

LETTERS

IMPACTS OF CLIMATE CHANGE ON CARIBBEAN LIFE

We appreciate Ford's documentation of the many ways in which climate change threatens the traditional lifestyles and health of indigenous and other populations.¹ As Ford states, the impacts of climate change on indigenous peoples are primarily studied in Australia and the Arctic, leaving much unknown about their global scale and manifestations in other regions.¹ We believe that small island communities such as the Caribbean are also vulnerable to climate change because of their coastal-dependent geographies and lifestyles.

The Caribbean population was estimated at 37.5 million in 2000,² and Caribbean nations constitute approximately half of the 39 members of the Association of Small Island States.³ Like much of the world,⁴ the Caribbean is already experiencing increased salinity of drinking water, sea level rise, decreased habitable and agricultural land area, disrupted fisheries, and diminished food security.⁵ Its limited infrastructure and socioeconomic resources leave it at least partly reliant on foreign aid for climate mitigation and preparedness efforts.

In one of our qualitative studies, Caribbean islanders described their personal experiences

and perceptions about climate change as increased average temperatures, severity of weather events, and changes in rainfall patterns. They had observed geographic changes including beach erosion, sea level rise, drying rivers, and reduced vegetation and ground cover. They discussed the growing regional attention to disaster preparedness since the devastation of Hurricane Ivan in 2004, including efforts to digitize and archive legal and historical documents to prevent losses like those caused by Hurricane Ivan. Participants identified subsequent regional business opportunities in conservation and alternative energy, government efforts to promote the use of drought resistant crops after the severe drought of 2010, and a policy on climate change education being considered for public schools. Participants noted that relatively high rates of interisland movement and population growth stretch Caribbean social services and encroach on diminishing areas of habitable land. The discussion itself seemed to galvanize participant recognition that climate change threatens natural resources, such as rushing rivers and sandy beaches, that they take for granted.

Although preliminary, our data show that climate change is altering Caribbean life. Further research on the health impacts of climate change on indigenous peoples and in unique geographic, economic, and sociocultural contexts is needed. Governments, industries, and individuals are unlikely to respond to climate change until it threatens things they value in their own lives. Ford's article, and findings like ours, may help them to appreciate the urgency of doing so. ■

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This letter was accepted October 2, 2012.
doi:10.2105/AJPH.2012.301095

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FORD RESPONDS

I fully agree with the points made by Macpherson and Akpinar-Elci, who note the significant vulnerabilities faced by small island nations to the health effects of climate change. Small island nations, like the indigenous populations profiled in my article, are considered to be highly vulnerable to the health effects of climate change on account of low socioeconomic status, location in areas undergoing rapid change, and dependence on climate-sensitive natural resources, and have similarly been overlooked in studies on climate change and health.¹

There is a risk however, that in focusing on the magnitude of the risks posed by climate change, that vulnerable populations are portrayed as powerless victims of climate change, overlooking how socioeconomic conditions determine how climate change is experienced and responded to, downplaying the resilience of communities, and

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