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Ethiopia, Factor 2: Water Scarcity

Ethiopia’s Water Issue and Poverty

Many people know of the daily struggle against poverty in third world countries, but not the degree of severity regarding poverty. An estimated 40% of the population in Ethiopia live below the poverty line (Samuel Loewenberg). To provide perspective, that means an estimated 40% of Ethiopia’s population live on less than $1.25 a day. Creating a comprehensive plan to attack each facet causing poverty in Ethiopia would save many lives, stabilize Ethiopia’s economy, and ultimately change the world for the better. In order to begin to create a potentially successful solution we must first examine: the causes of the problem, what measures are currently being implemented, if such action is working, and what must still be done to eliminate the problem. In this case, the problem we’re faced with is poverty in Ethiopia and there are many factors that contribute to poverty’s grip on the country and its people. The main issues that result is such poverty are: a lack of clean water, malnutrition, minimal education, and healthcare. The lack of clean water, or water at all is one of the most formidable of these factors with its effects being extremely widespread. Numerous plans of action have been created to address the water issue and have been put into action with the help of continued funding from donors and financial aid from other countries. Holistically, the many implemented solutions to the water problem have been relatively effective. Despite the situation improving, there is still much to be done before Ethiopia can stand on its own two feet. Each solution that has proved to be effective must be implemented on a massive scale across the country in order to make a lasting impact. With battle proven solutions and a large scale implementation of such measures, Ethiopia stands a chance at conquering its water issue and thus reduces poverty’s hold on its citizens.

Before we analyze Ethiopia’s water issue we must first examine its people. The average size of an Ethiopian family varies regionally with the highest (6.5) in the Somali region and the lowest (3.9) in Harari in 2007 (Gemechu Kuffa). In 2007 females represented 49.5% of the total population compared to the male’s 50.5% (Gemechu Kuffa). Ethiopia is primarily an agricultural nation with farming accounting for 85% of employment and 45% of Ethiopia’s gross domestic product (GDP) (CIA World Factbook). Since 84% of the population in Ethiopia live in rural areas and subsistence farm to survive, droughts can be the deciding factor on if many Ethiopians will eat or starve (We Are Water Foundation); because when a drought comes, crops fail. “In the 2000 cropping season, 87.4% of rural households operated less than 2 hectares; whereas 64.5% of them cultivated farms less than one hectare; while 40.6% operated land sizes of 0.5 hectare and less” (Samuel Gebreselassie). Their diet consists of various meats and vegetable accompanied with injera (like a spongy pancake) and various spices.

Minimal education is an issue most third world countries grapple with, and Ethiopia is no exception. Due to lack of water, malnutrition and disease many children will never enrol or will drop out of school. An estimated 60% of Ethiopia’s population is illiterate (Linda Villarosa). Many children can’t attend school due to malnutrition, for they are too hungry and tired to even function properly (Dan Cayo). Other children (mainly girls) can’t attend school because they must go fetch water with their mothers (We Are Water Foundation). Some children can’t attend school because they have contracted a disease such as tuberculosis which has a 35% detection rate in Ethiopia (Samuel Loewenberg). Students have an estimated school life expectancy of eight years if you are a male and nine years if you are a female, while a basic education in the United States is fifteen years or so (CIA World Factbook).

Healthcare is a main contributing factor of poverty in Ethiopia because of the major absence of funding for it, which increases disease related problems. The average African country spends $34 on health per
person, Ethiopia spends $15.50 on health per person (Samuel Loewenberg). Due to the minimal funding the few hospitals are understaffed and understocked. In the United States there are approximately 120 physicians per person, but in Ethiopia there are only 1.5 physicians per person (Samuel Loewenberg). Even in Ethiopia’s capital city of Addis Ababa for every 30 people helped there are 10 people turned away (Samuel Loewenberg). Due to the absence of healthcare funding Ethiopia is ranked number 7 in the world for tuberculosis with a 35% detection rate (Samuel Loewenberg). Malaria is also a big problem in Ethiopia with over 8 million clinical cases a year (Samuel Loewenberg). However due to an immense amount of HIV prevention programs only 2.1% of adults have the disease. Due to the low healthcare funding and high amount of diseases, Ethiopia has a mortality rate of 590 deaths per 100,000 live births; compared to the United States’s 13.3 deaths per 100,000 live births (Linda Villarosa). Also in Ethiopia 381,000 children die before age five a year (Linda Villarosa).

