

Justin Thoeni
Carrollton High School
Carrollton, MO
Ethiopia, Factor 2: Water Scarcity

Ethiopia: The Rivers Run Dry

Introduction

Over forty-two million people in Ethiopia do not have access to healthy drinking water, contributing largely to the more than thirty-three thousand child deaths that occur from diseases caused by drinking (or the lack there of) contaminated water in Ethiopia. Ethiopian citizens, both rural and urban, are facing issues which many Americans don't have to worry about and therefore take advantage of daily. Vehicles to drive, paved roads to drive on, high quality schools to attend, food on the table, and clean drinking water are all things many Ethiopians, particularly the country's rural citizens, do not have the luxury of having. With a lack of food, education, and health care, the need to produce crops at a quicker and more efficient rate in Ethiopia is crucial, but none of this is possible without one key resource: water. Many Ethiopians go days without water, and even when they do have access to water, it is usually contaminated. The low amount of water, combined with the poor quality of what little water there is is a disaster, spreading death, disease, and illness. Getting water transferred throughout the country is also a key issue. Citizens may be forced to walk up to six hours from their homestead to find even a drop of water, or a large enough body of water to collect even a cup to drink. Water scarcity is a big issue in Ethiopia, contributing to sickness, drought, and even death. [Shore 1]

Ethiopian families in rural areas struggle to have access to a healthy diet, quality education, and health care. The average size of an Ethiopian family is four to five people, with the leader of a family primarily being a male, but in some cases, a single mother. Only about four percent of rural citizens are single and live by themselves. The fact that most rural families have several children puts more pressure on the family leaders to provide for their entire family, while usually only being able to produce a minimal profits and goods.

With families struggling to get by, the average Ethiopian citizen only gets to eat once or at the most twice a day. Most of their diet makeup includes grains such as sorghum, maize, and injera, a pancake style bread made from teff, a grass grain. They are also in many cases forced to drink contaminated water, if any water at all. The more fortunate citizens eat a stew called wat, which is spicy and made up of beef, goat, lamb, fish, and hard boiled eggs. Those who are fortunate enough to eat stew usually are also able to drink tea, coffee, and beer. That being said, more citizens than not are not fortunate enough to have this kind of food and drink, resulting in calcium, iodine, iron, zinc, and vitamins A and D deficiencies. ["Food and Daily Life 2"]

Children, as well as adults in rural Ethiopia suffer from a large lack of education. There are barely any rural schools, and even if there are, most families can't afford to have their kids sitting at school learning because they are forced to have to get a job to help generate income for their family out in the fields. The small fifty-eight percent of children who attend begin school at the age of seven and go until at least eighth grade, when they are then required to take a test to determine whether or not they are smart enough

to continue on with their schooling. If they do not score high enough on the test to continue attending school, they are sent out into the workforce, which typically results in trying to start up their own farm or assisting a family member with theirs.

There is also a major struggle to seek medical attention and doctors throughout rural Ethiopia. The ratio of doctors to citizens throughout the country is one doctor for every ten thousand people. With this massive shortage of doctors, the United Nations Children's Emergency Fund estimates sixty rural Ethiopian women die daily of childbirth complications. Common causes of death include malaria, tuberculosis, and respiratory infections. Also an issue is Acquired Immunodeficiency Syndrome, or AIDS. Over seven-hundred thousand people in Ethiopia have AIDS, with around twenty-three thousand citizens dying from it each year. Thousands of deaths in this country each year could have easily been prevented with the type of health care provided throughout the United States. A lot of these deaths, whether they are from malaria, tuberculosis, or AIDS, are due to the fact that only one in ten people have access to proper sanitation. A lack of clean water to drink and provide cleanliness also adds to the problem. [Ethiopia 3]

Of the farms in Ethiopia, over eighty-seven percent of them are less than five acres in size, with about sixty-four percent being less than three acres. Their farms, which produce teff, wheat, barley, corn, sorghum, and millet, are very small compared to typical United States farms. That being said, the small amount they produce would be even smaller without farming techniques they have input such as conservation tillage, use of inorganic fertilizers, and improved crop variety. These increase crop yields, but they are still extremely low for the large population the crop is used to feed.

Ethiopian farms are home to over one-hundred fifty million livestock, that number being made up of cattle, sheep, goats, horses, mules, donkeys, camels, and chickens. Most rural farmers typically only eat things they have access to within their own home, which means they only eat what they produce themselves. Farmers in Ethiopia make very little, and most of that money goes to things they need to live, and most families come up short on that money often, causing a lack in nutrition. They have vitamin deficiencies due to usually eating the same diet daily. There is also no extra money to help farmers to access things such as new ideas and new technology. They face the issue of not being able to improve water quality, and have little water. [Ethiopia 3]

One key factor of Ethiopian issues is water scarcity. This, along with an ongoing drought, is a factor in preventing efficient crop growth. With some areas of the country receiving less than six inches of rain a year, irrigation is needed, but in order to have irrigation you have to transport water from a body of water. This is an issue because in some places, there isn't a large body of water for a very long way. This prevents farmers from producing the amount of crops needed, which results in less income and less money for food, medicine, and other life essentials. The ongoing drought is very severe, with little rainfall contributing to the disaster. What little water that is available in Ethiopia is contaminated with disease, feces, and insects. This hurts the environment, contaminating the air and waters, along with the wildlife and humans that are nearby. Women are particularly disadvantaged by this issue of water scarcity. They sometimes have to walk up to six miles to find water for their families and carry back heavy amounts of water to provide for their children. This is especially hard on pregnant mothers. [Sanford 4]

