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Togo

Few people in the United States have to worry about their parents producing enough food on their farms in order for them to go to school or pay the bills. In fact, the United States provides aid to many families who cannot afford to send their children to school or feed them at night through welfare. Many people also have two parents that work in their homes, making the availability of food something they rarely have to think about. Although poverty does exist in the United States, it is a lesser problem here than it is in places such as Western Africa. In countries such as Togo in Western Africa, families depend on their farms in order to pay for their children's education along with the food that will be on the table at night. Without a surplus from their farms, families go without sending their children to school and some even go without eating for a period of time. Children are often times forced out of their education and sometimes their homes in order to sell and produce things on the streets so their families have a little money to get by. Recent efforts have brought aid to the country in the form of scientists and health researchers who work together in an attempt to bring more prolific yields to farmers who depend heavily on their surplus to make it through the year. The aid groups work very hard in order to educate the farmers and their families about different ways to keep the soil healthy along with taking care of produce after it has been harvested. Through their hard work and research concerning agronomy, these scientists hope to bring an easier life to the people of Togo. They are currently conducting many experiments with different minerals to test their affects on soil fertility along with educating farmers on how to take better care of their fields to ensure a good yield at the end of the season. Although many researches are working together in attempts to bring a more productive surplus to the farmers of Togo, it is difficult for them to make monumental progress in the situation because there are so many farmers to educate throughout the country and only a limited number of people on the job.

Many Togolese families are composed of anywhere from two to five children (Togo's World Bank Information). As a family, they work very hard out in the fields and eat whatever they can produce whether that is grain, or some kind of animal. Through jobs such as farming and street vending, the average family survives on a yearly income of no more than three hundred United States dollars (Togo Poverty and Wealth). This is sometimes enough money for a family to send their children to school; however, it is not usually enough to send all children. Literacy rates state that 43% of men are literate from the age of 0-15 versus 31% of women (Togo Poverty and Wealth). This statistic hints that parents are often times more likely to send their sons to get an education than their daughters. Families often times work on farms no more than one to three hectares, planting crops such as: maize, cotton, cassava, and coffee (CIA- The World Fact Book-- Togo). During the day, parents work tediously in the fields trying to take care of the crops to ensure a good surplus. The children go to school if the parents can afford education at that time; however, if a child cannot attend school at one term, they work in the fields with their parents in hopes that they will be able to attend the following term. In order to clear farmland, many families follow the slash and burn technique to clear the land and make room for their crops. The family then plants in the same area until the soil's nutrients are exhausted making the soil completely useless for a period of time. A simple amount of fertilizer and technique of switching around the location of crops would prevent nutrient exhaustion from occurring; however, few farmers know this and their

surplus suffers after having crops in the same area for a few years. If farmers are lucky enough to get a slight surplus from crops, they are often times crestfallen to find out that the produce is infested with parasites such as weevils and other insect larvae (Springer Link). Because insecticides and resources to build proper grain bins are too expensive and, often times, unavailable, farmers often suffer from the effects of these pests. As for soil exhaustion, few farmers have the money to afford the proper amount of fertilizer to keep their fields nutrient rich enough for a prolific yield.

Few people in Togo trust new twists in science brought to them by people from other countries such as the UN. Because of this, farmers are more likely to reject new technologies concerning techniques that would bring them a more productive surplus. Soil exhaustion has brought agricultural produce to a standstill in some areas, preventing people from being able to farm to their optimal potential (NationMaster- Togolese Agriculture Statistics). In order to attain soil good enough to plant crops in, farmers continue to slash down trees and other organic material around them in order to make room for their farms. By doing this, people make farmland more vulnerable to soil erosion from the wind and rain causing their crops to fail. Over time, the excessive abuse of the environment and erosion of soil will lead to a sandy composition in the texture of the soil making a successful planting season even more difficult. As the environment is continuously damaged, farmers lose up to one third of their produce every year from the soil alone; and when parasites are factored into this equation, they could lose up to half of their produce (Togo's Maize Bugs are in for a Big Surprise).

Today, farmers continue to slash and burn their ways through the environment, but they are still doing little or nothing to prevent invasion from parasites to their crops. Because of the little improvement in the technique of farming, the average family gathers only one third to half of their desired surplus making it very difficult to make ends meet within their families.

Often times, girls from the family are pulled out of school and forced into selling things on the streets in order to bring in more of an income to their family. These girls often times do not get the opportunity to finish their formal education, and they marry shortly after being pulled out in order to start a family, and a farm of their own. Recent trends indicate that the situation is slowly changing for the better in Togo. These changes can be accredited to the efforts being made by people from countries around the world coming into the country in effort to educate families on new farming techniques. In the near future, numbers of girls being pulled out of school will be dramatically lowered increasing the country's rate of literacy, and people working on farms will put a stop to the slash and burning technique that they have grown accustomed to performing in the fields (NationMaster- Togolese Agriculture Statistics).

