

CLIMATE TALK

Climate Change at Home: The Case for Localized Adaptation

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“We’re not climate refugees, we will stay here ‘till we die!”

The phrase isn’t a common title for an academic paper but a presentation by this name won the Award for Best Paper at the *World Symposium on Climate Change Impacts and Adaptation Strategies in Coastal Communities* hosted in Western Samoa, in July. The symposium’s goal was to discuss, document, and disseminate best practices for the complicated work of adapting to climate change on low-lying, small island countries. In attendance were more than 100 climate adaptation professionals, politicians, and academics from more than a dozen island nations across the western Pacific Ocean.



And then there was me - a twenty-seven-year-old American, frequently being asked by my fellow symposium attendees: why was I spending my Independence Day on the wrong side of the International Date Line? My long-winded answer included an explanation of how I had recently completed a graduate degree in Environmental Policy at the University of Washington, I had been provided a once-in-a-lifetime opportunity to work on climate change adaptation for a coastal Treaty Tribe in Washington State, and my Washington Sea Grant fellowship included funding to attend a professionally-relevant conference.

After the first day, however, my short answer quickly became: “I’m here to learn.”

The symposium was an emotional rollercoaster that highlighted why coastal communities, especially on small island nations, are often referred to as the “frontline of climate change” and their residents are often labeled as “the world’s first climate refugees.” Attendees shared both inspirational case studies and vivid firsthand accounts of communities left with little choice but to abandon their ancestral homeland in the face of rising sea levels.

Many of the challenges faced by small island countries are similar to those faced in coastal communities elsewhere in the world, but are unique in terms of their magnitude and variability. According to the Intergovernmental Panel on Climate Change, small island countries are the most vulnerable due to:

- Sea Level Rise: the rate of sea level rise is three times greater in the western Pacific than the global average;
- Population Distribution: more than 50% of people living on Pacific islands live within one mile of the coastline; and
- Uncertainty & Extreme Events: El Niño remains one of the most difficult natural phenomena to predict, but has the potential to deliver stronger and more frequent extreme events, such as floods, to small island nations in the near future.

In short, small island countries must take action to prepare for impacts of climate change that other nations may not experience for 20-30 years.

The logical reaction to the many urgent threats that climate change delivers to coastal communities, especially on small island nations, is to identify and implement the single best available solution. However, the Samoa symposium reinforced one of the main lessons I've learned: there is no single adaptation solution that can work for all communities.

An example of this lesson is climate migration, perhaps the adaptation strategy of last resort. Whether abandoning one's home to escape rising sea levels is an acceptable form of adaptation can vary on the country, the community, and even the individual level. The best paper, *We're not climate refugees, we will stay here 'till we die!*, at the symposium won because it documented the fact that some coastal communities on low-lying islands reject the label of climate refugees and would rather defend their home at all costs than opt to migrate.

While the goal of the symposium was to discuss, document, and disseminate the best available solutions to help coastal communities avoid maladaptation, it also succeeded at avoiding the pitfall of prescribing a single one-size-fits-all solution for all participants to take home.

Overall, my fellowship has emphasized the value of adaptation as an opportunity to address global problems with locally-determined and human-focused solutions. This may be truest for coastal communities relatively small and scattered across archipelagos, but the benefits of locally-sourced fixes for changing conditions is not limited to remote, exotic places. Compared to the complex issue of mitigating global carbon emissions, adaptation offers all communities an opportunity to address a changing climate on their own terms.

For a coastal community on a low-lying small island country, adaptation may mean reestablishing mangroves, starting an intensive agriculture program, or migration.

For a coastal Treaty Tribe in Washington State, adaptation may mean leveraging traditional knowledge, preserving treaty-protected resources, or modernizing a fishing fleet to keep pace with changing fish species.

For an agricultural town in the Midwestern United States, adaptation may mean more efficient irrigation practices, tree plantings to combat urban heat islands, or improving infrastructure to handle more frequent flood events.

There is no silver bullet for adapting to climate change. The decision on how to think globally but act locally lies at the community level. Because I am neither Samoan nor Native American, I do not get to decide how or if those communities adapt to changing conditions. As an adaptation professional, however, I have the opportunity to provide communities the best available scientific information, learn from how they decide to use it, and apply those lessons elsewhere. Whatever your personal opinion on climate change may be, the benefits of well-informed local governance are not a hoax and my experience as a climate adaptation professional is living proof.

Forrest graduated from Bayfield High School in 2008 after documenting the impacts of climate change on ice cover in his hometown. He received a Bachelor of Science in Conservation Biology and International Studies from the University of Wisconsin-Madison and a graduate degree in Environmental Policy and Climate Science at the University of Washington-Seattle. He is currently serving as the 2016 Marc Hershman Marine Policy Fellow organized by Washington Sea Grant and hosted by Makah Tribe of Washington State.