

PACIFIC CLIMATE MOBILITY COUNTRY REPORT SUMMARY - SAMOA

PURPOSE

The purpose of this summary report is to highlight the key climate mobility insights from the research run in Samoa, and with input from the Samoan population living overseas. Around 450 participants were engaged via survey, talanoa and future scenario activities, with representation from all key island groups in Samoa. Research participants ranged from senior leaders in the community and villages, government, business, academia and churches through to youth, fisher people and farmers. Key insights here are paired with some high-level policy implications/opportunities. Given the richness of the findings from this project, the reader is invited to explore these high-level findings in more detail through the range of research 'products' (reports) available at <https://www.waikato.ac.nz/research/research-enterprise/research-at-waikato/pacific-climate-change-mobility-research-tonga-and-samoa/>. This research was funded by the Ministry of Foreign Affairs and Trade through New Zealand International Development Programme climate finance. The views expressed are the contributing authors' alone and not necessarily the views of the New Zealand government.

INSIGHT

INSIGHT 1 - Samoa faces increasing climate hazard exposure, though mapping offers a limited picture of current and future climate stress

INSIGHT 2 - Climate mobility is happening in Samoa at a small scale, though climate change was identified as the number one reason for internal mobility in the next five years

INSIGHT DETAIL

Studies of hazard exposure have mostly focused on limited areas, particularly Mulinu'u Peninsula and some catchment areas of the Vaisigano river¹, with hazard exposure concentrated around Apia, the eastern and western ends of Upolu and the eastern end of Savai'i. Each district also has a Community Integrated Management (CIM) plan that includes coastal inundation maps and lays out local adaptation priorities. In flood risk mapping for the Vaisigano river the area of highest human safety threat was seen around Lelata.² By 2055, increases in sea level (+0.3m) could result in a 1-in-50-year storm tide completely inundating Mulinu'u Peninsula. Other areas of Apia are at 'considerable risk of flooding' during tropical cyclone storm tides.³ The eastern and southern coasts of Savai'i and Upolu, as well as areas of Apia (Mulinu'u Peninsula and Vaipuna) were most exposed to damaging wind.⁴ Annual average loss for all assets (buildings, infrastructure, crops)⁵ was highest for Apia, eastern Savai'i and the eastern and western ends of Upolu. Extreme heat and its impact on health and productivity was the most common concern raised by research participants.

2% of Samoan people surveyed reported recent climate related mobility.⁶ As a proportion of the population, this could suggest around 4,111 people moved within Samoa due to climate impacts in the last five years. Separately, the Internal Displacement Monitoring Centre (IDMC, 2021) suggests that approximately 650 people were displaced annually due to climate related disasters.⁷ Further, 5.5% of those surveyed reported plans to move in the next five years due to climate change, with the predominant direction being coastal to inland'. Adding those reporting that they plan to move coastal to inland for reasons that could be relevant to climate impacts e.g., for safety, this figure could be in the range of 15,415 people in the next five years, or 3,083 mobilising annually, to escape the impacts of climate change.⁸ Up to 10% of the families that were living in Lelata have reportedly relocated so far due to persistent floods in the last ~decade.

POLICY IMPLICATIONS

1. Updated mapping is warranted for all areas of Samoa to bring together a current, national picture of climate hazard exposure for different future scenarios, for all major hazards, including coastal inundation, to support planning and decision making.
2. Many participants emphasised the need for better awareness raising of climate related impacts, including better targeting information to those most exposed to climate impacts, improving the translation of scientific language for the 'average Samoan', shifting from a focus on risks to impacts, and improving the specificity of information (e.g., specific impacts, timing for who/where).

1. Explore options to systematise data capture of climate related mobility to improve visibility and support planning.
2. Targeted and at-scale engagement is needed to further understand how climate stress translates to mobility planning, for whom.

1. MNRE and NIWA, 2022 2. MNRE and NIWA, 2022. See research product Recent Shifts, Future Signals. 3. Including the coastline from Fugalei to Vaiusu to the west of Mulinu'u Peninsula and Vaipuna on the eastern side of town under higher sea level rise scenarios. The Centre for Australian Weather and Climate Research (Hoeke et al, 2014) 4. The Pacific Catastrophe Risk Assessment and Financing Initiative, by GNS (Lin et al, 2022) 5. Due to tropical cyclones and earthquake shaking 6. In the last five years 7. 14,500 people in Samoa had been displaced internally in the 13 years between 2008 – 2021 due to disasters (approximately 1,115 people annually). However approximately 5,000 of the internal displacements were reportedly due to the 2009 Samoa tsunami. The IDMC noted that globally, almost 89% of the total disaster-induced displacement in the same period was climate change related.) 8. of those reporting plans to move coastal to inland due to the impacts of climate change, 3 of the 11 live/d in Savai'i – north and east coast (Asaga, Fatuvalu Safune and Fusi-Safotulafai), 1 lived in Apolima Tai and the rest live/d in Upolu – south and north coast (Vaiala, Siufaga, Vaitete fou, Siumu, Faleasiu, Malie and Vailoa). Those reporting plans to move due to the impacts of climate change, urban to rural – were residing in Palisi (Upolu) – Apia area – the Vaillima river runs adjacent, Vaimoso (Upolu) – and also the Apia area. Those reporting plans to move from rural to urban areas were residing in Saina (Upolu) and Matautu Lefaga (Upolu).