By resolving harmful environmental factors of farming, agricultural yields will bring a larger income to families and prevent them from having to withdraw their children from school. It would bring more food to the family so they would be able to purchase things they are not able to produce on their own, along with giving them the option of saving surplus for the future in the case that they have a poor planting season. Most importantly, by increasing produce, families will be able to keep their daughters in school and reduce the age at which they will marry. By doing this, the mortality rate will sink dramatically, and the literacy rate of women would increase as well. The environment around the farms would slowly recover and other areas of the environment would be preserved if the slash and burn method were to be replaced with simple ways of fertilizing the fields by simple means of poultry manure or dead

organic manner. Any improvement, no matter how miniscule it may be would improve the economical situation of an average Togolese family. A small increase in agriculture could mean the difference of an education or an unhappy life being married at a young age (CIA- The World Fact Book-- Togo).

In compliance with recent experiments that were conducted by different scientific groups that have gone into Togo, I believe that surplus can be increased with simple, new techniques. Many citizens of Togo, however, are very reluctant to new technologies brought to them by people from other countries as has been previously mentioned. I believe the introduction of many new educators scattered throughout the country would help many people see that there are new techniques available that would make keeping soil fertile much easier than slashing and burning their way through the environment. Phosphorus, for example, can have profound effects on the nutrient content of soil. Although the substance is very costly, small amounts of it mixed with poultry manure at a 1:1 ratio would dramatically increase the nutrient content within the soil (Springer Link). Aside from introducing Phosphorus to the soil, farmers can also utilize new techniques in harvesting their crop to keep parasites from invading the surplus.

Techniques such as building a small platform that sits around four feet from the ground could be utilized for storing crop surplus. A small fire could be built under the structure one to two times a week. The smoke from the fire would then repel parasites from the crops and would prevent them from destroying nearly as much as they have in the past this experiment was performed with maize in the late 1980s and early 1990s and was proven to be immensely effective. By utilizing this technique with other crops, average surplus would go up immensely (Togo's Maize Bugs are in for a Big Surprise). The attempt to smoke insects out of crops is a cost effective method into preventing parasitic species from reaching the crops of many families.

A technique, though proven less effective than the smoking technique, would be to build a coned structure which would be used to store crops. The coned structure would then be built upon a structure standing a designated height off the ground keeping moisture and other environmental factors out of the crop. By doing this, few parasites would be able to sustain life for a very long period of time within the structure therefore reducing the total amount damage done to the crops by the parasites. Although this method would be easier to keep track of than the smoking method, it is much less effective when it comes to preserving the crops (Togo's Maize Bugs are in for a Big Surprise).

Another technique that can be utilized in order to increase crop surplus would be to introduce different methods of planting. If more than one species of corn were to be planted at the same time in the same vicinity, they may be more resistant to parasitic invasion. An experiment conducted in Southern Togo revealed that by planting different kinds of corn, the success rate in gaining a surplus would rise because different species are harder than others. Although people often times prefer the softer corn, if they were to plant both varieties of hard and soft, parasites would infest fewer of their crops and a larger surplus would be definite (Togo's Maize Bugs are in for a Big Surprise).

The government of Togo should be more cooperative with help from foreign countries. Due to a poorly run government in the past, few farmers have been introduced to foreign help that would actually benefit them. If the government were to make it more known to the people, they would be more open to foreign assistant's help.

Along with people being more aware of foreign assistance, people should scatter to different areas throughout the country. By doing this, aid would not be concentrated in just one area, and the education of one farmer could be adequately passed along to another. Ultimately, the scattering of foreign aid would enable different regions of the country to be introduced to effective means of farming. By doing this, more income would be brought into the household, increasing the chances of children getting a sufficient education.

To ensure optimal surplus, more people should be employed to work in the fields around harvest time. According to recent data taken on the country, there are 2,630 thousand hectares of arable and permanent crop land and only 120,000 hectares of crops are produced a year. The shocking difference in these numbers is largely attributed to the lack of workers present in the fields. Currently, only four tenths of a person work on every hectare.

All in all, the people of Togo are faced with a difficult choice in their day to day lives. They are often times forced to choose between educating their children or feeding them. In the end, everything comes down to whether or not they produce a surplus on their small, family farms. This is not always the easiest task for them to accomplish, however, because they are not adequately educated in effective ways to farm. Current methods of farming involve destroying the environment, making the soil very vulnerable to erosion and other harmful factors. These factors can effectively be reduced, however, by introducing new means of education and farming. Once these new farming ideas are introduced to the people, over time the citizens of Togo will no longer have to decide between feeding their children or educating them. With proper technique and determination, surplus will be effectively reached. If more aid is allowed into the country, more farmers will be exposed to new forms of affordable technology when it comes to agriculture. Ultimately, they will be able to plant more crops on their farms and harvest a larger amount than previously possible. These new surpluses will not only benefit the well being of the family, but it will also affect the literacy rate of the citizens of Togo. Because literacy and surplus tend to walk hand in hand with each other in this country, a dramatic increase in one will surely lead to an increase of equal amount in the other. Once education and agronomic output increase within the country, it will slowly rise from the poor economic state it currently sits at in the world to one of mediocre stability. Hopefully, in the future, the country of Togo will no longer be a country that lives year to year dependent upon the average surplus, but will be a country of economic stability and educated people.

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