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Ethiopia, Factor 11 Malnutrition

## **Ethiopia: A Country Dominated by Malnutrition**

A majority of us know the feeling all too well, eating a rather large, warm, fresh home cooked meal, and feeling completely full. This might include a secret recipe your grandma had stored in her recipe box, or a zesty new flavor added onto your plate. However, this is not the case for everyone. In countries such as Ethiopia, food is scarce, with a main cause being an ongoing drought. Malnutrition occurs on a day to day basis in Ethiopia. Currently, two out of five children experience stunted growth in this country. Many can only dream of having just a handful of food to feed their aching stomachs. (WFP 2013) Along with the huge number of malnutritioned people in this country, dietary diseases come hand in hand. With an ongoing drought, it has been calculated that 10.2 million people are in need of food, with 435,000 children needing to be treated for malnutrition, and 5.8 million people are in need of a clean water supply. (Reliefweb 2015)

Known as the 'Horn of Africa', Ethiopia encompasses an area of 426,372 square miles. Similar to the United States, this country too, has its fair amount of land diversity. The center portion of Ethiopia consists of high lands with volcanic rock, surrounded by vast deserts. Split by the Red Sea, the southwest and northeast regions couldn't be any more different. The further north you travel in Ethiopia, you would find very rugged and steep terrain. In the south, the land flattens greatly, with the highest point of the country being 14,905 feet above sea level, and the lowest at 410 feet below sea level. There have been issues in the past with deforestation, however, the lowlands are noted to have lush, evergreen forests. (https://www.worldtravelguide.net/guides/africa/ethiopia/weather-climate-geography)

The average household in Ethiopia is predominantly led by the oldest male of the family, while less than one quarter of rural households are led by females. Most homes are occupied with 4.8 people, and with a country with a high fertility rate, 46 percent of Ethiopia's population are under the age of 15, while only a mere four percent are over the age of 65 (DHS Program, 2000). With so many mouths to feed, it's hard for low income families to support their families.

Compared to the United States, Ethiopia's quality of life is quite different. Having a GDP per capita of \$1,900, this is 96.7% less than the U.S., which is \$57,300. On top of this, Ethiopians live 17.6 years less, and are 3.7 times more likely to be unemployed in relation to the average American. If you were an Ethiopian citizen, you would be 96% more likely to be below the poverty line. (http://www.mylifeelsewhere.com/compare/united-states/ethiopia)

An average meal of an Ethiopian is usually compiled of four things: cereal, pulses, root crops, and oilseeds. Generally maize, teff or milo, potatoes, and sesame seeds are most likely to be found on an Ethiopian plate. Although Ethiopia has a large number of livestock, the use of animal products are rare, especially in rural areas. On the contrary, milk is often a contributing factor in a diet of one living a nomadic lifestyle. These diets cannot even withstand to erase energy deficiencies, and lack in diversity (FAO, 2010).

Two of the factors we take for granted when cooking are electricity, and running water. Only 13 percent of Ethiopian homes supply their homes with constant electricity, with three in four citizens living in urban areas, compared to those living in the countryside, compared to one percent of rural inhabitants. Water is often supplied by a nearby open spring, which is used for all of the cleaning, cooking, and sanitation

needs. As far as sanitation goes, most households do not have the standards of cleanliness that we are used to in the United States (DHS Program, 2010).

Water management also affects those living in Ethiopia. The country certainly has agricultural potential, with it's significant amount of rainfall in mountainous areas, and rich soils. Farmers have only uncovered 40 percent of its potential fields used for crops, and are depending on a small scale use of livestock and relying on rainfed agriculture. However, it's the way water is managed through irrigation that makes Ethiopians water insecure. Due to the country's way of using animals for tilling and plowing, fields often leave farmers without water to supply for their crops, and often leaves low water levels and causes erosion; due to their lack of techniques. (Polsci, 2010). Most soil matter in Ethiopia does not have the level of nutrients to grow the needed crops (Menale 2010). In rural populations, most citizens depend on rain water to provide for their agricultural industry (PolSci, 2010).

