

Climate Change: Food, Water, and Migration in Namibia

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I was in Namibia for the first time in June 2016. In several tourist accommodations where I stayed, guests were strongly urged to use water very sparingly. There were large buckets in every shower, for example, to catch the water from the showerhead rather than letting it flow down a drain. That 'gray water' was later collected and used for cleaning and other critical activities. Not a drop was wasted.

It was the third year of a terrible drought. A national emergency had been declared. An estimated 750,000 people were food-insecure because crops had dried up and animals had died from a lack of both grazing land and water.

UNICEF targeted relief for women and children affected by the drought. A UN spokesperson reported that 109,000 children under age five were at risk of malnutrition after almost three decades of low seasonal rainfall and a second year of failed rains.¹

Businesses closed. Coca-Cola, for example, had employed 815 people in two plants, one in Windhoek and the other in Oshakati in the far north. The company stopped producing all canned drinks in the country and instead imported them from South Africa. Frik Oosthuizen, the head of Coca-Cola in Namibia, said that the decision was a direct result of the water crisis.



Meatco, the country's major meat exporter, closed its plant in Okahandja due to the low number of available cattle. In the 2013 drought, more than 4,000 animals perished from lack of water.

¹ <http://www.un.org/africarenewal/magazine/december-2016-march-2017/commodity-prices-crash-hits-africa>
Accessed 7-1-2017.

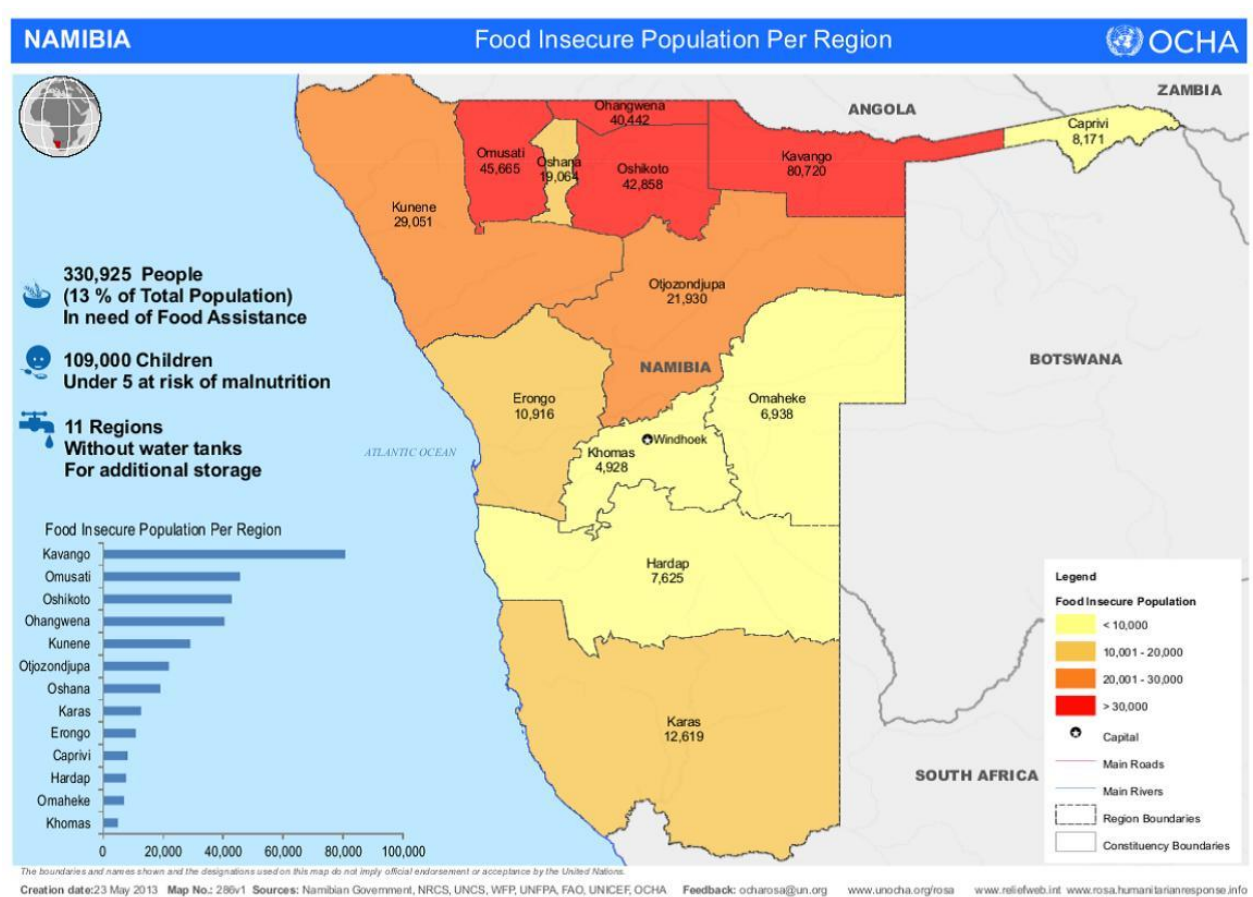
Small businesses such as carwashes suffered. Hair stylists couldn't wash customers' hair. Water use at homes became severely limited.

