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BY BOB DOPPELT

For The Register-Guard

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COPENHAGEN — I had no idea where Tuvalu was. But the tiny nation in the South Pacific caught my attention — and everyone else's — early in the United Nations climate summit here by insisting on changes that temporarily brought the entire process to a halt. Among its demands, Tuvalu wanted assurance that any new agreement slashed greenhouse gas emissions far and fast enough to keep global temperatures from rising no more than 2.7 degrees Fahrenheit.

More than half of the nations of the world joined Tuvalu in calling for the 2.7-degree limit. These nations also want the Kyoto Protocol — which the United States did not sign and which does not ensure major emission cuts from large emitters such as China and India — to remain in effect while a parallel agreement is developed that includes those nations. These and other disagreements have made for rocky times at the summit.

I was keen to learn why a nation with just 10,000 people would take on big boys, so I asked Gillian Le Gallie, president of the Alofa Tuvalu Foundation. She showed me a video of seawater literally bubbling up through the ground. "Rising sea levels and more persistent droughts are forcing our people to flee our nation," she told me. "Flooding is getting worse and during high tides the ocean now covers our main highway. It also causes pig manure to spread, polluting our land."

Drinking water is also becoming scarce. "We get our freshwater by capturing rainwater," Le Gallie said. "But we are getting longer periods of drought and water shortages."

Given these risks, I wondered what she thought about the U.S. proposal to cut emissions by 17 percent by 2020 based on 2005 levels. "We like President Obama," she said. "But his proposal does not keep temperature increases below 1.5 degrees Celsius (2.7 degrees Fahrenheit), which is the maximum for us to survive. For us it's really a question of life and death."

The United States and other nations propose to limit temperature increases to 3.6 degrees. Scientists say, however, that when temperatures rise that high the impacts on nations such as Tuvalu will be catastrophic.

While Tuvalu is being drowned by seawater, Nigeria, a heavily populated nation in western Africa, is being parched by drought. I was lucky to stop by the Nigerian delegation's office when Sen. Bassey Ewa Henshaw, chairman of the Nigerian Senate Committee on Water Resources, walked in. He kindly spoke with me.

"We are experiencing very unusual and severe drought," he said, causing the rivers to dry up. "Water volume in our major rivers is down to one quarter of what it was."

The result has been desertification in the north and massive erosion in the south. "The farmers in the north are not finding enough water. The government has built food storage facilities and so far we have not seen shortages. But we don't know how long this will continue. In the south the lands are more arid and big storms are destroying the roads and infrastructure, knocking down trees, and causing severe erosion."

Asked about the U.S. proposal, Sen. Ewa Henshaw told me, "From the perspective of the least developed nations we want assurances that temperature rises will not go beyond 1 to 1.5 degrees Celsius. Two degrees Celsius (3.6 degrees Fahrenheit) is too high because of its impacts."

Drought is also affecting India. But so is too much rain at the wrong time, according to Nafisa Giga Dsouza, convener of the Indian Network on Ethics and Climate Change. "In India we are seeing the rainfall patterns change, and that affects farmers," she told me. "Seventy percent of India is rural, so farmers are very important. But now when it is supposed to rain it doesn't and when it is not supposed to rain it does. This makes it hard to farm."

Giga Dsouza was very unhappy with the United States. "Obama's 17 percent proposal is terrible, unfathomable, it does not make sense," she said. "Does he not understand what is happening to us?"

These stories show that global warming is not merely a future problem projected by computer models. It is happening right now throughout the world, and it has serious consequences.

Perhaps the most poignant comment for Lane County residents came from Gillian Le Gallie of Tuvalu. "We are the symbol of what will happen to other places," she said. "Beware, if we can't get what we need to survive then all other people are at risk."

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