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Helping Kenyans Help Themselves

The majority of Americans today would agree that their life contains some form of hardship. Whether it is a financial, family, or personal problem, the average American can quickly pick out at least one thing he or she detests and considers a burden on their life. Although these “burdens” may be very unfortunate, the painful truth is that many of them are relatively easy to live with. The fact of the matter is that Americans have easy access to the basic necessities; food, water, clothing, and shelter. In addition to this, Americans are privileged enough to not only have access to the basic necessities, but a plethora of amenities at our disposal. American children are able to attend school, and receive an education. They are able to obtain jobs and work for reasonable wages. They even have the option to hire a jobholder to care for them in their old age. Although this is not so for all Americans, those citizens lacking these amenities have undeniable access to homeless shelters and food banks. When it is truly pondered, life in America is copacetic.

It is important to keep in mind that not all countries have the fortune that the United States of America has. Believe it or not, there are over 925 million people living in the world right now, who are hungry, or even starving. When it is said that these people are hungry or starving, it is not to be perceived that they have neglected several meals. These people have serious nutrient and mineral deficiencies, usually coupled with lack of clean drinking water. The World Health Organization estimates that one-third of the world is well-fed, one-third is under-fed, and one-third is starving. When this is taken into account, it means that the total number of hungry people in the world is greater than the populations of the United States of America, Canada, and The European Union. This data is concerning, due to the fact that over 120 thousand tons of untainted, perfectly edible food is wasted and thrown out on a daily basis in America.

One of the countries lacking a suitable amount of necessities is Kenya. Kenya is a relatively small country, approximately 220 thousand square miles, which lies on the equator in East Africa. It is bordered by Tanzania, Uganda, South Sudan, Ethiopia, and Somalia. The geography of Kenya contains Mount Kenya, one of Africa's tallest mountains, as well as Lake Victoria, the second largest lake in the world. The majority of the land is arid savannah, which makes for bad crop growth. This is no help to the population of approximately 41 million, most of which is starving.

The average day in the life of a Kenyan child is extremely different from our daily routine. A child wakes up at dawn and prepares for school, only if he or she is lucky enough to attend a school. The child then endures the one hour hike to get to his or her school. The school days in Kenya are very long. The child starts school at 7 A.M., and does not leave the school until 5 P.M. The child then proceeds to endure the one hour trek, yet again, home. There, the child completes his or her chores, and helps out on the family farm if they are lucky enough to have one. In some cases the child may try to steal a thing or two from town to make any form of profit. Later that night, the child may finally rest and prepare to start all over the next day. This is the daily routine for this child, and the child does all this while only eating less than you probably have eaten for lunch today, if anything. As you could imagine, this can very easily and quickly lead to malnourishment, and the eventual death of the child. The once living breathing child is now only part of a statistic stating that over 160 million children in the world are starving [Black].

Keep in mind that was only the average day for a privileged child living in Kenya. Many Kenyans that are not as privileged as the child previously mentioned may spend their day stealing or killing for survival. Gang violence and violence in general, is a serious problem in Kenya. Country wide gangs patrol the slums of Kenya, terrorizing villagers, and stealing what they please. One religious gang, the Mungiki, patrol Mathare, one of Kenya's largest slums. The Mungiki force citizens to pay a "protection" fee. They are also known for performing crimes such as extortion, murder, and theft. In 2002, over 50 people were brutally killed in a clash between the Mungiki and local police. Among the people that died were innocent women and children.

Gangs and violence are not Kenya's only problems. Kenya is also notorious for having an immense variety of disease. Hepatitis A, Hepatitis B, Typhoid, Polio, Yellow Fever, Rabies, Malaria, and food borne illnesses are just a few diseases that can regularly be seen carried by Kenyans. The living conditions of Kenya are absolutely perfect for diseases to thrive. Cities and villages have hundreds, perhaps thousands, of people cramped into very small areas. Sources of drinking water are usually left stagnant, for days at a time. An abundance of mosquitoes, constantly transfer diseases from human to human. Food is sometimes not even prepared or preserved properly. All of these factors, along with a multitude of others, allow diseases to easily spread through the population of Kenya.