INSIGHT

INSIGHT 3 - People in Samoa seemed more inclined to move generally, and more inclined to move internally than overseas

INSIGHT 4 - There may be some connection between plans to move internally to escape the impacts of climate change, and plans to (also) move overseas in the coming five years

INSIGHT 5 - Though New Zealand was the most common overseas destination of choice and Australia was a close second for those in Samoa

INSIGHT 6 - For family-level climate mobility, it was mostly those without access to resources to rebuild (but with access to means to be mobile) who were the ones moving. They were also people living on freehold land

INSIGHT 7 - Many believe that customary land systems in Samoa will be flexible enough to accommodate future climate mobility scenarios, though the proportion of households living on customary land continues to fall

INSIGHT DETAIL

In responses to hypothetical mobility scenarios and in reports of recent internal mobility, those in Samoa showed a higher overall inclination for mobility, and a preference for internal over overseas mobility compared to those in Tonga. Also, only 8% of those surveyed responded 'strongly agree' to a statement about finding a way to stay and rebuild if their home was destroyed in a strong storm (compared to 23% in Tonga). 18% planned to move internally and 37% planned to move overseas in the next five years. On testing however, many of those reporting plans to 'move' overseas were planning a shorter stay to support children into school or work before returning to Samoa.

Half of those in Samoa reporting plans for internal mobility to 'escape the impacts of climate change' were also planning overseas mobility - a higher proportion than for the overall survey population. This could suggest that climate related overseas mobility is already being planned for the coming five years. The majority of these people noted New Zealand as their planned destination.

About half of those planning overseas mobility in the coming five years noted New Zealand as their destination, and one third noted Australia. Reasons for choosing Australia or New Zealand was predominantly for employment opportunities (37%), followed by the presence of family (30%). In 'more extreme' climate change future scenarios, it was assumed that there would not be a material increase in overseas mobility as people recognise that challenges would be global.

Families leaving their (freehold) land in Lelata and relocating elsewhere reportedly left as they were unable to access funding in time to rebuild following repeated flooding events. Others reported that those living on customary land have unique ties to the land they occupy which would make them more likely to stay over those living on freehold land. Many shared examples of wanting to remain on land occupied by the bodies of ancestors and parents despite significant climate and/or environmental stressors.

Land experts engaged in Samoa believed customary land laws, though at times complex and time consuming to navigate, will be flexible enough to accommodate all future scenarios of mobility. However, the proportion of households living on customary land has dropped in the last decade, and 36% of households reported residing on freehold land in the 2021 census. Survey and workshop participants commonly voiced wishes, plans or recent moves from customary to freehold (often leased) land.

POLICY IMPLICATIONS

1. Mobility proclivity may influence mobility levels under high climate stress.
2. This apparent preference or likelihood to move internally versus overseas may influence mobility patterns. However, the shifting social /cultural context should factor into policy making e.g., how cultural erosion or more people living on freehold land might impact this.
3. Context should be considered in reports of plans to 'move' overseas, with much of the reported mobility in fact being impermanent.

1. Further engage those planning/ undertaking climate mobility to sharpen understandings of connections between internal and overseas climate mobility.
2. Explore ways to capture new data (e.g., emigration data) to sharpen understandings of climate related overseas mobility.
3. Test options to increase choice for those planning dual internal and overseas mobility, such as financial/non-financial support.

1. Aotearoa New Zealand, and Australia should consider the implications of these destination preferences, particularly under scenarios of high climate mobility.¹ First Peoples should be engaged in these discussions - in Aotearoa, Māori should be engaged early in any discussions, decision making and planning.²

1. Planning for climate (im)mobility should consider that those on customary land may be less likely to move under climate stress than those residing on freehold land.
2. Those living on freehold land may be more inclined to be mobile under a given level of climate stress, particularly if they face barriers to adapting.
3. The presence of family/parents (including those passed) can increase motivation to stay in place.

