

USING COMMUNITY KNOWLEDGE TO INFORM PLANNED RELOCATION IN THE PACIFIC ISLANDS

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I. INTRODUCTION

From the media to international donors, there is increasing interest in the potential for large-scale movement out of areas that are vulnerable to climate change and related disasters.¹ When the Pacific Island nation of Kiribati purchased land in Fiji in 2014, the world took note.² Some saw the purchase as evidence of “climate refugees” and the stark choices facing low-lying atolls.³ Some hailed it as forward-thinking—a plan to provide for future food security and even a place to live.⁴ Since then, academics and international donors have increasingly rolled out frameworks for “climigration” at every level, from gradually moving communities back from shorelines to abandoning islands altogether.⁵

1. See Robert Oakes, *Culture, climate change and mobility decisions in Pacific Small Island Developing States*, 40 POPULATION AND ENVIRONMENT, 480, 480 (June 2019); John R. Campbell, *Climate-Change Migration in the Pacific*, 26 THE CONTEMP. PAC. 1, 1 (2014).

2. See Alister Doyle, *As Seas Rise, Pacific Island President Favors Buying Land Abroad*, SCI. AM. (Sept. 22, 2014), <https://www.scientificamerican.com/article/as-seas-rise-pacific-island-president-favors-buying-land-abroad/>; Laurence Caramel, *Besieged by the rising tides of climate change, Kiribati buys land in Fiji*, GUARDIAN (June 30, 2014, 8:00 PM), <https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu>.

3. See Ben Doherty, *Climate change castaways consider move to Australia*, SYDNEY MORNING HERALD (Jan. 7, 2012, 3:00 AM), <http://www.smh.com.au/environment/climate-change/climate-change-castaways-consider-move-to-australia-20120106-1pobf.html>; Lea Merone & Peter Tait, *‘Climate refugees’: is it time to legally acknowledge those displaced by climate disruption?*, 42 AUSTL. AND N. Z. J. OF PUB. HEALTH 508, 508 (2018) (referring to those who are forced to migrate due to climate change-induced inhabitation of their homeland).

4. See *Pacific island Kiribati buys land in Fiji to escape climate change*, BLUE & GREEN TOMORROW (July 1, 2014), <https://blueandgreentomorrow.com/environment/pacific-island-kiribati-buys-land-in-fiji-to-escape-climate-change/>; Mike Ives, *A Remote Pacific Nation, Threatened by Rising Seas*, N.Y. TIMES (July 2, 2016), <https://www.nytimes.com/2016/07/03/world/asia/climate-change-kiribati.html>; Samantha Goins, *Sea-Level Rise and Climate Migration: The Story of Kiribati*, ENV'T L. INST. (Jul. 16, 2018), <https://www.eli.org/vibrant-environment-blog/sea-level-rise-and-climate-migration-story-kiribati>.

5. See John Podesta, *The climate crisis, migration, and refugees*, BROOKINGS BLUM ROUNDTABLE (2019) https://www.brookings.edu/wp-content/uploads/2019/07/Brookings_Blum_2019_climate.pdf; Tony Matthews & Ruth Potts, *Planning for climigration: a framework for effective action*, 148 CLIMATIC CHANGE 607 (2018); Mark Scott et al., *Climate Disruption and Planning: Resistance or Retreat?*, 21 PLANNING THEORY & PRACTICE 125–154 (2020); Robin Bronen, *Climigration: Creating a National Governance*

Sometimes, this advocacy loses sight of the knowledge and values of the Pacific Island communities intimately affected by climate change.⁶

This article considers how these communities' values and knowledge have been and could be incorporated into planned community relocation. It first considers how community knowledge informs decisions about relocating—not only whether to relocate, but also what makes relocation sustainable. The article then provides examples of Pacific Islands' legal and planning instruments that provide for community knowledge in decision-making. It outlines challenges for working with community knowledge in collaboration with other forms of knowledge. Finally, it outlines strategies for bringing community knowledge into relocation decision-making. The article's focus on planned community relocation should not diminish the importance of recognizing the knowledge and values of Pacific Island communities in all forms of mobility, from temporary displacement to long-term, international individual or household migration. Nor is it intended to suggest that any particular community or population should be relocated at all. Rather, the focus on planned community relocation acknowledges that this form of climate mobility is directly related to climate change, in contrast to individual and household migration that may be based on a combination of factors beyond climate change.⁷

Several definitions are relevant to this article. The phrase “planned community relocation” refers to an external entity assisting a community's residents to resettle, pending inhabitation due to climate change and related disasters. “Community knowledge” is a shorthand for the collective and hybridized forms of Indigenous, traditional, and local knowledges about a people's environment and history that should inform climate mobility

Framework for Climate-Forced Community Relocation, 45 N.Y.U. REV. OF L. & SOCIAL CHANGE 574 (2022). “Climigration” refers to community relocation undertaken in response to climate change impacts. *Id.* at 578.

6. See Carol Farbotko, *No Retreat: Climate Change and Voluntary Immobility in the Pacific Islands*, MIGRATION POL'Y INST. (June 13, 2018), <https://www.migrationpolicy.org/article/no-retreat-climate-change-and-voluntary-immobility-pacific-islands>.

7. See generally MIGRATION AND TRANSNATIONALISM: PACIFIC PERSPECTIVES, (Helen Lee & Steve Tupai Francis eds. 2009) (essays on Pacific migrations not related to climate change); John R. Campbell & Olivia Warrick, *Climate Change and Migration Issues in the Pacific*, International Labour Organization(ILO), (Aug. 1, 2014), <https://www.ilo.org/dyn/migpractice/docs/261/Pacific.pdf>.

in the Pacific.⁸ “Community” is used rather than “traditional,” because the latter term may not fully capture the evolution of knowledge over time.⁹ Also, a narrow focus on “traditional” knowledge can ignore the modern practices and needs of communities.¹⁰ In many cases, “Indigenous knowledge” may be an appropriate term since many of the communities that face relocation in the Pacific Islands are Indigenous,¹¹ and the term reflects the cosmologies that are fundamental to the knowledge holders.¹² Still, “Indigenous knowledge” may not be broad enough to cover the mobile and transplanted communities across the Pacific that hold place-based knowledge.

“Community” is a broad term that could refer to a village settlement, a neighborhood, or a group of people with a collective cultural identity. Community knowledge is distinct from so-called “Western knowledge” or “external knowledges,” but external knowledges may be hybridized into community knowledge.¹³ Community knowledge is broader than the Western sense of “knowledge” since it encompasses the values, practices, and

8. See Matthew Lauer, *Oral Traditions or Situated Practices? Understanding How Indigenous Communities Respond to Environmental Disasters*, 71 HUM. ORG. 176, 182 (2012); E. Barrett Ristroph, *Integrating Community Knowledge into Environmental and Natural Resource Decision-Making: Notes from Alaska and Around the World*, 3 WASH. & LEE J. ENERGY, CLIMATE, AND THE ENV'T 81, 85–86 (2012).

9. See Lauer, *supra* note 8, at 184; Ristroph, *supra* note 8, at 84; John R. Campbell, *Traditional disaster reduction in Pacific Island communities*, GNS SCIENCE REP. 2006/38 1, 3 (2006), <https://library.sprep.org/sites/default/files/651.pdf>.

10. See generally JOERN BIRKMANN ET AL., *Poverty, Livelihoods and Sustainable Development*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 1171, 1171–1274 (2022), available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter08.pdf; HANS-O. PÖRTNER ET AL., *Summary for Policymakers*, in CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY, 3 (2022), available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (placing adaptation in context of larger web of community needs).

11. See ERICA BOWER & SANJULA WEERASINGHE, *Planned Relocation in the Pacific: A Regional Snapshot*, PLATFORM DISASTER DISPLACEMENT, 22 (2021), <https://www.adaptationcommunity.net/wp-content/uploads/2021/11/PDD-Planned-Relocation-Pacific-2021.pdf>.