Above all other issues in Kenya, food insecurity is the greatest. Kenya's population deals with extremely high levels of malnutrition. Approximately 31% of the population eats below the minimum level of dietary consumption, and an estimated 20% of the population lives off of less than one dollar a day. The main portions of their diet most Kenyans are missing are calories and protein. The lack of protein causes low muscle growth and on some occasions, extreme bloating of the stomach. Due to the lack of nutrient dense food, and food in general, Kenyans are also deficient in an array of vitamins and minerals. The poor soil and crop land, as well as low yielding crops, are partially at fault for this lack of food

Many medical and missionary groups are currently helping Kenya to the best of their abilities. These groups not only raise money and supplies for the people of Kenya, but travel there, in person, to help. The volunteers that travel to Kenya provide support to the people in a variety of ways. The volunteers run medical centers, teach in schools, and live among the Kenyans for the duration of their stay. The following quote, from a journal published by Lisa Grisafe, describes an average day a volunteer, helping in Kenya, must endure; "Just another average day in Kenya; my roommate got malaria, my director got carjacked on the way to pick us up, on day number 2 of no electricity, our hot water shower broke again, our doctor's friend was shot, getting harassed in the street, another cholera outbreak, nothing surprises me anymore [Grisafe]."

Although these volunteer groups do make a difference, more needs to be done. Yes, sending food and supplies to Kenya does help the natives, but only for a short duration. The majority of help Kenya is receiving is short term. Once the food and supplies they receive diminishes, they are left with nothing. The intelligent thing to do is invest in some type of long term aid that will help Kenya develop as a country. There are several long term aids that have the potential to do just that, but one rises above the rest. Investing in education and extension for improved implementation of agricultural research and technology will be the most beneficial for Kenya in the long run [6].

Investing in agricultural education and technology will help Kenyans help themselves. Once permanent schools and labs are established, professors can begin working to solve the problems of Kenya, and passing down their knowledge to future generations. It seems too simple of a solution to solve all of Kenya's problems, but it is very promising. Just by giving Kenyans access to higher

education, as well as the tools and equipment needed for intricate lab work, they can begin to take matters into their own hands.

A prime example of the life saving research that can be done in a well equipped laboratory comes from a high school student from the Chicago High School for Agricultural Sciences. Abriel Brooks spent her summer at the National Soybean Research Laboratory on the University of Illinois's campus. During her stay, she worked on incorporating protein into the Kenyan diet. She did this by attempting to enrich a traditional Kenyan dish, called ugali. Ugali is a mix of cornmeal and water in the form of a ball. Abriel tested multiple concentrations and variations of soy concentrate, and their effect on the overall taste, texture, and nutrition of ugali. She found that by adding a set amount of soy concentrate, she could increase the ugali's protein levels by at least 110%, while still maintaining its traditional taste, texture, smell, affordability, and appearance. She also began working on the sustainability of actually incorporating this enriched food into the Kenyan diet. The research Abriel completed has the potential to help thousands [Brooks].

Another fine example of the important research that can be completed in a well equipped laboratory, yet again, comes from a student belonging to the Chicago High School for Agricultural Sciences. Alex Villarreal researched cellular growth parameters in various sorghum types, over the summer. He was searching for differences in cellular parameters, between different types of end use sorghum. Alex discovered that sorghum crops breed for energy uses had smaller genomes and therefore a faster cell cycle. In layman terms, Alex discovered what made energy sorghum crops suitable for energy use. This discovery has the potential to lead to the improvement of crop yields, as well as crop growth rate. As you may imagine, this would greatly decrease the population of hungry and starving people in the world [Villarreal].

The previous two examples show that with a well equipped laboratory, even high school students can make important discoveries that make an impact. If Kenyan professors and students had access to and control of such labs they would be able to begin working on their own permanent solutions to the problems and conflicts that plague Kenya. By investing in education and extension for improved implementation of agricultural research and technology, we will ensure that Kenyans will have the resources to increase their crop yields, increase crop drought resistance, make crops insect resistant, and even increase the nutrition of their common foods. Once this research is done and applied, the other problems Kenya is burdened with will begin to lessen. This is because the established labs and schools will require workers, as will the new agricultural jobs. Once the food, and poverty issues are lessened, the crime rates will be sure to decrease, and overall living conditions will increase. As all this happens, Kenya will begin to develop as a country, and begin to establish reputable medical centers. This in turn will cause disease rates to drop a large amount. Kenya will then continue to develop and eventually become a developed country.

Hopefully you can now see the importance of seeking and applying a long term plan to not only Kenya but all underdeveloped countries in need of food, or help in the field of agriculture. Volunteers and projects do help a great deal, but only for a limited amount of time. Resources should be focused on supplying Kenya with proper laboratory and classroom supplies, and less on supplying Kenya with food. This will ensure that Kenya will be able to produce a sufficient amount of nutrient dense food, for generations to come. If this plan is followed, the end result of Kenya would be it eventually becoming a developed country, and deteriorating the burdening issues that swarm it today.

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