The water crisis put 40,000 construction jobs and as many as 400,000 indirect jobs – everyone from suppliers to the women making a living cooking at construction sites – at risk due to the water-intensive nature of the construction industry.

The financial consequences affected individuals, businesses, and the entire nation, as jobless rates soared while tax revenues plummeted.

And, as agricultural production literally dried up, farmers and their families migrated to the cities in search of work – and food.

The map² below illustrates that food insecurity is the greatest in the northernmost regions. The areas near Windhoek are not as drought-vulnerable, and consequently this urban center has become the target for in-migration from the rural north.



² <https://www.unocha.org/legacy/top-stories/all-stories/namibia-hundreds-thousands-affected-drought>
Accessed 7-1-2017.

The recently-released 2016/2017 livelihood vulnerability report states that the drought currently ravaging Namibia has exposed 729,134 people, or nearly one in every three persons, to food insecurity.³

Migration

Windhoek has a population of slightly more than 322,000 and is growing rapidly; it is the largest city in the country and the only one with a population above 100,000. During apartheid, in the years up to 1990, there were strict internal migration controls on the black population that restricted blacks to rural areas largely in the north. Those controls were lifted with independence in 1990, and since that time migration to Windhoek has been significant.⁴ During apartheid, whites outnumbered blacks in Windhoek; today, blacks are nearly triple the number of whites. Roughly 60 percent of Windhoek's blacks live on the north and northwest sides of the city on about 25 percent of the land in what are called 'informal settlements.'⁵



Sanitation facilities and access to clean water are shared by large numbers of people. Services such as hospitals and schools are significantly lacking. Disease prevention and treatment pose very real challenges in these dense communities.

More than half of Windhoek's population is comprised of those who have migrated into the city, with most of them coming from the north since the end of apartheid.

³ <http://www.namibian.com.na/158415/archive-read/The-persistent-epic-drought>

Accessed 7-1-2017

⁴ https://www.researchgate.net/publication/262572488_Migrant_Windhoek_Rural-Urban_Migration_and_Food_Security_in_Namibia

Accessed 7-1-2017

⁵ https://www.researchgate.net/publication/262572488_Migrant_Windhoek_Rural-Urban_Migration_and_Food_Security_in_Namibia

Accessed 7-1-2017

Studies show that both the people who move into the informal settlements from the north and those who are non-migrants are equally and highly food-insecure in these communities of significant poverty. Diets are extremely limited in variety, caloric content, and nutrition; pap, a porridge made of maize meal, is often the main, or only, food, three times a day.

The Problem and Possible Solutions

Efforts are underway to find more underground water resources. In 2012, geologists discovered an underground lake about 500 miles (800 kilometers) north of Windhoek, but it is estimated that it might take another 5-10 years to begin using this lake as a resource depending on its human suitability and sustainability. Much of Namibia's underground water is salty and not fit for consumption.

Not only is the timeline a challenge; so is the cost. Experts say that at least \$121,000,000 (US) will be needed to find new sources and to upgrade today's inadequate water infrastructure. It is becoming increasingly difficult to find the funding for this vital effort. Namibia's national treasury relies on mineral exports, and global commodity prices have crashed. According to the UN, the fall in commodity prices in 2015-2016 was a shock for the entire sub-Saharan African region, because fuels, ore, and metals account for more than 60 percent of the region's exports.⁶

Climate change creates unusual, unpredictable, and extreme patterns of flooding and drought. This global challenge is inadequately addressed in terms of both urgency and resource allocation at individual and national levels. The consequence for a country like Namibia, with limited financial and infrastructural resources to mitigate overwhelming food insecurity, is morally tragic. But the problem extends into another realm as well. This situation of almost-constant hunger for one in every three people, where almost 60 percent of the people are under age 24⁷, an age group known to be highly volatile, portends grave political instability. Food insecurity is a known 'threat and impact multiplier' for violent conflict.⁸

At this point, there do not appear to be any sings of political instability. Namibians are known for carrying on peacefully even under life's harshest circumstances. However, persistent and enduring food insecurity may become an inescapable trigger of violence.

The solutions have a long time horizon and require great leadership. These solutions require 1) addressing climate change at global and domestic levels; and 2) diversifying the country's

⁶ <http://www.un.org/africarenewal/magazine/december-2016-march-2017/commodity-prices-crash-hits-africa>
Accessed 7-1-2017.

⁷ http://www.theodora.com/wfbcurent/namibia/namibia_people.html
Accessed 7-1-2017

⁸ http://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp238358.pdf?_ga=2.174599330.1264981692.1498967060-1899223460.1498967060
Accessed 7-1-2017

economic base to reduce the consequences of declines in any single sector. The prospects appear bleak for the immediate future.

I returned to the US with a profound awareness of my own privilege: safe access to sufficient and nutritious food and to readily-available clean water. We can no longer take these foundations of life for granted – anywhere.