United Kingdom.[129] Pasifika populations, however, may manage to avoid much of the opposition to immigration as most contemporary domestic opposition to immigration focuses on illegal immigration and perceived threats to national security.[130]

Across Europe immigration policy has been a highly contentious issue. In both the United Kingdom and France, increased immigration from the Middle East and Africa has resulted in racially-based policies that have attempted to limit and deter immigration. The ascendant French National Front party has opposed recent immigration restrictions introduced by Prime Minister Macron as neither restricting nor deterring immigration to an ample level, while leftist parties opposed the same restrictions for going too far in restricting and deterring immigration.[131] In the United Kingdom, Brexit has resulted in a decreased concern over immigration as the UK regains the ability to institute its own immigration policy. In the context of its former membership in the EU, public perceptions of immigration to the UK focused on opposition to unmanaged movement within EU states. Today, such emphasis is lacking, but could easily return to the levels seen in 2015-2016 when around half the population viewed immigration as the most important issue facing the UK.[132]

Regardless of the uncertain nature of future relations globally and regionally, it is necessary to develop an understanding of likely expectations. States such as the United States, France, New Zealand, Australia, and the United Kingdom all have some form of extant and/or historical ties to Oceania (Figure 9). Furthermore, the public opinion of domestic audiences on migration is likely to play a significant role in

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[126] Husband, Dale. “It's Time for Māori to Be Heard on Immigration Policy - E-Tangata.” E-Tangata, May 24, 2018. https://e-tangata.co.nz/comment-and-analysis/its-time-for-maori-to-be-heard-on-immigration-policy/.

[127] Mayda, Anna M, and Giovanni Peri. “The Political Impact of Immigration: Evidence from the United States.” Cato Institute, September 11, 2018. https://www.cato.org/publications/research-briefs-economic-policy/political-impact-immigration-evidence-united-states.

[128] Smith, Laura. “The War between Vietnamese Fishermen and the KKK Signaled a New Type of White Supremacy.” Medium, Timeline, 6 Nov. 2017, timeline.com/kkk-vietnamese-fishermen-beam-43730353df06.

[129] Glenn Kefford, Shaun Ratcliff. “Analysis | Republicans and Democrats Are More Polarized on Immigration than Parties in the U.K. or Australia. Here's Why.” The Washington Post. WP Company, August 16, 2018. https://www.washingtonpost.com/news/monkey-cage/wp/2018/08/16/republicans-and-democrats-are-more-polarized-on-immigration-than-parties-in-the-u-k-or-australia-heres-why/.

[130] Joppke, Christian. Immigration and the Nation-State: the United States, Germany, and Great Britain. Oxford: Oxford University Press, 2008.

[131] Mohdin, Aamna. “Macron's Immigration Reform Has Sparked Outrage among the Left and Far-Right.” Quartz. Quartz, April 23, 2018. https://qz.com/1259323/immigration-to-france-right-wing-party-front-national-and-the-left-criticize-macrons-immigration-bill/.

[132] Casciani, Dominic. “Election 2019: How Significant Is Immigration to the UK?” BBC News. BBC, December 5, 2019. https://www.bbc.com/news/election-2019-50658968.

the reception of climate-induced emigration from Oceania. However, attempting to ascertain trends in support is a fickle exercise as the issue of immigration is largely tied to perceptions of the social effects of immigration on the nation.[133]

Figure 9. Extra-regional links between probable host states and Oceania.

Section 3.2: The Special Case of Climate Refugees in Oceania

Pacific Islanders are one of the most vulnerable communities in the world in terms of the existential threat posed by climate change. As the climate situation becomes more dire, members of the academic community, policymakers, and the general public are beginning to refer to PICT residents as future 'climate migrants' or 'climate refugees.'

In common terms, a refugee is often defined as a person who has been forced to leave their country in order to escape war, persecution, or natural disaster. The people of Oceania are increasingly being described in the media and academic circles as 'climate refugees' but this terminology, though intuitive, oversimplifies a complex reality: Pacific islanders, and their fellow 'climate refugees' around the world, do not actually have any legal standing as refugees in terms of international law.