The lack of clean water in Ethiopia is a major cause of its poverty making it one of Ethiopia’s biggest concerns. Only 24% of Ethiopia’s population have access to clean water (We Are Water Foundation). With a total population of 88,013,491 people (2010), 66,890,253 people are without clean water (CIA World Factbook). Although Ethiopia has one of the largest water potentials in Africa, its water is managed poorly which leads to the shortages of water wreaking havoc on the country today. Much of Ethiopia’s water is trapped under volcanic rock over 300 meters deep (Anver Versi). It would be very costly and time consuming to drill wells to penetrate the rock, so there the water sits. Ethiopia’s landscape doesn’t have many shrubs and trees which trap water and let it permeate into the soil, so when it does rain this landscape leads to increased runoff and flooding (Anver Versi). With 84% of the population farming and living in rural areas irrigation is the key to a good harvest (Samuel Loewenberg). However, Ethiopia does this poorly irrigating only 2,900 of its 5,328 square kilometers (CIA World Factbook). Due to this people, (almost always women and girls), have to make a long trek many miles to fetch water with 20 liter jerry cans (Samuel Loewenberg). This trek is almost always very time consuming because of its distance, the load of water that they have to carry and because of the traveling conditions. There are few paved roads and in the countryside most people travel by foot or by donkey on dirt paths created from numerous people walking along them (Samuel Loewenberg). These daily water trips are one main reason why many girls can’t attend school (We Are Water Foundation). It’s also the reason why many women can’t breastfeed their babies enough times during a day (Samuel Loewenberg).

Water availability isn’t Ethiopia’s only water related problem. Another problem Ethiopians face is what is in the water. Most of the water drunk by Ethiopians is riddled with various types of diseases which if not treated can be fatal. When occasional rainfall occurs, so does flooding. Which causes the spread of the waterborne disease cholera (Anver Versi). Also where many people get their water, so do farmers livestock. With humans and livestock drinking out of the same water source, it becomes contaminated with disease quickly. Which increases the health risk of catching one of the dangerous diseases (We Are Water Foundation). The United Nations estimates that 90% of diseases that affect people in Africa are waterborne (Anver Versi).

Although the outlook is bleak many successful solutions have been developed and are being enacted. One of the very successful solutions comes from Japan’s Development Agency (JICA) who have mapped out groundwater sources across Ethiopia, and have dug numerous wells giving Ethiopians access to clean accessible water (Anver Versi). As of 2010 the JICA had dug 205 wells in rural areas (Anver Versi). Each well serves an estimated 1.5 kilometer radius (around 500 people) (Anver Versi). In each area served by a well waterborne disease has almost disappeared (Anver Versi). Another positive is that because of the new wells travel time to water has been decreased immensely leaving allowing for girls to attend school, and mothers to breastfeed the recommended amount (Anver Versi). All in all it’s a proven successful solution to Ethiopia’s water crisis. Another solution is to create an infrastructure to extract water from the subsoil and then maximize the water’s usefulness by irrigating it (We Are Water Foundation). The only
problem with that solution is that it costs a lot of money, it would require a huge amount of donations, and it requires an immense amount of human resources (We Are Water Foundation). The main problem with donations is that they are being spent on less pressing problems in Ethiopia. For example, the USAID program donates $323 million towards HIV prevention and care. Which is only a minor problem in Ethiopia right now with only 2.1% of Ethiopian adults being affected by it (CIA World Factbook); especially when compared to the 76% of Ethiopia’s population affected by lack of clean water. However, some donations towards clean water and sanitation are present from the USAID program; who donated $7.5 million (2010) to the water and sanitation of Ethiopia (Linda Villarosa). If donations improve a water infrastructure in Ethiopia may go from an idea to reality.

In conclusion, there are many factors that contribute to poverty in Ethiopia. One of the main factors that contributes to Ethiopia’s poverty is a lack of clean water. The effects of a lack of usable water tie in to almost every aspect of Ethiopian life: diseases are spread, livestock is infected, agriculture production is curtailed, and education is hindered all as a result of the water issue. The lives of those in water scarce nations like Ethiopia comes to revolve around finding water. Thus the water issue is the most important problem facing Ethiopia as no real progress can be made in any other area without a consistent viable water source. Solutions have been designed to address the clean water scarcity in Ethiopia, and have been put into action with the help of continued funding from donors and financial aid from other countries. Solutions such as a strategic digging of wells and development of water use infrastructure through irrigation have proved successful. However, these measures must be implemented on a massive scale across the nation in order to make a lasting impact. For real change to come to Ethiopia there has to be an increased emphasis on the importance of clean water and less focus on other issues such as the spread of HIV. As many of the other problems facing Ethiopia stem from a lack of clean water donated funds must be divided up accordingly. There are battle tested solutions that will aid in the fight against water scarcity but they will not be able to be implemented on the scale required for lasting change without adequate funds. If such funds are allocated wisely, and proposed solutions implemented wisely Ethiopia stands a chance at winning the fight for clean water. Then once the issue of clean water has been addressed the nation can begin to gain ground against the other problems it faces. Ethiopia’s water issue is the key that will unlock the door to lasting change for the country. With Ethiopia’s water issue solved the nation stands a chance at winning the battle against poverty, saving countless lives in the process, and changing the world for the better.
Works Cited


We Are Water Foundation. “Drinking Water, Sanitation and Hygiene in Ethiopia.”