12. See TRANSCEND OCEANIA & CONCILIATION RES., *Peacebuilding Approaches to Climate Change in Fijian Communities* 1, 6 (2022), https://rc-services-assets.s3.eu-west-1.amazonaws.com/s3fs-public/%5BDIGITAL%5D%20Peacebuilding%20Approaches%20to%20Climate%20Change%20in%20Fijian%20Communities_24062022.pdf. For example, in Fiji, the term *Vanua* refers to the relationship between the Indigenous iTaukei people and the natural and spiritual world and is central to governance and decision-making. *Id.*

13. See JOHN CONNELL, *Nothing There Atoll? “Farewell to the Carteret Islands”*, in PACIFIC CLIMATE CULTURES: LIVING CLIMATE CHANGE IN OCEANIA 73, 83 (Tony Crook and Peter Rudiak-Gould eds., 2018).

relationships that are intertwined with knowledge.¹⁴ It includes the traditional forms of governance and kinship networks that allow Pacific Island communities to respond to climate change and disasters by pooling and accessing resources.¹⁵

II. HOW COMMUNITY KNOWLEDGE INFORMS CLIMATE MOBILITY

A. Knowledge of Past Relocations

Pacific Islanders have long histories of mobility.¹⁶ Community knowledge about where previous generations lived, why and how they moved, and where their kin are now, can be helpful in modern relocations.¹⁷ Sharing knowledge about past relocations can ease the difficulty of discussing future relocations.¹⁸

In addition to voluntary mobility, colonial involuntary relocation in the Pacific must be acknowledged.¹⁹ Colonial relocation includes relocating inland communities to the coast for ease of administration, even where their historical locations protected residents from disasters.²⁰ Colonial involuntary relocation also took place for the convenience of the mining industry and those testing nuclear weapons.²¹ Respecting and including

14. See Ristroph, *supra* note 8, at 94.

15. See Ainka A Granderson, *The Role of Traditional Knowledge in Building Adaptive Capacity for Climate Change: Perspectives from Vanuatu*, 9 WEATHER, CLIMATE, AND SOC'Y 545, 548 (2017).

16. See generally PATRICK VINTON KIRCH, ON THE ROAD OF THE WINDS: AN ARCHAEOLOGICAL HISTORY OF THE PACIFIC ISLANDS BEFORE EUROPEAN CONTACT (2d ed. 2017); MIGRATION AND TRANSNATIONALISM: PACIFIC PERSPECTIVES, *supra* note 7; Campbell & Warrick, *supra* note 7.

17. See Piérick C.M. Martin et al., *Responding to multiple climate-linked stressors in a remote island context: The example of Yadua Island, Fiji*, 21 CLIMATE RISK MGMT. 7, 12 (2018).

18. See Shaiza Z. Janif et al., *Value of traditional oral narratives in building climate-change resilience: insights from rural communities in Fiji*, 21 ECOLOGY & SOC'Y 1, 9 (2016); *National Policy on Climate Change and Disaster-Induced Displacement*, VANUATU NAT'L DISASTER MGMT. OFF. 1, 44 (2018), available at https://www.iom.int/sites/g/files/tmzbd1486/files/press_release/file/iom-vanuatu-policy-climate-change-disaster-induced-displacement-2018.pdf [hereinafter VANAUTU]. See also Clothilde Tronquet, *From Vunidogoloa to Kenani: An Insight into Successful Relocation*, STATE ENV'T. MIGRATION 121, 137 (2015). For example, ahead of the relocation of Vunidogoloa, Fiji, the Pacific Conference of Churches and the Nansen Initiative held a community workshop where residents shared stories of the past, including a prior relocation. *Id.* at 136.

19. See Bower & Weerasignh, *supra* note 11, at 22.

20. See Martin et al., *supra* note 17, at 12; Campbell, *supra* note 9, at 24.

21. See Tammy Tabe, *Colonial Relocation and Implications for Future Climate Change Induced Migration and Displacement*, TODA PEACE INST. 1, 2 (June 2020),

community knowledge can help communities regain their agency over mobility.²²

*B Determining When and Whether to Relocate
and What Alternatives May be Available*

The dramatization of “climate refugees” from Kiribati and other low-lying atolls can be counterproductive to a meaningful consideration of when communities are no longer habitable,²³ particularly because projections based on Western science can be incomplete.²⁴ Community knowledge, particularly the value component, is essential in assessing habitability and determining whether and when relocation should occur.²⁵ This includes community knowledge about long-standing patterns of environmental change and hazard areas.²⁶ It also includes the community’s

available at https://toda.org/assets/files/resources/policy-briefs/t-pb79_tammy-tabe.pdf; Julia B. Edwards, *The Logistics of Climate-Induced Resettlement: Lessons from the Carteret Islands, Papua New Guinea*, 32 REFUGEE SURV. Q. 52, 53 (2013).

22. See Tristan Baurick, *The Last Days of Isle de Jean Charles: A Louisiana tribe’s struggle to escape the rising sea*, NOLA.com (Aug. 28, 2022), https://www.nola.com/news/environment/the-last-days-of-isle-de-jean-charles-a-louisiana-tribe-s-struggle-to-escape/article_70ac1746-1f22-11ed-bc68-3bde459eba68.html. For example, in the relocation of the Alaskan Village of Newtok that the author worked on, the Village Council was able to use Indigenous knowledge to select a suitable site. In contrast, with the Isle de Jean Charles, Louisiana relocation, a number of residents felt that they had not been listened to and that the State of Louisiana co-opted their relocation. *Id.*

23. See Connell, *supra* note 13.

24. See Cuthbert Casey Makondo & David S.G. Thomas, *Climate change adaptation: Linking indigenous knowledge with western science for effective adaptation*, 88 ENV’T SCI. & POL’Y 83, 84 (2018); John R. Campbell, *Climate Change, Population Mobility and Relocation in Oceania: Part I: Background and Concepts*, TODA PEACE INST. 4, 4 (July 2022), available at https://toda.org/assets/files/resources/policy-briefs/t-pb-131_part-i-climate-change-population-mobility-and-relocation_campbell.pdf.

25. See SANJULA WEERASINGHE, PLANNED RELOCATION, DISASTERS AND CLIMATE CHANGE: CONSOLIDATING GOOD PRACTICES AND PREPARING FOR THE FUTURE, 21–23 (2014), <https://www.brookings.edu/wp-content/uploads/2016/06/Planned-Relocations-Disasters-and-Climate-Change-Report-March-2014.pdf>; see also Bruce Burson, *Planned Relocation in the Context of Disasters and Climate Change: A guide for Asia Pacific National Societies*, INT’L FED’N OF RED CROSS 2, 20 (2021), https://www.rerc-resilience-southeastasia.org/wp-content/uploads/2022/01/2021-Planned-Relocation-in-the-Context-of-Disasters-Climate-Change-Guidance-for-AP-National-Societies_final.pdf [hereinafter IFRC]; see also Brookings Institute, Georgetown University, and the Office of the United Nations High Commissioner of Refugees, *Guidance on protecting people from disasters and environmental change through planned relocation*, BROOKINGS (Oct. 7, 2015), <https://www.brookings.edu/articles/guidance-on-protecting-people-from-disasters-and-environmental-change-through-planned-relocation/> [hereinafter UNHCR].

26. See Campbell, *supra* note 24, at 26; see also IFRC, *supra* note 25, at 30.

concepts of uninhabitability and habitability,²⁷ and their capacity to adapt in-situ using their own knowledge.²⁸

For some communities, it may be possible that only a portion of the community moves and the rest remains in place, based on household preferences and ties to the original site.²⁹ When communities must split, there may be a preference to remain in close proximity or connected by a road.³⁰ In split relocations, community knowledge should determine which residents resettle first.³¹

C. Determining Sites Suitable and Culturally Appropriate for Relocation

Community values determine whether a new site will be habitable. Beyond just a safe location, communities need access to water, food, natural resources, and livelihoods.³² The community itself is the best source of knowledge regarding these factors.

27. See Carol Farbotko & John R. Campbell, *Who defines atoll 'uninhabitability'?*, 138 ENV'T'L SCI. & POL'Y 182, 189 (2022).

28. See Nikita Perumal, "*The place where I live is where I belong*": community perspectives on climate change and climate-related migration in the Pacific island nation of Vanuatu, 13 ISLAND STUD. J. 45, 57 (2018); see also Farbotko, *supra* note 6; JENNY BRYANT-TOKALAU, INDIGENOUS PACIFIC APPROACHES TO CLIMATE CHANGE, PACIFIC ISLAND COUNTRIES 1, 46 (Pamela J. Stewart & Andrew J. Strathern eds., 2018).