The definitive document on refugees remains the 1951 UN Convention and Protocol Relating to the Status of Refugees (the 1951 Convention was updated with the 1967 Protocol), which defines a refugee as "someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion."[134] The Convention and Protocol outline the responsibility of a host government, which must protect refugees who come to their shores by guaranteeing them basic human rights. These documents also prohibit refoulement, meaning that a host government cannot forcibly return a refugee

[133] Hainmueller, Jens, and Daniel J Hopkins. "Public Attitudes Towards Immigration." Annual Review of Political Science 17 (2014). https://www.cream-migration.org/publ_uploads/CDP_15_13.pdf.
[134] "Convention and Protocol Relating to the Status of Refugees" (UNHCR, n.d.).

to their origin country where they fear persecution. The sticking point here is two-fold: the mid-20th century Convention and Protocol do not address the effects of climate change on habitability of regions sensitive to climate, nor do they allow for someone to be considered a refugee without a credible "fear of persecution" in their home country. The official United States position on refugees is outlined in the Refugee Act of 1980, echoing the verbiage of the Convention and Protocol and leaving climate refugees no legal standing for refugee status in the United States.[135]

For those impacted by climate change, the lack of legal standing as climate refugees leaves them in a state of legal limbo, where they are not afforded the same protections as internationally recognized refugees. While this problem is salient for our study of Oceania, climate refugees are a global concern that will escalate in the coming years. According to a World Bank analysis of sub-Saharan Africa, South Asia, and Latin America, climate change could lead to displacement of over 143 million people by 2050. [136] The inclusion of climate refugees will bring further strain to the international refugee system, which is faced by 6.5 million Syrian refugees, 3 million Afghani refugees, 1 million Somali refugees, 3 million Venezuelan refugees, and millions of others fleeing conflict and unsustainable living conditions across the world.[137]

The UN took a step toward protecting climate refugees in the 2018 Global Compact on Refugees,[138] which recognized that "climate, environmental degradation, and natural disasters increasingly interact with the drivers of refugee movements," [139] yet stopped short of formally including as refugees those who are displaced due to these climate-related drivers. The Compact itself faces limitations, including its non-binding nature in a bid to respect sovereignty of signatory states, as well as influential countries, such as the U.S. and Australia, declining to sign on to the Compact. There is a question of how to directly address refugees displaced by climate, as "climate" is not a uniform driver but one that encompasses water scarcity, conflict originating from competition over limited natural resources, among others. In the case of Pacific Island peoples, sea level rise leading to inhabitability and saltwater incursion, as well as climate-induced changes to ocean temperatures and its resulting consequences for fisheries resources, provide another type of climate-induced migration than migration experienced in other regions of the world.

According to Dina Ionesco, UN Migration Agency Head of the Migration, Environment and Climate Change (MECC) Division, there are several reasons to be hesitant to push for a climate refugee distinction, including the primarily internal nature of most climate migration, the necessity for countries to think about adaptation rather than only migration, and the difficulty of isolating environmental and climatic drivers of migration from "humanitarian, political, social, conflict, or economic ones."[140] And so, in lieu of a refugee distinction, people who migrate as a result of climate change and its impacts are

[135] "An Overview of U.S. Refugee Law and Policy," *American Immigration Council* (blog), November 18, 2015, https://www.americanimmigrationcouncil.org/research/overview-us-refugee-law-and-policy.
[136] Kanta Kumari Rigaud et al., "Groundswell : Preparing for Internal Climate Migration" (The World Bank, March 19, 2018), https://openknowledge.worldbank.org/handle/10986/29461.
[137] "The World's Swelling Refugee Population Has Shrinking Options," *Council on Foreign Relations* (blog), accessed May 12, 2020, https://www.cfr.org/interactive/refugee-crisis/.
[138] "Report of the United Nations High Commissioner for Refugees | Part II - Global Compact on Refugees" (UNHCR, n.d.), https://www.unhcr.org/gcr/GCR_English.pdf.
[139] "National Policy on Climate Change and Disaster Induced Displacement."
[140] Martin, "Let's Talk About Climate Migrants, Not Climate Refugees," *United Nations Sustainable Development* (blog), June 6, 2019,
https://www.un.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees

referred to as 'climate migrants' with no additional legal protections when they decide to leave their home country.

The lack of refugee status protections for the people of Oceania may be changing. This discussion is the most prominent as it pertains to Kiribati, the Pacific island nation that the IPCC suggested "could become uninhabitable as early as 2050."[141] In late January 2020, in response to a case brought by Ioane Teitiota of Kiribati, the UN ruled that non-refoulement applies to those who flee their homes due to climate. According to the UNHRC ruling, "without robust national and international efforts, the effects of climate change in receiving states may expose individuals to violations of their rights … thereby triggering the non-refoulement obligations of sending states."[142]

Although this ruling stopped short of considering Teitiota a climate refugee, it did open the door to further cases in the future as the climate outlook becomes more bleak for the people of Oceania, stating "given the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized."[143] When looking toward the future, granting the people of Oceania rights as climate refugees will require alterations to global climate refugee policy. For Pacific Islanders, and the myriad challenges they face on their home islands as a result of climate change, there is an urgent need to address their situation promptly.