There is plenty of evidence backing the idea that Ethiopia's agricultural industry is worsening (Menale, 2010). Obviously, Ethiopia could benefit from the use of modern ways of irrigation and food security systems. One of the reasons why irrigation is limited is due to the fact of low income, as it's a huge load financially to provide new methods of irrigation. With such a high level of poverty, Ethiopia is Africa's largest recipient of food donations. While receiving aid from world organizations Ethiopia leads in degrading their own land, resulting in low agricultural production. With an increasing population it is pertinent that all agricultural resources be used to sustain and improve the quality of life in Ethiopia. (Menale, 2010) For the past twenty years, it's been the number one country to receive donations of food in the entire world. In April 2009, the United States Agency for International Development (USAID) donated more than \$140 million dollars to attempt to lower food insecurity. Usually, most aids come in the form of direct food packages, and seed and fertilizer (PolSci, 2010).

As quoted from the book, *Enough*: "Food aid in Ethiopia has really perpetuated a dependency syndrome. The government is painfully aware. It is shameful, that many Ethiopians have become so food-aid dependent, waiting in line for hours once a month to get their white bags emblazoned with the American logos rather than working to try to feed their families themselves," Professor Mesfin said. "They consider it their right to get food aid, whether they are starving or not." (Thurow/Kilman, 2009)

Most agriculturalists in Ethiopia are not landowners, which is another key role into understanding how the country's land is maintained. For the record, most of the country's land is managed, and owned by the government, and is leased to it's citizens, also known as public land. Government policies are often challenged by environmental factors. (PolSci, 2010).

Until recently, Ethiopians depending on rain-fed agriculture, have improved their systems one small step at a time. Digging basins and pits into the ground, near the center of the field, Ethiopians can expect to provide enough water to double a rainfed crop yield. With this, Ethiopians are more likely to leave a large amount of crop failures behind, which is definitely on the right path of solving dietary issues seen in Ethiopia. Creating agricultural breakthroughs on a small scale farming level, is important to improving the constant battle of poverty and ensuring food security (PolSci, 2010).

Another thing that citizens lack in Ethiopia is insurance. Insurance based on environmental factors could easily uphold Ethiopian agriculture. Farmers often sell their products during times of drought, which unfortunately enough is when they harvest. This is why food aid is so common is Ethiopia. (PolSci, 2010).

Malnutrition and dietary needs hits women and children the hardest in Ethiopia. In fact, it is one of the biggest challenges in terms of health care in Ethiopia. Ethiopians face four significant types of malnutrition: acute and chronic, iron deficiency anaemia (IDA), vitamin A deficiency (VAD), and iodine deficiency disorder (IDD). This country owns the lowest birthweight in the world, and the major cause for

this is the level of nutrition women receive both before and during pregnancy (Open.Edu 2016). Over half of the country's children under the age of five experience stunted growth, and 11 percent of children are entirely too thin for their height, while 16 percent are seriously underweight and are on the verge of never finding an answer for their solution. On top of being malnourished, 14 percent of children are left unvaccinated, making them vulnerable to many diseases. Ethiopians lack access to basic healthcare, and medical professionals (FAO, 2010). This is due to having an inadequate amount of doctors, which leads to not having enough money to pay for education to due the large amount of poverty in Ethiopia.

Cultural factors also take a part in malnutrition. There is always the possibility that beliefs are standing in the way of changing people's view on topics in the medical field. For instance, children are weaned from their mothers only a short time, due to frequent pregnancies. Ethiopians believe that food should not be given to any child that is diagnosed with diarrhea or measles, and that children should not share food from the same bowl (Open.Edu, 2016).

Anemia is common among Ethiopian women, and it's main cause is associated with iron deficiencies. (NCBI, The World Bank Group, 2006) A cross study was conducted in 2013 in the southwestern region in Ethiopia, 616 school children were tested for Anemia, having about 44% percent of positive cases (Plos One Gedefaw 2014), compared to 27 percent found in young women, ranging from 15-19 years old (NCIB, The World Bank Group, 2006), in a survey created by NCBI in the year 2003. Micronutrient deficiencies such as Anemia are responsible for the drastic childhood mortality rate of Ethiopian youth. Anemia it is categorized as a global nutritional problem, and is something that not only happens in Ethiopia, but all over the world (Plos One Gedefaw, 2014).