29. See Julia B. Edwards, *Phosphate mining and the relocation of the Banabans to northern Fiji in 1945: Lessons for climate change-forced displacement*, J. DE LA SOCIÉTÉ DES OCÉANISTES 121, 138 (2014).

30. See Edwards, *supra* note 29, at 138.

31. See IFRC, *supra* note 25, at 40.

32. See Mark A. Calamia, *A methodology for incorporating traditional ecological knowledge with geographic information systems for marine resource management in the Pacific*, SPC TRADITIONAL MARINE RES. MGMT. & KNOWLEDGE INFO. BULLETIN #10 2, 5 (Feb. 1999), available at https://www.iapad.org/wp-content/uploads/2015/07/incorporating_itk_with_gis_for_mrm_in_the_pacific.pdf; MICHELLE MYCOO ET AL., *Small Islands*, in PÖRTNER ET AL., *supra* note 10, at 2043, 2068; Karen E. McNamara et al., *An assessment of community-based adaptation initiatives in the Pacific Islands*, 10 NATURE CLIMATE CHANGE 628, 629 (2020); Annah E. Piggott-McKellar et al., *Moving People in a Changing Climate: Lessons from Two Case Studies in Fiji*, 8 SOC. SCI. 1, 10–11 (2019). See Phillip Haines, *Choiseul Bay Township Adaptation and Relocation program, Choiseul Province, Solomon Islands*, COAST ADAPT (2016), available at https://coastadapt.com.au/sites/default/files/case_studies/CSS3_Relocation_in_the_Solomon_Islands.pdf; Emma Benintende, *The Relocation of Taro Island*, 2 UIA 2021 RIO: 27TH WORLD CONGRESS OF ARCHITECTS 1177, 1179 (2021). For the relocation of Taro Island residents to Choiseul (Solomon Island), a collaborative team of the provincial government and international agencies worked with local residents to identify culturally suitable locations for fishing, boat access, pedestrian access to the shore, subsistence gardens, pig hunting, gathering building materials; and to consider issues for adjoining customary lands. *Id.*

Communities are also knowledgeable regarding customary land tenure and protocols for settling on lands held by others. Most of the habitable land in Pacific Islands is governed by long-established customary rights of usage or informal agreements.³³ In many Pacific Island nations, a large percentage of land, as high as 99% in Vanuatu, is customarily owned.³⁴ Traditionally, relocations have taken place through customary processes that recognize the rights of the customary title holders and seek permission to move there.³⁵

Relocations are easier and have traditionally occurred where the relocating community already has customary title or are kin to those who hold it.³⁶ For example, Vunidogoloa, Fiji was fully relocated to higher ground within the customary boundaries of the community.³⁷ In contrast, residents in Toguru, Fiji, may be reluctant to relocate away from their settlement because of the lack of customary rights to alternative sites.³⁸

D. *Preserving a Sense of Place and Respecting Community Culture and Spirituality*

The preservation of community identity and culture—including ties to traditional lands, architectural designs, traditional practices,

33. See Volker Boege, Director, Peace & Conflict Studies Institute Australia, *An overview of climate change related displacement, relocation and migration challenges in the Pacific* 25, 25 (May 2018) (transcript available at <https://search.informit.org/doi/10.3316/ielapa.854314489758271>); Volker Boege & Ursula Rakova, *Climate Change-Induced Relocation: Problems and Achievements—The Carterets Case*, *TODA PEACE INST.* 1, 11 (2019), available at https://toda.org/assets/files/resources/policy-briefs/t-pb-33_volker-boege-and-ursula-rakova.pdf; Daniel Fitzpatrick, *Research Brief on Land Tenure and Climate Mobility in the Pacific*, *PACIFIC RESILIENCE PARTNERSHIP* 1, 2–3 (2022); IFRC, *supra* note 25, at 33. See BRYANT-TOKALAU, *supra* note 28, at 9. For example, the land purchased by Kiribati in Fiji was already inhabited by a group of Solomon Islanders that the Anglican Church invited in 1947. *Id.* at 51. The Solomon Islanders now must pay for a limited lease to land that they intended to remain on indefinitely, free of charge. *Id.*

34. See Daniel Lund, *Navigating slow-onset risks through foresight and flexibility in Fiji: emerging recommendations for the planned relocation of climate-vulnerable communities*, 50 *CURRENT OP. IN ENV'T SUSTAINABILITY* 12, 15 (2021); VANUATU, *supra* note 18, at 34; Edwards, *supra* note 21, at 68; Siobhan McDonnell, *The importance of attention to customary tenure solutions: slow onset risks and the limits of Vanuatu's climate change and resettlement policy*, 50 *CURRENT OP. IN ENV'T SUSTAINABILITY* 281, 285–86 (2021).

35. See Bower & Weerasingh, *supra* note 11, at 23.

36. See Perumal, *supra* note 28, at 55.

37. See Tronquet, *supra* note 18, at 129.

38. See Merewalesi Yee, et al., *Climate Change, Voluntary Immobility, and Place-Belongingness: Insights from Toguru, Fiji*, 10 *CLIMATE* 1, 15 (2022).

ancestral burial grounds, and livelihoods—is important not only in planned relocation. These values and practices should guide *all* forms of climate mobility to establish a sense of place at the new site.³⁹ Community members and local groups have much more knowledge of these aspects of culture and place than the national government or aid organizations.⁴⁰

Culturally appropriate methods for community participation and consent are essential in this process.⁴¹ Researcher Nikita Perumal provided an example of a temporary relocation in Vanuatu after Cyclone Pam.⁴² The lack of community consultation by the relocation funders denied the community a chance to express preferences for movement along certain social networks or kinship networks.⁴³ This, in turn, led to a relocating community that was significantly less well-integrated into its host community.⁴⁴

Two frequently cited examples of village relocation in Fiji show the difference that community consultation can make. In Vunidogoloa, Fiji, the community consented to the relocation and agreed on the relocation site.⁴⁵ External facilitators respected the village's preference for identical houses such that all households were treated equally.⁴⁶ But there were also aspects of the relocation that were inconsistent with preserving and respecting the community's culture and spirituality. The new layout was designed to resemble a Western-style subdivision rather than following a traditional layout.⁴⁷ As such, the village lacks the traditional vegetated, symbolic space that functions similar to a shrine.⁴⁸ Still, the

39. See UNHCR, *supra* note 25, at 17; Priyatma Singh et al., *Place Attachment and Cultural Barriers to Climate Change Induced Relocation: Lessons from Vunivunivun Village, Vanua Levu, Fiji*, in *MANAGING CLIMATE CHANGE ADAPTATION IN THE PAC. REGION*, 27, 27–43 (Walter Leal Filho ed., 2020); Edwards, *supra* note 21, at 69.

40. See Perumal, *supra* note 28, at 55.

41. See UNHRC, *supra* note 25, at 22.

42. See Perumal, *supra* note 28, at 55.

43. See UNHRC, *supra* note 25, at 22.

44. See UNHRC, *supra* note 25, at 22.

45. See Amanda Bertana, *The role of power in community participation: Relocation as climate change adaptation in Fiji*, 38 *EPC: POL. & SPACE* 902, 911 (2020).

46. See Giulia Borsa, *Vunidogoloa: What Can We Learn from Climate Change Relocation?*, *TRANSFORMATIVE HUMANITIES* (Jan. 27, 2020), <https://www.kth.se/blogs/hist/2020/01/vunidogoloa-what-can-we-learn-from-climate-change-relocation/>.

47. See Bertana, *supra* note 45, at 915–16. See generally Amanda Bertana, *Relocation as an Adaptation to Sea-Level Rise: Valuable Lessons from the Narikoso Village Relocation Project in Fiji*, *CASE STUD. IN THE ENV'T, REGENTS OF THE UNIV. OF CAL.* 1 (2019).