[141] "Chapter 3 — Global Warming of 1.5 °C."
[142] "Views Adopted by the Committee under Article 5 (4) of the Optional Protocol, Concerning Communication No. 2728/2016" (United Nations International Covenant on Civil and Political Rights, 2016).
[143] "Historic UN Human Rights Case Opens Door to Climate Change Asylum Claims," *OHCHR* (blog), January 21, 2020, https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25482&LangID=E.

Part 4: Discussion and Policy Recommendations

Section 4.1: Discussion and Areas of Future Research

Climate change in Oceania is expected to contribute to migration in Oceania, albeit at an unknown level as an independent factor. Migration is currently a private decision for which a considerable dearth of literature exists. Future research should focus on filling such gaps.

Subsection 4.1.1: Discussion

Climate change will undoubtedly affect the future of populations in Oceania, in addition to the geography of Oceania itself. Through analysis of climate change through the lens of migration, the effects of climate change become clear, although the causes and magnitude of such effects remain obscure. Thus, climate change can be accurately identified as a key contributor to future migration from and within Oceania, but it may be impossible to completely separate climate change from other drivers of migration within the region. Among competing drivers of migration are the economic factors such as availability of jobs and greater access to various forms of industry unavailable in Oceania in addition to a myriad of desires ranging from access to educational opportunities and desires to be close to family members who have migrated. While disaggregating the causes of migration is nearly impossible in each specific case of migration and especially so in general, it is clear that climate change is likely to exacerbate issues that form the basis for other forms of migration.

If left unaddressed, climate change driven migration is likely to compound other forms of migration as climate change affects modes of production and the ability of populations in Oceania to maintain their standard of living. In the long rum, climate change is likely to negatively affect the ability of fisheries to maintain their contemporary form of production. Climate change is likely to diminish or at the least change current fish stocks in the region through a combination of increasing ocean temperatures, rising sea levels, and ocean acidification. These changes to fish stocks will undoubtedly have a negative impact on Oceanic populations as those who rely on fisheries for their career may be forced to look elsewhere for employment. Furthermore, those who rely on fisheries for subsistence may have to search for other forms of sustenance. The compounding aspects of climate change are likely to exacerbate the negative effects on habitability in Oceania, forcing some form of managed retreat or forced migration.

Migration, however, is a uniquely personal decision. Individuals, families, and communities decide amongst themselves how, where, when, and if migration is a viable solution to their concerns. These decisions are often based on the economic situation, cultural and diasporic ties, and calculations based on future opportunities. It is rather unlikely that climate change will be the primary aspect of the decision to migrate, but it is quite likely that climate change will inform decisions on migration within and from Oceania.

Where people choose to relocate, assuming migration is required, will focus on historical links of migration, legality of migration, and the ability to migrate. Historical linkages for migration from Oceania are likely to play an outsized role among the aforementioned issues of migration as historical linkages

imply both a legal avenue for migration and the existence of a diaspora population. Yet, it is not the sole consideration as logistical and financial constraints on migration affect the mobility of populations on a classist basis. For instance, a flight from Pohnpei International Airport to Honolulu costs over $1,000 USD. Extending the flight to the mainland US increases the cost significantly depending on the location. A flight from the main airport on the Marshall Islands to Arkansas, which hosts over a quarter the Marshallese population in the United States, is upwards of $3,000. Adding baggage or shipping fees, the cost of migration may easily exceed the familial annual income as the GDP per capita for many states in Oceania is under $5,000 USD.[144] Factoring issues such as relocation from outlying islands to the major islands which host airports further increases the costs of migration.

As such, internal migration is likely to be the primary choice of at-risk populations when feasible. Internal migration allows populations to maintain their culture and methods of production relative to extra-regional or intra-regional migration. Furthermore, internal migration is relatively cost effective as the major costs of extra-regional migration are omitted. Additionally, existing research shows a particular resilience of local populations to the challenges posed by climate change. This resilience, however, may not be able to overcome the assumed issues posed by climate change in Oceania.