Unsatisfactory nutrition affects over 1,000 children in Ethiopia. For millions of the children, their call for food is forever unanswered. Treatment is slowly making its way public, but is still far out of the reach for many. Child malnutrition methods have shifted in recent years. Now, there is a better comprehension of healthcare, covering topics from pregnancy to nutrition. The World Health Assembly has set a target to reduce the rate of stunted children to under 40 percent by the year 2025 (UNCF, 2016).

As for my view on Ethiopian agriculture, I believe that it has so much more potential that most poeple, and statistics show. One of the largest factors in showing why Ethiopia lacks in production is technology. A number of the country's issues can be solved by implementing newer, and updated equipment into their farming methods. However, it would be rather costly to supply every farmer in Ethiopia (15 percent of the population, out of 92 million) (IPS, George 2014).

The perfect opportunity comes into play with the Ethiopian ATA, otherwise known as the Agricultural Transformation Agency. A team made up of seven people dedicated to solving problems that captures the attention of young hunger fighters, like myself. Led by Khalid Bomba, the Ethiopian ATA Team has been working for more than 20 years to solve agricultural issues in this country. (GTP 2016)

From the years 2016 to 2020, Ethiopian ATA has been focusing on the following areas: increased crop and livestock production and marketing, improving how natural resources are handled, and continuing to better food security. (GTP 2016)

Farmers in Ethiopia are responsible for creating 40 percent of the gross domestic product in the country. That number is simply way too high, for such a low number of people. Instead of shipping over new equipment and machinery, I think the best approach for setting new agricultural standards in Ethiopia. (IPS George 2014)

My proposal for a plan of action is this. Here in the United States, we are rich with knowledge in the field of agriculture, especially those of us who are incredibly active in the industry. We talk all the time about how children are our future. The same thought could be applied to Ethiopia. Yes, I understand that

children in the south are limited to agricultural land, alongside the decreasing expressed interest in the subject area with citizens moving to urban areas. On the contrary, a large percentage of the children living in Ethiopia are currently living in areas where agriculture has been the backbone of livelihood. (http://www.sciencedirect.com/science/article/pii/S0305750X14001727)

Similar to obstacles we face in the United States, is trying to excite youth about agriculture, and how to educate them, and help them know fact from fiction. Why not start programs that are pleasing, as well as challenging? The FFA Organization has transformed thousands of lives, no matter if you are dressed in the blue jacket, or the person's receiving the act of kindness. As a young girl, I grew up in the largest city in the state of Kansas. Currently, I live in a town that has 500 people. Agriculture has become so apparent to me, that I couldn't imagine moving back. The agricultural industry has led me to so many new opportunities and relationships, and I want every young person's to be able to experience that, too.

Ethiopia stands in a huge hole in terms of dietary deficiencies and diseases. This country has an incredible amount of potential. With the right technology, right methods, and the right mindset, the face of Ethiopia can change, for its betterment. Educating young people, rather the future, would be the first step in solving Ethiopia's war with malnutrition. They simply cannot rely on other countries government agencies supplies forever.

Sending our own agriculturalists to Ethiopia would not only benefit its inhabitants, but our own citizens as well. What better way to enrich the minds of others, and unite two distinct countries? After my research, I've become very humbled in my lifestyle, and travelling there would only increase my appreciation for the agriculture industry. One of the things I've learned is how much I love to teach and inspire others. I know I can't be the only one who enjoys seeing the spark in someone else's eyes. It's up to us, in this industry, to gain that spark back. Let's work together to build a legacy that will shape our two countries forever.

It's time to stop staring at cell phone screen, put down that remote and unplug your speakers. Stop what you're doing right now. Close your eyes for a moment. It's the midst of summer, and your stomach starts to growl. You reach for your cup, and it's dry as can be. As you walk upstairs to the pantry, and open the cupboard door, and it lies empty. You sit and wonder when your next meal will be. In Ethiopia, this is a painstaking reality for most people. It's time for us to stop thinking about the next time we will take a trip up to the mall, and for us to serve others. When the voice speaks, who is going to be the one to answer the call?

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