



Pacific Voices From A Rising Sea

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Perpetua Tmetuchl goes by the nickname Tua. She's been farming taro in the same place in Palau since the early 1980s. People have grown taro for about 5,000 years, and here some areas might trace an unbroken line of cultivation back fully 3,000 years. Its starchy root has been so crucial to island survival for so long that in some places it is revered and nearly sacred. Growing it is guided by custom and taboo. Men are not allowed into the taro patch at the time of planting. Women do not sleep with their husbands the night before, for fear that they will wake late, in the wrong frame of mind for hard work.

As we are walking downhill to her taro patch, Tua explains, "In 1996 my husband and I took a walk down to my taro patch, just like you and I are doing. But that evening, we were amazed. The high tide was coming inside, flooding the taro with saltwater. You know how water is; we couldn't do anything. That was the first time. Then, it started coming every few months. Now, it's almost every full moon."

Taro needs to be seasonally wet, so it's grown near freshwater. But it also has to dry out. And—it can't grow in seawater.

Until the 1960s, most Palauans relied on local food for survival. Taro was the main source of calories. For older and poorer people, it still is. It's starchy and satisfying, like potatoes, but the flavor—quite good—is different.

Looking at the flooded portions and the yellowed leaves, Tua says, "All the villages close to the shoreline have this same problem. With the seawater coming up, and so much rain, the water doesn't drain."

"Rain. Rain, rain, rain," says Hilve Skang, who also farms taro on the same island. She's chewing betel nut as she leads me down to her taro patch. And she's quite agitated. Hilve sputters, "Last night, full moon—highest tide we ever seen. It was about a foot over the mark we made last time it was the highest we ever seen."

Her banana trees' leaves look like they're burning. Saltwater has done that. A big part of the taro patch is soggy and lifeless. Hilve complains, "New moon and full moon, the tide comes very high. All die. The lady over there," she points her machete to a neighbor's bit of ground, "she already give up."

On the nearby island of Pelelieu, 76-year-old Isor Kikuo's face is lined and distressed. Much of her taro crop has died. She pulls one plant and shows the starchy root. "See—," The root is mushy; it should be hard. It

smells terrible. She tosses it in disgust, muttering, "This is all rotten. This is good for nothing. She gestures and says, "Look—. The water won't go down. Even people digging graves have begun hitting water." She says that children with distant jobs are sending money to their aging parents for rice. But Isor explains that in town the children's rents are high; sending money to feed their parents puts additional strain on them, and the price of rice nearly doubled in the last year.

And taro may be the least of it.

The first official sea-level-related evacuations to higher land occurred in December 2005 in the Pacific island nation of Vanuatu.

We're not talking about a few hundred people. Well over half a million people live in island countries whose average elevation above the sea is only six feet (about 2 m). On continents, the numbers of people are much more serious. Something approaching 100 million people live on land less than one meter—about three feet—above sea level. Those places will lose a lot of land in this century. Roughly 300 million (about the population of the United States) live on land less than fifteen feet (4.5 m) above sea level. Imagine moving the people of United States to other countries. Fifteen of the world's 20 biggest cities lie exposed to the sea, including Tokyo, Mumbai, New York—.

Fourteen time-zones away in New York—one of the world's most densely inhabited islands—I headed toward the United Nations to watch 50 Member States of the United Nations call on the U.N. Security Council to act on the "pernicious security implications of climate change for human beings worldwide."

Palau's U.N. ambassador said frustratedly that, "There is as great a threat from Climate Change as any bomb, poison, or terrorist." He added, "This is the first time in history that U.N. member states are faced with extinction—and the Security Council has been silent."

The Maldives, with a population of 380,000 people, averages a little over three feet (1 m) above sea level. The Maldives is looking at property in Australia, should the whole country need to escape from itself. Kiribati is likewise in the market for land to relocate its country. Also in the news: dozens of families from the Solomon Islands are being permanently evacuated to Papua New Guinea as flooding turns several islands into wet rags.

A *Financial Times* article titled, "Mass Relocation Planned as Seas Rise," reports that in Indonesia, "experts and the government fear that about 2,000 islands across the country will sink by 2040." In what sounds like slapstick humor, Indonesia's Maritime Minister "asked the regional governments to

keep an eye on the islands." But he also called it "the disaster that would affect the whole world."

Marlene Moses, whose business card identifies her as "U.N. Ambassador Extraordinary and Plenipotentiary Permanent Representative of the Republic of Nauru," is a large Polynesian whom you could imagine as a stone statue. But in conversation she's animated, articulate, and warm. Her whole tiny country has 14,000 people, but when you consider what it would take to relocate just 14,000, you begin to realize the enormity of the issue. During a hallway discussion about how sea level rise threatens her tiny island nation, she and her colleagues vow to defy the rising tide.

"We'll stay. There's no option," Moses insists. "No option. If we leave, Nauru would not exist as a nation."

Masao Nakayama, U.N. ambassador from the Federated States of Micronesia, adds, "We don't want to abandon our ancestors. That's a strong feeling. How can we just leave our ancestral place? It's unimaginable that climate change would cause a people to suffer extinction. It's very hard just to—."

"They use the word 'relocate' so easily," Moses says scornfully. "Relocate—for what? To become climate-change refugees?"

But Afelee Pita, U.N. Ambassador from Tuvalu (population 13,000), realizes that sands are running through the hourglass. Frustration is evident in his voice too, as he says, "Time and tide cannot wait for us to complete all these dialogues. At high tide, even with no wind now, water will just come onto the land. It's contaminating our wells and gardens."

Moses adds, "In Nauru now, we've had to move graves before they got washed away. In the olden days, each family had drinking wells; it was *fresh* water. Now it's not for drinking. Not any more." She shakes her head. "It's pretty hard," she says, "for our people to understand that these changes are being caused by, you know, industrialized countries so, so, so far away."

Nakayama adds, "Fish are a big source of meat for us. And we have traditional ways of conserving fisheries. But now our traditional ways may no longer work. If the fish are leaving because it's too warm for them, if the corals die because it's too acidic—how are we supposed to conserve?"

When I ask if it's true that New Zealand has offered asylum, Moses rolls her eyes and shoots, "Oh, *please*. No. It's not an option. Why should we *lose our identity*"—she's jabbing a finger into the wall—"because of deeds committed by industrialized countries? It's a *justice* question, a *security* question, a human *rights* question—. Our whole country is just *one* island. If we sink, it's farewell to me."