Barring feasible internal migration, intra-regional migration is preferred by local populations over extra-regional migration. Intra-regional migration permits some form of continuity that extra-regional migration inherently disrupts. Intra-regional migration, however, requires both a feasible location and a willing host. No state in Oceania is likely to be capable of hosting significant portions of Pasifika populations, therefore, extra-regional migration is likely required to some degree, if not a very significant degree.

Extra-regional migration is a likely end solution to the effects of climate change in Oceania. In host states migration impacts both the migrant and the extant community. No form of migration negates the binary feedback between the migrant and the host. The migrant will fear a loss of community, identity, and culture. The host will fear an assumed invasion on its values and culture as outsiders enter the political body.

It must be noted that any form of migration will represent a new form of competition over limited resources. In the case of internal migration such competition will undoubtedly play a larger role than intra-regional and extra-regional migration as evidenced by the conflict in the Solomon Islands.[145] This competition, however, does not dissipate with intra- or extra-regional migration. As evidenced by the white nationalist movement perception of non-white immigration to the US, migration from Oceania may lead to conflict due to competition over limited resources.[146] Intra-regional migration of significant populations is less studied and fewer instances of conflict are readily apparent, however, it is unwise to

[144] "GDP per Capita (Current US$) - East Asia & Pacific, South Asia, Europe & Central Asia." Data, data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=Z4-8S-Z7.
[145] Judith Miller, "6 Are Killed in Ethnic Strife in Solomon Islands," *The New York Times*, July 8, 1999, sec. World, https://www.nytimes.com/1999/07/08/world/6-are-killed-in-ethnic-strife-in-solomon-islands.html.
[146] Smith, Laura. "The War between Vietnamese Fishermen and the KKK Signaled a New Type of White Supremacy." Medium, Timeline, 6 Nov. 2017, timeline.com/kkk-vietnamese-fishermen-beam-43730353df06.

assume that the same forms of conflict due to competition that exist from internal and extra-regional migration will not occur.

Migration induced conflict is an aspect of climate change in Oceania of which host states will need to maintain awareness. However, this does not mean that extra-regional migration is unfeasible or inherently disruptive to host states. Rather, host states will need to be cognizant of the competition over limited resources and attempt to limit such competition through various policy initiatives. Racially-based movements in certain insider-outsider contexts may continue to persist, but effective governance will limit the ability of such movements to acquire adherents.

Subsection 4.1.2: Areas for future research

Further policy research is needed to inform policymakers, develop migration schedules, and more effectively prepare for a managed retreat or forced migration in Oceania. Future research should focus on the people of Oceania and diaspora populations in other PICTs, public sentiment in likely recipient states, transnational governmental coalitions focused on climate change, conflict exacerbated by climate change, and increased quantitative research on migration patterns and local vulnerabilities to the effects of climate change.

Oceanic Populations

A major limitation of this and other studies is the framing of how climate change affects third parties and extra-regional states, rather than the people of Oceania. In many studies of climate change in this region, the people of Oceania are relegated to a secondary area of interest in favor of strategic interests or economic concerns. Although we set out to avoid this trap, our minimal primary research and utilization of publicly available information made this challenging.

To prioritize the perspectives of the people most directly impacted by climate change in Oceania, future research should prioritize direct interviews with community organizations and leadership to assess the impact of migration on the people of Oceania. These studies should re-center the citizens of this region as the primary stakeholders in the conversation around climate change in Oceania.

Another important goal of future research on Oceanic populations should be to understand how individuals weigh climate change as its own independent driver of migration, both in the immediate term and in the long-term used in our study. Such studies can illuminate previously unknown local concerns about climate change induced migration and highlight concerns that currently are not at the forefront of the academic and policy conversation on this issue.

Public Sentiment in Probable Recipient States

Research on public sentiment, and its consequences of decision makers, in PICTs and extra-regional nations that may receive Oceania migrants is an important area of future research. This research should focus on several different aspects of recipient states' perspective of migration, including the outsized role of recipient states in allowing populations in Oceania to migrate extra-regionally, as well as how public sentiment of migrants may influence decision making at national level decisions around immigration. Despite the fickle nature of public sentiment, such research can provide valuable information on the ability of people within Oceania to migrate both intra-regionally and extra-regionally as a result of the

migration-focused policy of likely recipient states. Recipient nations imposing or lifting travel restrictions and other limitations of migration will directly affect mobility of the people of Oceania.