48. See Barrett Ristroph, *Using Traditional Knowledge To Inform Planned Relocation For Pacific Islands Communities*, *PACIFIC RESILIENCE PARTNERSHIP* 10 (Feb. 2023),

relocation recognized the villagers' cultural, emotional, and spiritual ties to their traditional territory and the burial place of their ancestors: ancestor remains were exhumed, and the local church provided for the transfer of the burial site.⁴⁹ The old village site was left in place so villagers could continue to visit it.⁵⁰

The relocation of Narikoso, Fiji, provides a contrasting example where the lack of community input had a negative impact. The initial relocation effort, which involved clearing a site and bringing in equipment, destroyed mangroves and trees along the shoreline.⁵¹ The clearing was not carried out in the way villagers advised, such that sediment flowed out to sea and damaged the coastal reefs on which the villagers' livelihoods depended.⁵² The location selected by the government was unstable, and some felt that a better location could have been found had there been more consultation with knowledgeable village members.⁵³ A later relocation effort moved only seven houses, leaving most of the village in the original site.⁵⁴ Community members felt that they had little input regarding the relocation site, the layout of the new relocation village, and the design of the houses.⁵⁵ They felt that the new houses were too small for the traditional way of living together, and that the layout failed to follow that of a traditional village.⁵⁶

Since these relocations, the Fijian government has convened stakeholders, including women and youth from relocated communities, who have provided input and shared information with communities planning to move.⁵⁷ As discussed in Section III(B), the Fijian Ministry of Economy has worked to incorporate this

available at <https://www.resilientpacific.org/en/media/265>.

49. See Borsa, *supra* note 46.

50. See Tronquet, *supra* note 18, at 136.

51. See Stanley Simpson, *Lessons in climate-driven relocation: The Narikoso case*, EARTH JOURNALISM NETWORK (Sept. 23, 2020), <https://earthjournalism.net/stories/lessons-in-climate-driven-relocation-the-narikoso-case>. See also Bertana, *supra* note 45, at 3.

52. See Simpson, *supra* note 51; Bertana, *supra* note 45, at 3.

53. See Simpson, *supra* note 51.

54. See Anna Anisi, *Addressing Challenges in Climate Change Adaptation: Learning from the Narikoso Community Relocation in Fiji*, TODA PEACE INST. 1, 7 (July 2020), available at https://toda.org/assets/files/resources/policy-briefs/t-pb-84_anna-anisi.pdf; Campbell, *supra* note 9, at 19.

55. See Anisi, *supra* note 54, at 7.

56. See Anisi, *supra* note 54, at 7.

57. See OFFICE OF THE PRIME MINISTER, REPUBLIC OF FIJI, STANDARD OPERATING PROCEDURES FOR PLANNED RELOCATION IN THE REPUBLIC OF FIJI I-2 (Mar. 2023) available at <https://fijiclimatechangeportal.gov.fj/wp-content/uploads/2023/04/Standard-Operating-Procedures-for-Planned-Relocation-in-the-Republic-of-Fiji-1.pdf> [hereinafter SOPs].

input into Standard Operating Procedures that better incorporate local voices and adhere to traditional protocols for negotiations related to customary land.⁵⁸

E. Ensuring Sustainable Infrastructure and Avoiding Maladaptations

Community involvement and knowledge are important to develop adaptation strategies and infrastructure that can function in a particular environment and that communities can maintain themselves once external funding and technical support are gone.⁵⁹ What works well on one island does not necessarily work well elsewhere: adaptations and relocation methods must be country- and context-specific.⁶⁰

There are many examples of efforts to adapt to climate change that have resulted in “maladaptations,” where the efforts are unsustainable or even counterproductive.⁶¹ Seawalls are an example, as they can easily fail and lead to additional erosion or scouring of the shoreline.⁶² For example, poor integration of local and available resources into infrastructure at a relocation site in Vanuatu complicated the replacement of equipment parts, and poor design rendered maintenance more difficult than necessary.⁶³ Traditional infrastructure may fare better in severe storms if it is more easily repairable and less likely to injure inhabitants when it fails.⁶⁴

58. *See id.*

59. *See* Janif et al., *supra* note 18, at 7.

60. *See* MUYEVE CHAMBWERA ET AL., *Economics of Adaptation*, in CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY. PART A: GLOBAL AND SECTORAL ASPECTS, 945, 984 (Eduardo Calvo et al. eds., Cambridge University Press 2014), available at https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap17_FINAL.pdf.

61. *See* E. Barrett Ristroph, *Avoiding Maladaptations to Flooding and Erosion: A Case Study of Alaska Native Villages*, 24 OCEAN AND COASTAL L. J. 110, 130 (2019) [hereinafter Ristroph 2019-1]; E. Barrett Ristroph, *Addressing Climate Change Vulnerability in Alaska Native Villages Through Indigenous Community Knowledge*, 9 SOCIO. STUDY 1, 12 (2019) [hereinafter Ristroph 2019-2].

62. *See* Ristroph 2019-1, *supra* note 61, at 130; *see also* Patrick D. Nunn, *Responding to the challenges of climate change in the Pacific Islands: Management and technological imperatives*, 40 CLIMATE RSCH. 211, 217 (2009).

63. *See* McNamara et al., *supra* note 28, at 629.

64. *See* Campbell, *supra* note 9, at 32. *See also* Janne von Seggern, *Understandings, Practices and Human-Environment Relationships—A Meta-Ethnographic Analysis of Local and Indigenous Climate Change Adaptation and Mitigation Strategies in Selected Pacific Island States*, 13 SUSTAINABILITY 1, 9 (2021).

This is not to suggest that traditional infrastructure alone will sustain all relocated communities, particularly if there is still a risk of flooding at the new site. Communities in the Pacific Islands and elsewhere have become increasingly sedentary and dependent on more expensive infrastructure and amenities.⁶⁵ As such, community knowledge in designing infrastructure is still important but may be insufficient.⁶⁶

II. EXAMPLES OF COMMUNITY KNOWLEDGE IN LEGAL AND PLANNING INSTRUMENTS RELEVANT TO PACIFIC ISLAND NATIONS

From international declarations and agreements concerning climate change and disaster management to national climate change and disaster plans, governments are recognizing the importance of community knowledge. Still, there are gaps in the extent to which international and national documents specifically apply community knowledge to climate mobility. Likewise, there are gaps in planning for large-scale relocation.

A. International and Regional

The following table shows how community knowledge is mentioned in some of the international and regional documents relevant to the Pacific Islands. It is not intended to be comprehensive, but rather to provide examples.

65. See Nunn, *supra* note 62, at 219.

66. See Ristroph 2019-2, *supra* note 61, at 6.

Document	Type	Application of Community Knowledge
Sendai Framework ⁶⁷	International Declaration	<p>“Disaster risk reduction requires a multi-hazard approach and inclusive risk-informed decision-making based on the open exchange and dissemination of disaggregated data . . . complemented by traditional knowledge[.]” (§19(g))</p> <p>“To ensure the use of traditional, indigenous and local knowledge and practices, as appropriate, to complement scientific knowledge in disaster risk assessment and the development and implementation of policies, strategies, plans and programmes of specific sectors, with a cross-sectoral approach, which should be tailored to localities and to the context[.]” (§24(i))</p> <p>“Older persons have years of knowledge, skills and wisdom, which are invaluable assets to reduce disaster risk, and they should be included in the design of policies, plans and mechanisms, including for early warning[.]” (§36 (a)(iv))</p> <p>“Indigenous peoples, through their experience and traditional knowledge, provide an important contribution to the development and implementation of plans and mechanisms, including for early warning[.]” (§36 (a)(v))</p>
World Bank Guidelines on Involuntary Resettlement ⁶⁸	Funder Guideline	<p>The borrower must have “explored all viable alternative project designs to avoid physical displacement of these groups. When it is not feasible to avoid such displacement, preference is given to land-based resettlement strategies . . . that are compatible with their cultural preferences and are prepared in consultation with them.” Operating Principle 4.12, paragraph 9</p> <p>“[R]esettlement packages should be compatible with the cultural preferences of the displaced persons, and prepared in consultation with them.” Operating Principle 4.12, Annex A, No. 11</p>

67. G.A. Res. 69/283, Sendai Framework for Disaster Risk Reduction 2015–2030 (June 3, 2015).

68. See generally The World Bank, *Involuntary Resettlement Sourcebook: Planning and Implementation in Development Projects*, at 371–398, <https://documents1.worldbank.org/curated/en/206671468782373680/pdf/301180v110PAPE1ettlement0sourcebook.pdf> (2004).