1. If those residing on freehold land may be more mobile under climate stress, increased numbers of households on freehold land may lead to a more mobile population overall. The pattern of mobility may look different as well, e.g., it cannot be assumed that mobility will predominantly occur within traditional village bounds. Those living on freehold land will possibly have less flexibility to move under climate stress compared to those on customary land.

1. Note, in responding to hypothetical statements regarding moving overseas if it were no longer safe to remain at home, these destination preferences remained very similar. 2. See research product 'Six Kōrero'.

INSIGHT

INSIGHT 8 - People in villages that do not have land inland or those in villages that have relatively inhospitable inland topography, may be driven to leave their land under high climate stress

INSIGHT 9 - There were differing opinions about whether Samoa has 'plenty' of land to accommodate future climate mobility scenarios, and many report increases in land-related court cases and higher levels of contention and conflict

INSIGHT 10 - A number of 'groups' of people were identified as being more vulnerable in futures of higher climate mobility, including those living subsistence lifestyles, those without representation on village councils, those ostracised from their villages, and women and children

INSIGHT 11 - Food insecurity will play a significant role in future climate mobility, possibly driving high levels of rural to urban flow, with those living subsistence lives more vulnerable to poor outcomes

INSIGHT DETAIL

Hazard exposure could translate to quite different outcomes for those living in 'non-standard' village layouts. Some villages lack significant inland land, others have land that would prove very difficult to relocate to and/or rebuild on. Research participants assumed these people would mostly disperse amongst family elsewhere. Under more severe scenarios, some assumed that people may set up makeshift housing wherever they could.

Senior government, academic and community leaders had differing opinions on land availability, particularly in scenarios of high climate mobility. One shared their belief that Samoa has plenty of land and that people will not have to move overseas because of this. Others disagreed, citing high levels of land contention already. One expert in Samoan studies related this contention to a shift in perspectives about land that began following colonisation – where land went from a means to provide for aiga to a means for profit. Other land experts believed that the count and complexity of land related court cases may only increase and efforts to 'standardise' some decision-making in court may be limited due to the high-context decision making process. One academic leader shared examples of recent gun violence within families over land matters.

Those living subsistence lifestyles may face challenges under climate stress, either not being able to fund mobility or relocation elsewhere, or not being able to compete for work in urban settings based on their skillsets. Some community leaders believed that some families won't fare as well as others in future land allocation decisions made in traditional village councils as not all families have equal, or any, representation. Similarly, some raised examples of whole families ostracised from their villages who are currently sleeping rough in Apia. Women in a relocated rural village highlighted issues of increased domestic violence following relocation, an issue further emphasised by women leaders in the community and in government.

There was a clear, shared belief that the main direction of people movement under climate stress would be rural to urban driven by increasing difficulties growing food, due to environmental degradation and unpredictable weather. The vulnerability of, and unequal impact on those with subsistence lifestyles was further highlighted, with beliefs that many would either relocate and live insecurely, or make-do on unsafe or unproductive land. Development experts, community leaders and youth shared concerns about existing challenges with household level food insecurity.¹ In survey, 28% disagreed or strongly disagreed that life is easy right now - family have work/study, plenty to eat and are comfortable (compared to just 10% in results from Tonga). Many pointed to a weakened baseline of resilience, in part due to the under-cultivation of Samoa's land assets and believed that returning to working the land would re-establish critical self-reliance in a climate changed future.

POLICY IMPLICATIONS

1. Policy making and planning for future climate mobility should recognise there will be variation in options available (and unavailable) to those living on customary land, and the unique solutions/support options needed for different populations.

1. Consider risks and opportunities within current land laws - for customary, government and private land - in the context of different climate mobility futures, including high overall internal mobility, high rural to urban flow and possible high overseas mobility.

1. Planning for future climate mobility should consider differentiated supports for those likely to face different barriers or unique impacts from climate mobility.
2. Consider longitudinal data capture on the impacts of environmental or climate mobility on different groups of people within Samoa, over time to improve future interventions and/or support prioritisation.
3. Consider embedding monitoring and evaluation of impacts of supports or interventions for those undertaking climate/environmental mobility.

1. Consider opportunities to invest in improving or protecting household (and/or village) level food security, such as funding for greenhouses/food tunnels, which can also serve as income generation for families able to harvest excess produce.
2. Explore ways to capture and share examples of successful food growing adaptation practices (e.g., ceasing tree felling on plantation land) and approaches to improving community motivation to cultivate arable land.

1. One development leader shared current efforts to source capital funding from government for village and district food growing tunnels. Some relayed a belief that a lack of motivation by many to work the land was part of the issue, due to overseas seasonal employment and the increasing intensity of heat.