Transnational Governmental Organizations

Future research should specifically trace the evolution and likely outcome of granting climate refugees legal status according to the 1951 Convention Relating to the Status of Refugees and the 2018 Global Compact on Refugees. Additional research should focus on transnational ties between states at-risk due to climate change such as the Dominican Republic, Madagascar, Kenya, and PICTs in Oceania, in order to identify common characteristics of the problem and understand how that knowledge can be applied to protection for the people of Oceania. Research should focus on the likelihood of achieving an effective global coalition that alters status quo policies on climate-induced migration and what the consequences of action or inaction are for the people and polities in the region.

Climate Change Induced Conflict

Future research on climate change induced conflict should focus on how migration may exacerbate local grievances and create increased competition over diminishing resources, including freshwater and fisheries stocks. Such research can elucidate the likely destabilizing impacts of domestic migration from outlying islands to larger and more resilient primary islands, impacts of different nations relocating to primary regional islands such as Fiji's Viti Levu and Vanua Levu islands, and possible conflicts between competing communities to ensure access to extra-regional migration. Some conflict has already occurred due to competition caused by migration. For instance, the Solomon Islands experienced ethnic violence in 1999 due to the long term effects of non-climate change induced intranational migration.[147] Research on how climate change induced migration may increase competition and therefore lead to conflict on a larger scale than this instance in the Solomon Islands would be beneficial for those stakeholders concerned with regional security.

Increased Data Availability

Quantitative research on Oceania should primarily focus on defining at-risk populations and increased understanding of extant migration trends from and within Oceania. Future research on defining at-risk populations should juxtapose available topographical information and population densities. Our study attempted to do this, but was limited by data publicly available at the resolution this research question required.[148]

Research on the less obvious effects of climate change on habitability in Oceania, such as freshwater salinization and shifting fisheries resources, and its consequences for a community or PICTs' decision to migrate from their home island.

On a large, multinational scale, migration research should focus on filling gaps in existing governmental and non-governmental migration data, specifically on intra-national and intra-regional movement. In the case of the United States, publicly available immigration statistics from the Department of Homeland Security are a good starting point, but minimal reporting for many countries in Oceania is a roadblock when attempting to understand the level of migration from Oceania into U.S. states and territories.

[147] Miller, "6 Are Killed in Ethnic Strife in Solomon Islands."
[148] For more information, see the Mapping Team report.

Section 4.2: Policy Recommendations

The United States should consider five primary policy options to minimize risk to Oceanic populations from climate change and associated migration, as well as to enhance the U.S. geopolitical status in the region. These recommendations are:

- Provide logistical support to at-risk states, especially those with existing ties to the United States. The Department of Defense should develop a rich civilian presence in the region to enhance the short-term resilience of Oceanic states to climate change and develop logistical plans for a managed retreat or forced migration from Oceania, especially from COFA states and associated territories. Although the Department of s is the sole global actor with the infrastructure and capacity to unilaterally relocate at-risk populations in Oceania, it should adopt a more collaborative approach based on sharing best practices and operating as a logistics coordinator. In the context of states with existing movement agreements with the United States, INDOPACOM should develop contingency plans for a managed retreat to the mainland or other American territories. In the event that the U.S. needs to facilitate managed retreat, the U.S. helping to maintain a local presence on the island may be worthwhile in order to ensure that claims to territory are not challenged through military or legal avenues. While land reclamation on the scale of China's activity in the South China Sea is not feasible in Oceania due to seabed depth, small scale reclamation can ensure survival of small populations in the case of forced migration. Maintenance of such populations can ensure continued access to land in Oceania.

- Greater U.S. diplomatic presence in Oceania. A more holistic U.S. diplomatic presence in Oceania can help counter Chinese regional ascendancy and calm regional concerns over a possibly exploitive Chinese presence. Outreach to states with ties to China such as Fiji, Kiribati, Tonga, and Vanuatu should be a primary driver for the U.S. to retard China's growth within Oceania. Such a presence would allow the U.S. to help develop local and regional migration plans in accordance with U.S. and allied interests while simultaneously curtailing China's potentially hostile presence in a strategically vital region. Even if the majority of populations are forced to migrate, a robust diplomatic presence in Oceania will provide the U.S. greater access to the remaining populations and land.