Paris Agreement ⁶⁹	International Agreement	“Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.” Art. 7(5)
Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP) ⁷⁰	Regional Declaration	Priority actions include: “Improve understanding and applications of successful strategies to increase resilience by documenting traditional, contemporary and scientific knowledge, and lessons learned[.]” (Goal 1(i)(r)) “Encourage a spiritual, theological and cultural inclusive approach that underpins personal and community participation in strengthening risk management.” (Goal 1(ii)(g))
SAMOA Pathway ⁷¹	Regional Declaration	“In particular, indigenous and traditional knowledge and cultural expression, which underscores the deep connections among people, culture, knowledge and the natural environment, can meaningfully advance sustainable development and social cohesion.” (§80) “In this regard, we strongly support the efforts of small island developing States: . . . (c) To develop and strengthen national and regional cultural activities and infrastructures, including through the network of World Heritage Sites, which reinforce local capacities, promote awareness in small island developing States, enhance tangible and intangible cultural heritage, including local and Indigenous knowledge, and involve local people for the benefit of present and future generations; . . . (e) To develop domestic mechanisms to conserve, promote, protect and preserve their natural, tangible and intangible cultural heritage practices and traditional knowledge.” (§81)

69. Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

70. *Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP) 2017 – 2030* (2016), available at https://gsd.spc.int/frdp/assets/FRDP_2016_Resilient_Dev_pacific.pdf.

71. G.A. Res. 69/15, SIDS Accelerated Modalities of Action (SAMOA) Pathway (Dec. 15, 2014).

Convention for the Safeguarding of the Intangible Cultural Heritage ⁷²	International treaty	<p>“To ensure the safeguarding, development and promotion of the intangible cultural heritage present in its territory, each State Party shall endeavour to: (a) adopt a general policy aimed at promoting the function of the intangible cultural heritage in society, and at integrating the safeguarding of such heritage into planning programmes[.]” (Art. 13)</p> <p>“Within the framework of its safeguarding activities of the intangible cultural heritage, each State Party shall endeavour to ensure the widest possible participation of communities, groups and, where appropriate, individuals that create, maintain and transmit such heritage, and to involve them actively in its management.” (Art. 15)</p>
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Still, a number of international documents relevant to Pacific Island relocation do not mention community knowledge at all, including the 2001 United Nations Guiding Principles on Internal Displacement,⁷³ 2010 Inter-Agency Standing Committee (IASC) Framework on Durable Solutions for Internally Displaced Persons,⁷⁴ 2011 IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters,⁷⁵ and the 2011 Nansen Principles on Climate Change and Displacement.⁷⁶

B. National

Several Pacific Island Nations specifically provide community knowledge in their adaptation and relocation policies. For example, Kiribati’s national adaptation strategy acknowledges the importance of community knowledge and expresses concerns

72. See Convention for the Safeguarding of the Intangible Cultural Heritage, Oct. 17, 2003, 2368 U.N.T.S. 3, available at <https://treaties.un.org/doc/Publication/UNTS/Volume%202368/v2368.pdf>.

73. See Sergio Vieira de Mello, U.N. Secretary General for Humanitarian Affairs and Emergency Relief Coordinator, Guiding Principles on Internal Displacement (June 2001), <https://www.unhcr.org/43ce1cff2.pdf>.

74. See The Brookings Inst., IASC Framework on Durable Solutions for Internally Displaced Persons (Apr. 2010), <https://www.unhcr.org/50f94cd49.pdf>.

75. See The Brookings Inst., IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters (Jan. 2011), https://www.ohchr.org/sites/default/files/Documents/Issues/IDPersons/OperationalGuidelines_IDP.pdf.

76. See Norwegian Refugee Council/Internal Displacement Monitoring Centre (NRC/IDMC), *The Nansen Conference: Climate Change and Displacement in the 21st Century* (June 5–7, 2011), <https://www.unhcr.org/4ea969729.pdf>.

regarding its decline, along with cultural barriers to sharing it.⁷⁷ One of Kiribati's key national strategies is to improve knowledge and information generation, though this is largely focused on the spread of external knowledge from government centers outward.⁷⁸ Kiribati's strategy highlights the importance of community knowledge regarding disaster prediction,⁷⁹ food preservation and cultivation,⁸⁰ and in developing local plans.⁸¹

Tonga's adaptation strategy also focuses on collecting and managing external knowledge on climate, but it includes a component to "[e]nhance the research and documentation, data collection information and knowledge on Traditional Knowledge on climate."⁸² This strategy also focuses on increasing access to available data for quantitative assessments of climate impacts.⁸³ Further, the strategy notes more data is needed to support "vulnerability and risk assessments integrated with . . . traditional knowledge to inform resilient development."⁸⁴

Only two nations, Vanuatu and Fiji, maintain online climate mobility plans.⁸⁵ Vanuatu's National Plan on Climate Change and Disaster Displacement highlights the role of community knowledge to minimize the disruptive impacts of displacement, assist communities to mitigate and cope with displacement-related impacts, and map land and housing available for relocation.⁸⁶ The plan calls for the following measures to preserve community knowledge and apply it to migration:

- (1) Map community knowledge for communities at risk of displacement, and consider how this knowledge can inform adaptation efforts.

77. See KIRIBATI JOINT IMPLEMENTATION PLAN FOR CLIMATE CHANGE AND DISASTER RISK MANAGEMENT (KJIP), GOV'T OF KIRIBATI 1, 48 (2019), <https://www4.unfccc.int/sites/NAPC/Documents/Parties/Kiribati-Joint-Implementation-Plan-for-Climate-Change-and-Disaster-Risk-Management-2019-2028.pdf> [hereinafter *Kiribati*].

78. See *id.* at 69.

79. See *id.* at 110.

80. See *id.* at 124, 127.

81. See *id.* at 120.

82. See JOINT NAT'L ACTION PLAN 2 ON CLIMATE CHANGE DISASTER RISK MGMT. 2018–2028, GOV'T OF TONGA 1, 31 (2018), <https://policy.asiapacificenergy.org/sites/default/files/JNAP%202%20%282018-2028%29.pdf>.

83. See *id.* at 31.

84. See *id.*

85. See *id.* at 26.

86. See VANUATU, *supra* note 18, at 17, 35.

- (2) Link mapping of community knowledge with existing initiatives by the Vanuatu Cultural Centre and Provincial level cultural officers.
- (3) Map “family histories, birth records, connections to land, and property and assets ownership to provide records in the event of displacement.
- (4) Provide for community-led and participatory approaches to planning so that emergency response reflects the needs (and knowledge) of affected communities and allows them to make informed decisions.
- (5) Assist communities to create plans to sustain their connections to burial grounds.
- (6) Highlight community knowledge regarding stories of displacement, migration, survival, return, and relocation. “Provide a place to share experiences of displacement.” Work with the Vanuatu Cultural Centre to collect, display and share these stories.⁸⁷

Fiji has a ministry division specifically dedicated to climate change within the Ministry of Economy.⁸⁸ Fiji’s 2021 Climate Change Act, which implements the Paris Agreement, contains objectives for relocation designed to guarantee basic rights and enable all affected stakeholders to participate in decisions affecting communities.⁸⁹ Communities are to be relocated “only with the full free and prior informed consent of the communities, following inclusive and gender responsive consultation and participatory processes.”⁹⁰ Further, if a community is relocated to “land that supports existing communities, the rights and concerns of those existing or host communities are taken into account and

87. See VANUATU, *supra* note 18, at 17, 26, 44.

88. The Fijian Ministry of Economy established a climate change division within the Ministry of Economy. As of this writing, the Economic Minister serves as Climate Change Minister and is Fiji’s National Designated Authority to the international Green Climate Fund. See *Fiji’s Climate Change Information Hub*, FIJI CLIMATE CHANGE AND NAT’L DESIGNATED AUTH. PORTAL, <https://fijiclimatechangeportal.gov.fj/> (last visited Nov. 11, 2023); *H.E. Mr. Aiyaz Sayed-Khaiyum, United Nations Department of Economic and Social Affairs Sustainable Development*, <https://sdgs.un.org/panelists/he-mr-aiyaz-sayed-khaiyum-30306#:~:text=Attorney%2DGeneral%2C%20Minister%20for%20Economy,Minister%20responsible%20for%20climate%20change> (last visited Nov. 11, 2023).