INSIGHT

INSIGHT 12 - Future rural to urban flow may increase further under increasing climate stress due to the erosion of traditional village leadership and structures

INSIGHT 13 - While decisions on village mobility typically rests with Matai and the Sa'o, decision making on mobility at a [nuclear] family level occurred within families. Women play an influential and often nuanced role in decision-making

INSIGHT 14 - The preference and practice of communal living is likely to continue in future, for those moving internally or overseas

INSIGHT 15 - Family overseas are and will continue to be critical in future, with diaspora reporting a high level of acceptance of a future role in climate mobility for family in Samoa, though this may be challenged in future through an assumed 'narrowing of the family'

INSIGHT DETAIL

Many raised concerns about a general 'loss of culture'. It was assumed¹ that further erosion of tradition would lead to more people abandoning their rural villages and moving into urban areas. This erosion was attributed to two future assumptions: increasing Western cultural/social influences, including from circular migration to places like New Zealand (which many believed had eroded the family unit) and a loss of trust in some traditional leaders in more severe and desperate climate scenarios.² Youth asserted that rural to urban mobility would be led by youth and could lead to higher incidences of youth crime as village guidance and oversight are lost.

Historical and recent village level mobility was mostly decided at the Matai/Sa'o level, including where the options were moving within their own land boundaries and not.^{3,4} Some shared how individual families had flexibility within those decisions, like returning back to coastal areas. Those from Leauva'a shared how several families back in 1905 chose not to move despite the decision by village Matai. Women were aligned in their typical roles in mobility decision making – advising on the benefits, ensuring fair consideration of all needs and supporting the decision, though women, including through village committees, have changed Matai decisions they did not agree with. There were reported differences in the strength and influence of village processes, with some believing that village systems are stronger in Savai'i than Upolu, and stronger in rural villages over urban.

Under different climate mobility scenarios, it was assumed that people will continue to move as a family and resettle as an aiga.⁵ In recent environmental mobility events, communal ways of living continue to be replicated in villages that relocate, with many reporting that natural coalescence occurred in resettling e.g., inland. A few families however noted that there was an increase in distance between houses, with some women feeling it contributed to a loss of cohesion and reduced the safety of women (e.g., from domestic violence). In considering future urban and overseas mobility, one community leader believed there would be cultural impacts from an inability to replicate the traditional village layout (e.g., Head Matai at the centre) on a numbered street.

The Samoan government hosts a Diaspora Relations Unit⁶ which helps coordinate outreach to 1,000+ Samoans⁷ for support and to publicly celebrate their input. 2/3 of the overseas diaspora surveyed said they want the Samoan government to contact them with national updates and for options to support Samoa. One-quarter of diaspora surveyed support family with climate adaption⁵ and half have been part of mobility decisions for family in Samoa, more commonly initiating these discussions than the Tongan diaspora. Many in Samoa reported heavy reliance on overseas family to fund relocation and/or rebuilds, though concerningly, many believed that under higher levels of (global) climate stress there may be a 'narrowing of the family' (to "immediate needs, immediate family") which may leave many in Samoa without their usual supports and mobility options.⁸

POLICY IMPLICATIONS

1. Explore ways to revitalise interest in, and the practice of Samoan values, to help (re)build social and cultural resilience to upcoming challenges and reduce avoidable drivers or contributors of mobility.

1. There are well-defined roles in mobility decision making, though there is flexibility within these roles and in the decisions themselves.
2. Context is critical - traditional systems of decision making may have greater or lesser weight in some areas or villages over others. Policies that rely on or factor in these decision making structures should consider this variation.
3. The role of women in mobility decision making and how this may be changing should be further explored (including as more households move to living on freehold land).

1. Policy and planning for future climate mobility scenarios should factor in this preference for communal living, including for when a whole village is impacted but also as individual families move and seek to resettle close to extended family.
2. Longer-term planning and planning for overseas mobility (including at scale) should consider this drive for aiga-based living.

1. Explore ways now to ramp up engagement with the overseas diaspora, to establish a strong(er) foundation, identify opportunities for mutual support and recognition in anticipation of ongoing (and likely increased) reliance on this group in future climate mobility scenarios.
2. Consider additional efforts to address existing inequalities in Samoan (and Pacific) populations in places like Aotearoa New Zealand to strengthen the foundations of those likely to play a critical role in the future receiving and integrating those leaving Samoa due to the impacts of climate change.

1. In youth, future scenarios workshop, see Moving Futures research product 2. See Moving Futures research product. 3. E.g., Lalomanu, Aleipata district 4. E.g., those who moved in 1905 from Savai'i to Leauva'a, Upolu 5. Most commonly funding rebuild of home or business 6. Ministry for Prime Minister and Cabinet 7. Reportedly mostly celebrities. 8. In Satitoo, families reported that those that participate in overseas seasonal work now only share their income with immediate family, not the wider aiga or village.