The water scarcity issue is worsening. The trends for water scarcity are measured by multiple shocking statistics. Each year, over eighteen-thousand Ethiopian children die from diarrhea caused by a combination of consuming unhealthy water and practicing poor sanitation methods. Seventy-one Million Ethiopians do not have access to good sanitation, along with forty-one million who cannot access healthy water. These numbers have gone up in the recent years, a sign of an exponentially growing issue. Improving these issues would have an astounding impact in this African country. More rain would help to improve crops along with the drought, and having more water could mean there would be newer freshwaters which have not yet been contaminated. An end of a drought could result in more money circulating throughout the Ethiopian economy, meaning there is less poverty throughout. The end of a drought would thus eventually put an end to water scarcity, which would benefit all citizens of this country. [Sanford 4]

Also an issue is the rapid population growth throughout Ethiopia. Since 2000, the population has jumped from eighty-two million to nearly ninety-five million people. Based on the amount of crops raised each year, Ethiopia only grows enough food for about fifty-five million of its nearly one-hundred million residents. This rising number just means that the water availability will lower even faster while the need for water will rise just as quick. The amount of food available is also in the same boat as water availability [UNAIDS 5]. A higher population will use up what little water and food remains, and whatever is left over will quickly become contaminated. A higher population also means more areas people will call home, taking away areas that could be used for farmland. Something must be done or this problem will never end. The future's not looking bright for Ethiopian families with so many factors restraining residents from succeeding and raising a successful crop. [FAO 6]

Solution

Something must be done to stop this water crisis, and people are doing their best to try and help the matter. Organizations worldwide are stepping up in any way they can, whether they collect donations or even come build new things or help to innovate Ethiopia. Organizations such as, "We Are Water" are looking to dig deep down in order to find sources of water to create new wells. "We Are Water" has helped over two-hundred thousand people across twenty-five countries by funding projects such as digging wells, providing money to pay teachers to teach educational classes on water management and water conservation, and wastewater treatment and recycling methods. Other organizations are also educating citizens of the country in multiple ways, such as how to know whether or not water is safe to drink and how to prevent contaminating the few freshwater sources that aren't contaminated already.

New irrigation systems are being installed to better take advantage of what water is available and transfer that water to the crops. The always improving world of technology will improve issues that have stumped scientists for years. There are new inventions like the portable water pump, which makes irrigating fields easier and has increased food productivity in numerous areas by as much as 50%. That being said, all of these projects are pending proper funds which will be unavailable without generous donations from a lot of people, countries, and organizations.

Prevention methods for population control should be put into place to help citizens. Birth control and proper precautions to prevent accidental pregnancy would help to reduce the ever so quickly growing population and allow families to better provide for the family that many struggle to support as it is. This

will require help from the government by setting money aside to help reel in pharmaceutical companies and promote them to both begin and expand their businesses in urban and rural Ethiopia. Waivers and other types of governmental assistance would need to be set aside to allow everyone to be able to seek this assistance, especially since those on the low end of the poverty spectrum are typically those in the most need of education and assistance on birth control. Also, people would have to make good with the church by approaching high up officials on how to go about this process, as use of forms of birth control are against many religions in Ethiopia. They could also work around this by educating the younger population through educational classes and promoting abstinence. Government officials from both Ethiopia and more fortunate countries need to get involved to help the cause.

Families in rural Ethiopia can also do their best to try and help themselves. They can do their best to contribute to the efforts in improving irrigation and allowing themselves to be educated by those attempting to help them and their country as a whole, as well as accepting constructive criticism from outsiders who try and help them to improve their country, and use it as a learning tool to help their country begin to flourish.. [FAO 6]

Conclusion

Water scarcity is a building block that many other factors and issues in Ethiopia feed off of. People have been dying, as the world stood by and watched, doing nothing. But things are beginning to change, the world is beginning to take note of these things and getting behind the cause to see a failing country become successful. Despite the help and backing of the world, all of these problems are ongoing and don't seem to be letting off the gas pedal, but these are problems that can be solved. It sounds like a very tough task to complete, and honestly, it is. But humans often forget that many things are a marathon, not a sprint, and this is a scenario in which that line is very true. People must remember that issues such as starvation, disease, contaminated waters, population growth, and water shortages cannot be solved overnight, but with time, things can change and take a positive turn as our world progresses, and rebuilds, and moves forward in time.

Works Cited

1. Shore, Rebecca. "Water In Crisis - Spotlight Ethiopia." *The Water Project*. N.p., n.d. Web. 9 Dec. 2015.
2. "Food & Daily Life." *Our Africa*. N.p., n.d. Web. 11 Dec. 2015.
3. "Ethiopia - Where We Work - WaterAid America." *Ethiopia - Where We Work - WaterAid America*. N.p., n.d. Web. 12 Dec. 2015.
4. Sanford, Walter. "Bring Safe, Clean Water To Ethiopia." *Global Giving*. Global Giving, n.d. Web. 13 Dec. 2015.
5. "UNAIDS." *Ethiopia*. N.p., n.d. Web. 13 Dec. 2015.
6. FAO. "Ethiopia." *Food and Agriculture Organization of the United Nations*. N.p., n.d. Web. 16 Dec. 2015.