89. See Climate Change Act 2021, § 77 (Act No. 43) (Fiji).

90. See *id.* at (1)(e).

respected.”⁹¹ There must be consultation and a public hearing prior to making a decision to move.⁹²

The Climate Change Division/Ministry of Economy has developed guidelines for both planned relocation and disaster displacement. Both recognize the role of community knowledge. Among the stated purposes of the Planned Relocation Guidelines are to ensure a participatory process with community engagement and ownership, and to “recognise the richness of the indigenous knowledge.”⁹³ The Displacement Guidelines refer to the “constructive use of the Indigenous knowledge.”⁹⁴

The Climate Change Division has also developed Standard Operating Procedures (SOPs) that are designed to work with communities and seek their knowledge at all phases of relocation. For example, there is a detailed process for relocations on customary land managed by the Ministry of iTaukeia Affairs.⁹⁵ The Ministry works with a Task Force of Relocation and Displacement of various agencies in administering this process.⁹⁶

A community can seek assistance from the Fijian government to help with negotiations with neighboring landowners. Fiji requires 90% of each group (including women, youth, elders, etc.) of village residents to agree to the relocation in order to trigger the negotiation process.⁹⁷ A task force of different government agency representatives conducts an assessment of the village to determine whether it meets the threshold for relocation, as relocation is the last resort.⁹⁸ Petitioners who fall short of the threshold can get other adaptation interventions to prolong protect-in-place adaptation or to avoid the need for move.⁹⁹

If the threshold is met, the Task Force completes a comprehensive community assessment to identify a new site.¹⁰⁰ The selection of the new site requires the consensus of at least 60%

91. See *id.* at (1)(g).

92. See *id.* at (2).

93. See *Planned Relocation Guidelines: A framework to undertake climate change related relocation*, MINISTRY OF ECON., REP. OF FIJI 1, 3 (2018), https://fijiclimatechange-portal.gov.fj/wp-content/uploads/2022/01/Planned-Relocation-Guidelines_Fiji.pdf.

94. See *Displacement Guidelines In the context of climate change and disasters*, MINISTRY OF ECON., REP. OF FIJI 1, 3 (2019), <https://www.adaptationcommunity.net/wp-content/uploads/2020/03/Displacement-Guidelines-Fiji-2019.pdf>.

95. See SOPs, *supra* note 57, at I-1.

96. See SOPs, *supra* note 57, at II-4.

97. See SOPs, *supra* note 57, at II-4.

98. See SOPs, *supra* note 57, at III-20.

99. See SOPs, *supra* note 57, at III-27.

100. See SOPs, *supra* note 57, at III-51.

of residents.¹⁰¹ Negotiations for the right to live at the new site take place through a village headman, following traditional protocols.¹⁰² Customary land is not bought or sold, as ownership is inalienable.¹⁰³ Villages use their ties and respect with neighboring clans to acquire rights to use. When the negotiation is complete, the physical relocation starts. A decision is made on how to handle the old site.¹⁰⁴ Monitoring and evaluation occur thereafter.¹⁰⁵

Thus, while there are an increasing number of policies to guide planned community relocation, only a few policies specifically provide for community knowledge. Fiji's policies are among the most far reaching and could serve as a reference for operationalizing planned community relocations in other places.

IV. CHALLENGES FOR APPLYING AND BRIDGING KNOWLEDGES

As summarized in the previous section, there are several efforts to incorporate community knowledge into adaptation and relocation strategies. Despite these efforts, there are gaps between policy and reality. This section explores the pitfalls external facilitators face in gathering and applying community knowledge.

A. *External Processes May Not Adequately Capture and Integrate Community Knowledge*

The Pacific Islands have a history of externally led relocations without adequate input from residents. This is true not only of colonially mandated relocations, such as Banaba Island,¹⁰⁶ but also of more recent relocations where there may have been consultation but not full participation by residents (e.g., Narikoso and Denimanu, Fiji).¹⁰⁷ In some cases, national priorities may not be consistent with those of a relocating community.¹⁰⁸ Even

101. See SOPs, *supra* note 57, at III-32.

102. See SOPs, *supra* note 57, at III-47, III-57.

103. ITAUKEI LAND TRUST BOARD, LAND OWNERSHIP IN FIJI 1, 3, available at [https://www.tltb.com.fj/getattachment/Media/Brochures/Land-Ownership-in-Fiji-Booklet-\(1\).pdf.aspx?lang=en-US#:~:text=As%20such%2C%20land%20in%20the,only%20on%20a%20leasehold%20basis](https://www.tltb.com.fj/getattachment/Media/Brochures/Land-Ownership-in-Fiji-Booklet-(1).pdf.aspx?lang=en-US#:~:text=As%20such%2C%20land%20in%20the,only%20on%20a%20leasehold%20basis).

104. See SOPs, *supra* note 57, at III-85.

105. See SOPs, *supra* note 57, at III-88.

106. See Edwards, *supra* note 29, at 138.

107. See Piggott-McKellar et al., *supra* note 32, at 13.

108. See Maxine Burkett, *Lessons From Contemporary Resettlement In The South Pacific*, 68 J INT'L AFFAIRS 75, 76 (2015).

where national and donor policies strive to incorporate community input, they may fail to provide for the time and funding needed to do so.¹⁰⁹ The result is a top-down initiative that is not likely to be supported by the community and is thus ineffective or unsustainable.¹¹⁰

A related challenge concerns incorporating community knowledge into the external knowledge framework used to guide relocations. While many Pacific Island residents are adept at combining external knowledge with their own observations,¹¹¹ community values and stories may not translate well into the language and formats used by external relocation facilitators.¹¹² Often community knowledge is documented by outsiders and may be stripped of context and values, which can offend the knowledge holders.¹¹³

Cultural barriers present additional challenges. There may be reluctance to share knowledge that is considered sacred or fundamentally important to a community or a family's livelihood, lest it be misused.¹¹⁴ Cultural politeness can mean that village residents listen to what outsiders have to say without fully sharing their thoughts.¹¹⁵ Thus, external facilitators may think that residents agree with the terms of a proposed relocation even when they do not. On the other hand, it may also be the case that those who lack relevant knowledge are still inclined to share it. In some Pacific Island cultures, it would be inappropriate to refuse to give advice when asked, even if one is not qualified to give it.¹¹⁶

109. See P. DUMARU ET AL., CLIMATE RESILIENT MOBILITY: AN INTEGRATED VULNERABILITY ASSESSMENT OF KORO ISLAND, LOMAIVITI PROVINCE 1, 66 (2020), available at <https://fiji.wcs.org/Portals/82/reports/Koro%20IVA%20Report%20Digital%20Singles.pdf?ver=2021-07-22-012226-233>; TRANSCEND OCEANIA & CONCILIATION RES, *supra* note 12, at 5; Volger Boege & Ria Shibata, *Climate Change, Relocation and Peacebuilding in Fiji: Challenges, Debates, and Ways Forward*, TODA PEACE INST. 1, 3 (2020), available at <https://toda.org/policy-briefs-and-resources/policy-briefs/climate-change-relocation-and-peacebuilding-in-fiji-challenges-debates-and-ways-forward.html>.

110. See Nunn, *supra* note 62, at 220.

111. See Connell, *supra* note 23, at 83.

112. See Boege & Shibata, *supra* note 109, at 10; Ristroph, *supra* note 8, at 93.

113. See Boege & Shibata, *supra* note 109, at 13; YUNIUNG SHIN & PETER MÅN-SON, INTEGRATING LOCAL KNOWLEDGE INTO DISASTER RISK REDUCTION: CURRENT CHALLENGES AND RECOMMENDATIONS FOR FUTURE FRAMEWORKS IN THE ASIA-PACIFIC, 1, 14 (2017), available at <https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=8923039&fileId=8923043>.

114. See Calamia, *supra* note 32, at 8; see also Ristroph, *supra* note 8, at 98.

115. See MARY B. ANDERSON ET AL., TIME TO LISTEN: HEARING PEOPLE ON THE RECEIVING END OF INTERNATIONAL AID, CDA COLLABORATIVE LEARNING PROJECTS 1, 71 (2012).