- Enhance COFA agreements and financial assistance to COFA states. COFA agreements due for renegotiation in the coming years should be enhanced to include funding for climate change adaptation and migration efforts. Including disaster relief and other climate change related funding for COFA states is unlikely to have a significant effect on the U.S. budget and may have the secondary consequence of limiting Oceanic migration to the U.S. by increasing resiliency and habitability in PICTs. Other forms of resettlement assistance, intra- or extra-regionally, should also be considered depending on logistical capacity, local desires, U.S. strategic priorities, and public sentiment. Any financial assistance to COFA states will be negligible on the U.S. budget yet significant in COFA states.

- Support for extra-regional allies already invested in Oceania. The U.S. should increase its level of logistical, strategic, and security assistance to Australia, New Zealand, France, and other allied countries in the context of migration. These states have historically adopted a primary role in humanitarian assistance and disaster relief missions in the region. Additional assistance from the U.S. will accentuate their capabilities in the context of forced migration or managed retreat. Furthermore, such assistance will allow the U.S. to maintain access to this strategically important region in the context of the Department of Defense's shift towards China. Access to these islands through our allies can limit the 'tyranny of distance' represented by the Pacific Ocean and increase the operational capabilities of the newly reformed and increasingly mobile Marine Corps. It will also increase the ability of Marine Expeditionary Units (MEU) to deploy in humanitarian assistance or disaster relief operations to augment FRANZ capabilities and is congruent with the Army's Pacific Pathways program. A collaborative approach will limit the direct resources expended by the U.S. as allied states absorb costs otherwise borne by the U.S., while the U.S. maintains access to strategically important PICTs. Migration-influenced assistance to allies will enhance security and limit intra-national and regional conflicts over limited resources. Additionally, increased U.S. support for extra-regional allies in Oceania will boost their own capabilities, effectively working as a force multiplier and reaffirming America's commitment to multilateral military abilities. Such action is congruent to the National Defense Strategy and will help deter aggression, maintain stability, and ensure free access to common domains within Oceania.

- Facilitate increased research on migration drivers and consequences in Oceania. In terms of both quantitative and qualitative data, the U.S. Government can contribute to the development of migration research in Oceania, with a focus on the people of Oceania and U.S. regional interests. Quantitative research should focus primarily on defining at-risk populations, increasing understanding of migration trends, and better understanding the effects of climate change on habitability in Oceania. Qualitative research can contribute to understanding how climate change affects third parties and extra-regional states, including the U.S., the role of climate change in the decision to migrate, the development of international compacts on migration, and public sentiment in probable recipient states. Lastly, migration research should focus on filling gaps in existing governmental and non-governmental migration data.

Appendix A: Migrant Stocks in Oceania

Country	1990	1995	2000	2005	2010	2015	2019
American Samoa	21,283	23,098	24,912	24,233	23,555	23,513	23,539
Cook Islands	2,587	2,686	2,785	3,277	3,769	3,477	3,491
Fiji	13,283	13,001	12,719	12,435	13,351	13,751	14,038
French Polynesia	25,830	28,360	30,329	32,286	31,640	30,058	31,205
Guam	69,755	71,912	74,070	74,743	75,416	76,089	79,846
Kiribati	2,162	2,223	2,283	2,487	2,868	2,919	3,022
Marshall Islands	1,158	1,480	1,891	2,417	3,089	3,284	3,296
Micronesia (Fed. States of)	3,685	3,342	3,116	2,905	2,806	2,756	2,819
Nauru	2,815	2,605	2,394	2,253	1,183	1,890	2,114
New Caledonia	37,673	43,662	49,651	55,405	61,158	68,881	72,537
Niue	461	480	498	522	589	588	588
Northern Mariana Islands	26,593	32,376	40,122	37,542	24,168	21,648	21,815
Palau	2,801	4,749	6,310	6,043	5,490	4,937	5,066
Samoa	3,357	4,694	5,998	5,746	5,122	4,252	4,035
Solomon Islands	4,226	4,178	3,981	3,271	2,760	2,585	2,532
Tonga	2,911	3,274	3,684	4,301	4,604	3,954	3,752
Tuvalu	318	263	218	209	220	230	238
Vanuatu	2,308	2,461	2,626	2,800	2,991	3,187	3,245
Wallis and Futuna Islands	1,402	1,704	2,015	2,191	1,624	1,052	1,022

Appendix B: Interviewees

No.	Official	Date	Location
1	UN Development and Peacekeeping Official	March 2020	Virtual
2	UN Peace-Building Mission Official	March 2020	Virtual
3	UN Trust Fund for Human Security Official	March 2020	Virtual
4	International Organization for Migration Official	March 2020	Virtual
5	UN Political and Peace-Building Mission Official	March 2020	Virtual