



COMMENTARY

Impact of Climate Change on Health From the Perspective of Catholic Relief Services

Albeit on a much larger scale, climate change reminds me of how I felt in March 2014 when I heard about the first case of Ebola virus disease (EVD) in Guinea. Having spent many years in West Africa, I could only begin to imagine the breadth of destruction it would have on the lives of thousands. At the early stage of the EVD outbreak, the world struggled to respond appropriately because we had never experienced such a large outbreak of this disease. Climate change feels the same way, except that we have much better advance knowledge that if the world does not make drastic changes immediately, climate change will have a devastating health effect on countries across the globe.

For more than seven decades, Catholic Relief Services (CRS) has responded to both sudden-onset or short-term and slow-onset or long-term emergencies, as a result of both natural disasters and conflict. In 2015, we worked in 101 countries and reached more than 100 million people. Our programming in agriculture, health, and emergency response—our three main areas of intervention—engages a wide range of partners, from civil society and governments to private companies and universities, working with community health workers as well as local health facility and district hospital staff and Ministry of Health representatives. While climate change has an impact on many areas of human health, this commentary is grounded in my expertise in mosquito-borne diseases.

The Problem or Challenge From a Public Health Point of View

From a public health perspective, change in the climate means changes in precipitation levels, which may cause flooding and impact health and nonhealth sectors alike. For instance, flooded lands make it difficult or impossible for farmers to cultivate their land, which in turn means reduced nutritious foods for families, affecting the health of pregnant women and children, among others. Flooding also means an upsurge in water-borne diseases and an increase in standing water, which forms a perfect breeding ground for mosquitos, thereby increasing vector-borne diseases such as malaria and Zika.

Rising temperatures also means the (re)introduction of malaria in what are currently malaria-free areas. Conversely, this could also mean that there might no longer

be malaria in current areas. However, the likelihood of the former could have a dramatic negative effect on the loss of human life and the health burden to humans. This would lead to a rise in malaria epidemics, since such communities would not have acquired natural immunity from the ongoing presence of the malaria parasite (and perhaps would not have the knowledge to prevent malaria) and would be hit with the disease just as hard as foreigners traveling to malaria-endemic countries. In countries with less developed health systems than those in Europe or the United States, this could unfortunately mean many lives lost.

In CRS, we see climate change as undermining our investment in supporting national malaria control programs in developing countries to prevent and control malaria activities, such as seasonal malaria chemoprevention, which aims to eliminate malaria from a specific geographic area by providing prophylactic drugs to children 3 to 59 months of age. In addition, in the last few months of 2015, areas as diverse as India and Zimbabwe have struggled with sudden outbreaks of dengue fever, a disease also transmitted by a mosquito. This might forecast the rise of a broad spectrum of vector-borne diseases in the near future, just like we have recently seen with the Zika virus.

The Solution From an International Nongovernmental Organization Point of View

Climate change jeopardizes health for millions, and in turn will affect the way international agencies such as CRS respond to its effects. Since CRS works across sectors that include health and water management, we can contribute to reducing the negative health impacts caused by climate change and in mitigating the impact of climate change on the environment and agriculture and therefore livelihoods.

According to the United National Development Program, "Africa is expected to be the hardest-hit continent by climate change . . . with one in four people in Sub-Saharan Africa living in poverty." With the sustainable development goals (<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>) focusing on equity ending hunger and poverty, climate

change is a very important issue because those living in Sub-Saharan Africa with a low social economic status will have the least ability to adapt and be resilient in the face of change. CRS' President and CEO, Dr. Carolyn Woo, testified in October 2015 to the House Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations Committee on Foreign Affairs about a hearing on food security and nutrition programs in Africa. Dr. Woo stated that "additional resources [need to be] directed to the most vulnerable" and that pro-poor approaches need to be taken to reduce the impact of climate change on this segment of the population.

CRS is actively engaging U.S. Catholics on climate change issues following Pope Francis' call to address the complex problems of poverty and climate change in his groundbreaking encyclical *Laudato Si*. With events such as El Niño, which are thought to be more intense in 2016 as a result of climate change, CRS issued regional guidance to countries where we have ongoing programming to support governments' adaptation strategies. Similarly, CRS encourages other humanitarian organizations to continue supporting governments through advocacy and on-the-ground efforts to prevent possible health consequences of climate change. Some of the strategies encouraged include:

- Prepositioning food, nutrition, and other health commodities and supplies to meet immediate or future needs. For instance, increased severe weather events can lead to communities being forced to move, and if we ensure that mosquito nets are easily accessible to these displaced populations, or that these nets are easily accessible in areas that may not have malaria presently, but are on the front lines of endemic malaria areas, we will help reduce cases of malaria.
- Developing health messages to ensure that communities can identify changes in their living environment that might trigger a catastrophic event. Messages might address unexpected or increased rains

and standing water, leading to increased mosquito populations. This preventive messaging can enable them to protect themselves before the event.

- Supporting Ministries of Health to ensure their surveillance sites and activities include factors that may be triggered by climate change patterns (such as sudden storms during unexpected seasons, or changes in the range of vectors that carry diseases) to enable them to send time-sensitive messages throughout their country to prepare communities for a possible adverse event.

Concluding Remarks

Whilst agencies such as CRS can support governments to reduce the number of people exposed to catastrophic events and the consequences of climate change, much more needs to be done. The World Health Organization estimates that if we do not act now to reverse the negative trends from climate change, we could see an additional 250,000 deaths each year from malaria, diarrheal disease, heat stress, and undernutrition (World Health Organization, 2015). Of course, the consequences of climate change don't stop with health, but impact agriculture, food security, water security and just about every other facet of our lives. It has become blatantly clear that to ensure our own health, we must also restore the health of our planet.

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Reference

World Health Organization. (2015, September). *Climate change and health*. Fact sheet No. 266. Retrieved from <http://www.who.int/mediacentre/factsheets/fs266/en/>