116. See Nunn, *supra* note 62, at 220.

B. Loss of Knowledge

The environment on which community knowledge is based has changed overtime on many Pacific Islands with development and overexploitation of natural resources as well as climate change.¹¹⁷ Social change is also an issue: the forces of colonization, urbanization, mechanization, globalization, and external aid have eroded community knowledge.¹¹⁸ Further, colonial languages and Western systems of literacy have diminished the importance of oral traditions that transmit cultural knowledge.¹¹⁹ Colonization also affects kinship networks that can support adaptation and relocation.¹²⁰ The marginalization of community knowledge can lead to a vicious cycle, where community members believe that the knowledge is not important and begin to disregard it themselves, leading to further diminishment.¹²¹

The fact that colonization has caused many problems should not suggest that all the systems in place prior to colonization were ideal in terms of fairly distributing community knowledge. Some traditional hierarchies have limited the input of vulnerable groups, particularly women.¹²² Failure to include women's input on the selection and design of the new site can result in greater inequity.¹²³

V. STRATEGIES FOR INCREASING THE APPLICATION OF COMMUNITY KNOWLEDGE TO PLANNED RELOCATION

Pacific Island governments are at the forefront of climate change impacts and the resulting need for relocation. These governments have opportunities to design relocation models that work for the current conditions of the Pacific Islands, instead of cutting and pasting designs from elsewhere. Rather than a

117. See Calamia, *supra* note 32, at 5.

118. See Ristroph, *supra* note 8, at 96; Granderson, *supra* note 15, at 555; see also Campbell, *supra* note 9, at 29; Lauer, *supra* note 8, at 177.

119. See Janif et al., *supra* note 18.

120. See Granderson, *supra* note 15, at 554.

121. See Jessica Mercer, et al., *Framework for integrating indigenous and scientific knowledge for disaster risk reduction*, 34 *DISASTERS* 214, 219 (2010).

122. See Mycoo, *supra* note 32, at 2077, 2090; Bertana, *supra* note 45, at 912; Granderson, *supra* note 15, at 555; VANUATU, *supra* note 18, at 18; DUMARU ET AL., *supra* note 109, at 62. For example, in the relocation of Vunidogoloa, new houses were built without kitchens, suggesting the women were not sufficiently involved. *Id.* See also Liam Moore, *Putting principles into practice: lessons from Fiji on planned relocations*, 69 *FORCED MIGRATION REV.* 51, 53 (2022).

123. See Campbell, *supra* note 24, at 24.

narrow focus based on Western-style climate projections and infrastructure construction, there must be an understanding of what is needed to sustain a community physically, economically, culturally, and spiritually. Bringing communities into the planning process and following their customary protocols related to land is key to this understanding.¹²⁴ The strategies in this section serve as recommendations for external relocation assistance.

A. Accepting that Community Knowledge May Dictate Staying in Place

It cannot be overstated how closely tied many Indigenous peoples are to their lands in the Pacific Islands.¹²⁵ These ties exist alongside the phenomenon of individual and household migration to urban centers and other countries in search of better opportunities. Younger generations may want to leave a community to take advantage of opportunities elsewhere, while older generations may prioritize connections to ancestral lands and maintaining traditions.¹²⁶ While Pacific Islanders are profoundly tied to their ancestral land, they also have the agency and the ability to choose how to adapt.¹²⁷

A number of scholars have emphasized the importance of voluntary immobility, recognizing that Pacific Island residents may choose to stay where they are despite the risks.¹²⁸ Planned community relocation is often seen as a last resort when other

124. See United Nations Educational, Scientific and Cultural Organization [UNESCO], *Convention for the Safeguarding of the Intangible Cultural Heritage* (Oct. 17, 2003), <https://www.unesco.org/en/legal-affairs/convention-safeguarding-intangible-cultural-heritage#item-2>. Further, working with communities to incorporate their traditional knowledges and protocols into relocation planning is consistent with the 2003 UNESCO convention on intangible cultural heritage, ratified by 13 Pacific Island Nations. *Id.*

125. See Lund, *supra* note 34, at 15; See generally Singh et al., *supra* note 39.

126. See generally S. Démurger, *Migration and families left behind*, 144 IZA WORLD OF LABOR 1 (2015), available at <https://wol.iza.org/uploads/articles/144/pdfs/migration-and-families-left-behind.pdf>; see also Mike Taibbi & Melanie Saltzman, *Marshall Islands: A third of the nation has left for the U.S.*, PBS (Dec. 16, 2018 6:22 PM), <https://www.pbs.org/newshour/show/marshall-islands-a-third-of-the-nation-has-left-for-the-us>.

127. See generally Elizabeth McLeod et al., *Lessons from the Pacific Islands – Adapting to Climate Change by Supporting Social and Ecological Resilience*, 6 FRONTIERS IN MARINE SCI. 1 (2019); see also Oakes, *supra* note 1; Perumal, *supra* note 28, at 58; Celia McMichael et al., *Planned relocation and everyday agency in low-lying coastal villages in Fiji*, 185 GEOGRAPHICAL J. 325, 325–328 (2019).

128. See Farbotko, *supra* note 6; see generally Yee, et al., *supra* note 38.

options have been exhausted.¹²⁹ Where relocation is chosen, it should be recognized that climate mobility is a spectrum rather than a binary in which a community must completely relocate or stay.¹³⁰ Part of the community may want to, and should have the right to, stay in its present location. The community may consider slowly adjusting its boundaries; taking a staggered relocation approach where some families move first; securing a site on customary land for future generations who may want to relocate; and/or planning for temporary post-disaster labor migration.¹³¹

*B. Ensuring a Participatory Approach for Relocation,
Following Customary Protocols*

Community participation and adherence to customary local protocols regarding communication and negotiations are fundamental to planned relocation.¹³² There is a need for a participatory process through which community knowledge is shown to have value and is fostered within the community.¹³³ Acknowledging the importance of this knowledge and the knowledge holders helps build trust that facilitates relocation planning.¹³⁴ The relocation process should take place in and through the communities themselves using languages and terms that are familiar to them. Each community would need to consent to all aspects of the relocation, including ways to ensure connections to the original locations are sustained.¹³⁵

C. Collecting Knowledge

Just as there are different views on the need for relocation within a community, there are different types of knowledges and

129. See generally Lara Bullens, *Pacific Island countries fight to ensure future before rising sea levels swallow them up*, FRANCE 24 (Nov. 24, 2022), <https://www.france24.com/en/asia-pacific/20221124-pacific-islands-fight-for-existence-before-rising-sea-levels-swallow-them-up>.

130. See generally Annah E. Piggott-McKellar & Celia McMichael, *The immobility-relocation continuum: Diverse responses to coastal change in a small island state*, 125 ENV'T SCI. & POL'Y 105 (2021).

131. See DUMARU ET AL., *supra* note 109, at 63, 68.

132. See IFRC, *supra* note 25, at 45, 48; see also Fitzpatrick, *supra* note 29, at 2–3.

133. See Mercer et al., *supra* note 121, at 219.

134. See Boege & Shibata, *supra* note 109, at 10.

135. See VANUATU, *supra* note 18, at 44.

levels of these knowledges.¹³⁶ Community knowledge holders should be drawn from all groups, including village and church officials, elders, youth, and women.¹³⁷ It may also be helpful to involve the larger diaspora of those who have left a community but still support it.¹³⁸

There can be a tension between the cultural norms associated with traditional knowledge and the egalitarian and inclusivity aspects of international human rights. It is important to acknowledge the traditional relations within a community, such as seeking permission from elders to collect knowledge,¹³⁹ while also creating a space for all community voices to be heard.¹⁴⁰ Depending on the cultural norms of the community, it may be useful to have separate forums for different groups of people so each can speak freely.¹⁴¹ This approach is important in places where women are traditionally not part of decision-making processes and are not always able to express their views¹⁴² or may simply defer to men.¹⁴³ Addressing the group as a whole could leave out the voice of women, perpetuating inequalities.¹⁴⁴ As discussed in Section III(B), Fiji's 2023 SOPs have tried to address this problem by separately consulting women and other groups in the community about potential relocations, and requiring 90% of people in each group to give their approval.¹⁴⁵

A wide range of knowledge(s), from knowledge on the natural and built environment to that regarding culture and relationships that can contribute to resilience, should be collected and documented to facilitate relocation. Community mapping (collecting knowledge on existing community structures, assets, capacities related to construction and livelihoods) is useful to

136. See Boege & Shibata, *supra* note 109, at 3; Lauer, *supra* note 8, at 183; Ristroph, *supra* note 8, at 95; Rory A. Walshe & Patrick D. Nunn, *Integration of Indigenous Knowledge and Disaster Risk Reduction: A Case Study from Baei Martelli, Pentecost Island, Vanuatu*, 3 INT. J. DISASTER RISK SCI. 185, 192 (2012).

137. See Anisi, *supra* note 54, at 8.

138. See DUMARU ET AL., *supra* note 109, at 65.

139. See Mercer et al., *supra* note 121, at 223; Boege & Shibata, *supra* note 109, at 15.

140. See TRANSCEND OCEANIA & CONCILIATION RES., *supra* note 12, at 24.

141. See Mercer et al., *supra* note 121, at 231.

142. See Yee, et al., *supra* note 38, at 7.

143. See Kate Lyons, *How to move a country: Fiji's radical plan to escape rising sea levels*, GUARDIAN (Nov. 15, 2022), <https://www.theguardian.com/environment/2022/nov/08/how-to-move-a-country-fiji-radical-plan-escape-rising-seas-climate-crisis>.

144. See Piggott-McKellar et al., *supra* note 32, at 8.

145. See SOPs, *supra* note 57, at II-3.

rebuild a sense of place and belonging at the relocation site.¹⁴⁶ In particular, it is important to understand the context in which residents live in order to select and design a site that can support traditional livelihoods and cultural practices, including sacred space.¹⁴⁷ While knowledge collection may occur in a segregated manner, it could be helpful to have community-wide knowledge-sharing forums so that knowledge is not held only by a certain group.¹⁴⁸ Such forums, if held in a culturally appropriate manner in connection with village traditions, could facilitate a common vision on adaptation and relocation.¹⁴⁹

D. Knowledge Exchanges and Relationship Building

It may be useful to foster partnerships and knowledge exchanges between a relocating and a receiving community, or the community that holds customary title to the relocation area.¹⁵⁰ Efforts to ensure equity among resettlers and the receiving community are likewise important.¹⁵¹ For example, resettlers should not end up with bigger and better houses than their hosts. To the extent it does not violate cultural protocols, it may be useful to provide some sort of compensation to the receiving community. Mechanisms to negotiate knowledge transfers, alongside mechanisms to negotiate land transfers, could be important to relocation success. For example, it can be helpful for resettlers to learn from those at a receiving site about how to cope with the local environment.¹⁵²

146. See IFRC, *supra* note 25, at 51.

147. See Burkett, *supra* note 108, at 80.

148. See Walshe & Nunn, *supra* note 136, at 192 (2012). An example is the Pacific Conference of Churches/Nansen Initiative forum held in Vunidogoloa, Fiji, prior to relocation. *Id.* See Tronquet, *supra* note 18, at 136.

149. See E. Barrett Ristroph, *Toward More Community Oriented and Collaborative Planning: A Case Study of Alaska Native Village Planning for Climate Change*, 5 CIVIL ENG'G & URBAN PLAN. 1, 11 (2018).

150. For example, the non-profit Tulele Peisa contributed to relocating efforts from the Carteret Islands, Papua New Guinea to mainland Bougainville by bringing chiefs and elders from the receiving area to visit the Carteret Islands. See Boege & Rakova, *supra* note 33, at 6. The extended visit enabled Bougainville leaders to see the difficulties faced by Carteret Islanders and enabled the leaders to be more welcoming. *Id.*

151. See Dalila Gharbaoui & Julia Blocher, *The Reason Land Matters: Relocation as Adaptation to Climate Change in Fiji Islands*, in MIGRATION, RISK MGMT. AND CLIMATE CHANGE: EVIDENCE & POL'Y RESPONSES, 1, 6 (Milan et al., 2016).

152. See Edwards, *supra* note 21, at 79.

E. Bridging Knowledges

It is important to share external knowledge with communities so they can combine it with their own knowledge and make informed decisions. For example, prior to the Vunidogoloa relocation, government officials shared information in community meetings about the forthcoming risks and offered alternatives without imposing relocation.¹⁵³ Without being fully informed of the climate risks, communities may not be able to properly consent to relocation.

Ministries, academics, and nonprofit groups with expertise in social services, cultural preservation and local languages may be helpful in bridging knowledges.¹⁵⁴ Vanuatu's incorporation of the Ministry of Culture into its National Policy on Climate Change and Disaster-Induced Displacement provides a good example.¹⁵⁵ When bringing together knowledges, external knowledge should not be privileged over community knowledge—the two should be evenly valued.¹⁵⁶

F. Trust-building and Respect for Custom and Traditional Processes

Trust between the relocating community, the receiving community, and any external relocation facilitators is an essential aspect of relocation.¹⁵⁷ External facilitators should spend time in dialogue with communities to build trust.¹⁵⁸ Longer planning time frames and open-ended, adaptive processes can help build relationships and trust among the various actors, allowing for more meaningful community participation.¹⁵⁹ Longer time frames are important not only for negotiating relocation on customary lands in accordance with the appropriate protocols,¹⁶⁰ but

153. See Bertana *supra* note 45, at 911.

154. See Jessie Connell & Sabira Coelho, *Planned relocation in Asia and the Pacific*, 59 FORCED MIGRATION REV. 46, 48 (2018).

155. See VANUATU, *supra* note 18, at 14.

156. See McLeod et al., *supra* note 127, at 2.

157. See Mele Katea Paea, *Tauhi Vaā Māfana: Tongan leadership and culture in the New Zealand Public Service*, VICTORIA U. OF WELLINGTON 1, 11 (2015) (Ph.D. Thesis, Victoria University of Wellington), available at <http://researcharchive.vuw.ac.nz/bitstream/handle/10063/4895/thesis.pdf?sequence=1>.

158. See DUMARU ET AL., *supra* note 109, at 9.

159. See TRANSCEND OCEANIA & CONCILIATION RES., *supra* note 12, at 5; Boege & Shibata, *supra* note 109, at 3; Campbell, *supra* note 24, at 25.

160. See DUMARU ET AL., *supra* note 109, at 66.

also for transactions with other types of land tenure.¹⁶¹ In some cases, there will be a need to sort out title and complete probate prior to land transfers. External facilitators should be prepared to fund lengthy negotiations with receiving communities.

G. Willingness to Continually Refine Process

There is still much to learn about how to best use community knowledge in the relocation process. What works well in some communities may not work well in others. Thus, external relocation facilitators should be willing to learn from past experiences and adapt policies and procedures. For example, the Fiji SOPs are supposed to be a “living document,” updated regularly in response to lessons learned with successive relocations.¹⁶² This flexibility is important, as it remains to be seen how relocations will affect overall livelihoods for future generations.

VI. CONCLUSION

Communities across the Pacific Islands have rich collections of knowledge about their environment, history, and culture, knowledge that is essential for selecting, designing, and adapting to relocation sites, and for preserving community identity in the new sites. Too often, there is a power imbalance in which external relocation facilitators dictate the terms of relocation and fail to adequately provide for the community knowledge, consent, and participation needed for successful relocations. For those communities that choose to relocate, there must be a participatory process that respects local customs and protocols, particularly those for acquiring the right to live on lands under the customary title. Bringing community knowledge to the forefront is not always easy; significant investments of time and funding are required just to generate the trust needed for knowledge sharing. The process should be approached with a sense of humility and a willingness to adjust as needed for each community. Processes will benefit from evaluations and additional research from the perspective of communities.

161. See Fitzpatrick, *supra* note 33, at 7–9.

162. See SOPs, *supra* note 57, at I-14, III-71.

Most of the research on community knowledge and climate change focuses on disaster preparedness.¹⁶³ There is a need for more research on how communities have historically used their knowledge to select, design, and adapt to new sites. As relocations continue to occur in the face of climate change, there will be a need to evaluate the short and long-term outcomes from the perspective of communities, as well as the processes for community involvement. This should provide insight into how to better integrate processes to obtain and use community knowledge into plans, policies, and guidance, so that community knowledge will be treated on par with external knowledge.

Just as there are gaps in the substance of research, there are gaps in the process by which research is conducted. A major limitation of this article was that it was written by an external researcher without a presence in the communities that are the focus of this research. Future research and evaluations of planned community relocations should be done in partnership with the affected communities.

163. See generally Leonard A. Nurse et al., *Small islands*, in *CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY* (Cambridge Univ. Press ed.) (2014). See also Bryant-Tokalau *supra* note 28, at 3; Campbell, *supra* note 9, at 29; Lisa Hiwasaki et al., *Process for integrating local and indigenous knowledge with science for hydro-meteorological disaster risk reduction and climate change adaptation in coastal and small island communities*, 10 *INT'L J. OF DISASTER RISK REDUCTION* 15, 16–17 (2014); Lauer, *supra* note 8, at 183.