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 Uganda, Factor 5: Climate Volatility

Creating a Steadier Life in Uganda

The country of Uganda has a very different lifestyle than the average farm family of the United States. The average family of Uganda consists of a mother, father, and five to six children, with a household composition of 72.6%. A single family farms on average 12.35 acres consisting of either; coffee, bananas, cotton, rice, sunflower, and maize. “Few farmers combine livestock such as; goats, pigs, and cattle, with their crops, but this is profitable to getting a higher income, but also at giving a backup incase a crop season under produces,” (“Agriculture Challenges in Uganda”). Farm families are responsible for producing enough food to feed themselves as well as enough food to feed other families, in order to make a steady income. Which is unfortunate for the people because farming methods are limited due to the lack of education about agriculture in Uganda. The methods that are used aren’t convenient for farmers, resulting in only a few large farms that contain a sugarcane plant as well as the demand of ground has led Ugandans to farming their yards.

The diet these families consume isn’t healthy due to the unsanitariness in Uganda and families only getting two meals a day; lunch and dinner. For education most citizens will attend primary school and later move on to secondary school; only a few Ugandans will attend a University or Institution. At primary school they develop skills for lifelong learning, literacy, numeracy, language, values, attitudes, current issues, participation, and self confidence is taught. Once graduated and on to secondary school, “national unity, social and civic responsibilities, strong love and care for eachother, respect of public property, appreciation for international relations, understanding of cultural heritage of Uganda, problem-solving skills, and importantly emerging society and economic needs,” (“Secondary Curriculum”), is taught here. The accession of health care is a constant battle for Ugandans. Due to poor infrastructures, “51% of citizens don’t have any access nor contact with facilities, while only 38% of health care jobs in Uganda are filled anyways,” (“Healthcare a Major Challenge for Uganda”). Not only, “Uganda has one of the worst health care records in the world, ranking 186th out of 191 nations,” (“Healthcare a Major Challenge for Uganda”), which is completely unfortunate as locals say health care and the health of their families is what worries them most. Katie Graf, a member of Sovereign Wings of Hope Ministries has traveled to Uganda more than once to assist with the demands of the economy and states, “Ugandans do not have good access to health care - there are few doctors and few health care centers/hospitals. Those that do exist are not the best quality and are not always properly staffed. As well as doctors are supposed to be free of charge, but some charge patients (taking advantage of them), especially around the holidays. People often travel great distances to see a doctor while others put off seeing one since they can not afford the cost of travel, etc.”

Climate volatility dilemmas in Uganda usually consist of droughts, heavy rainfall, and drastic temperature changes during the most inconvenient times of the year. When farmers go to harvest they find very low yield numbers because the rainfall issue either leaves the crops dehydrated or drowns them. In return of this matter the communities of Uganda receive less food and therefore farmers won’t collect as much profit as intended if all crops grew healthily. The aftermath of these events leads to poverty and hunger all across the Ugandan region. Families who already have trouble making ends meet will then starve or search for other alternative food. Uganda, being a region where healthy food is more expensive than high-carb or fatty foods, leads families stuck in predicaments paying for the cheaper fatty foods that gives inadequate nutrition. “Temperature is also an ongoing problem because Uganda is so vulnerable to it, it leads to food insecurity, disease spreading, soil erosion, land degradation, flood damage to infrastructures,

and settlements. All these changes in climate lead to heat waves, droughts, floods, and storms in Uganda (Climate Change in Uganda: Understanding the Implications and Appraising the Response).”

This severe climate concern is one of the biggest problems leading to food insecurity in Uganda and is predicted to worsen if movements aren't taken to stop the rise of it. “Human induced climate change is likely to increase average temperatures in Uganda by up to 1.5 degrees Celsius in the next twenty years and by up to 4.3 degrees Celsius by the 2080's,” (“Climate Change in Uganda: Understanding the Implications and Appraising the Response”), in Fahrenheit this would mean the climate would excel by thirty-five degrees in the next twenty years. Additionally, Uganda's environment is immensely being degraded because of poor farming methods that cause over cultivation on the rare land that doesn't naturally degrade from flooding. Besides this, the climate concern is also causing disadvantages for farm families and woman in the Ugandan societies. As urban families suffer from not getting a sufficient amount of food, farm families suffer from this factor as well as missing out on the income they would attain if all the plants seeded produced accordingly. The second disadvantage caused from climate change is revolved around Ugandan woman. Women are entirely on a double standard in Uganda because, “Women are expected to walk very long distances to just collect dirty water for drinking, washing, cleaning, cooking, and growing food,” (“WaterAid - Where We Work - Uganda”). These lengthy walks waste precious time, as woman work more in the fields than men do in Uganda, are expected to care for the children, and keep the house clean. To have to waste time and energy walking for water that isn't even sanitary is deficient, when time could be spent in the field tending to the crops. This is a huge disadvantage men have over women when men just have to tend to their fields. Katie Graf, also mentions that “--women are limited legally-they could not own land. It seemed that women traditionally are subordinate (“less than”) the men.

Improving the climate matter will resolve bad field production, give people more food, income, and “save Ugandan's time and energy,” (“Water Aid - Where We Work - Uganda”), that could be used on other factors relating to the bad economy. If a solution to climate volatility was met, the proper crop would grow regularly in fields, the population would therefore receive the appropriate amounts of food and nutrients needed, as well as farmers will make income to pay for other conveniences needed for their lives. People will earn more time to solve other economic issues such as water scarcity, disease-regulating, infrastructure, etc. Controlling Uganda's temperature and weather pattern would also reduce land degradation as Ugandans would no longer have to over-cultivate their territory. After a solution is seized, the economy will then start to greatly develop as people will begin to grow healthily, earn income, and focus on more ways of sustainability then just the climate.

Behind climate volatility is water scarcity. People consuming unsanitary water causes bad health and the carrying of diseases. “Women of Uganda spend a lot of their precious farming time trotting to watering areas to access water for their families that is only dirty to begin with,” (“WaterAid - Where We Work - Uganda”), and then will eventually sicken their loved ones. As well as in extreme droughts when people have to manually irrigate their fields they will kill their plants with extremely infected water. Once citizens pick up diseases through the wide spread water in Uganda they will then start to transmit the diseases to other residents in their communities.

The main answer for Uganda's climate insufficiency complication and above all the food insecurity issue, is education. People of Uganda lack education on so many different centers of their lives. For Uganda to take the next step in their society they need to be educated on the crops that can grow and survive in a flooding atmosphere, how to fish farm, catch rainwater, and later how to use it for irrigation.

There are crops that can be planted for food that will survive a flooding season. Therefore Uganda needs to be taught which crops will, and how to care for them. Crops that are able to do this duty are;

cranberries, rice, water chestnut, camas, and wild rice. These crops will produce more than other crops that can't survive flooding will. This solution will give farmers more income and every family more food.

Due to all the flooding and rain water, fish farms would be very effective in Uganda because of all the standing water in the area. To help keep the fish in an area though, and not being washed out barriers could be put into place in order to keep the fish together. A system could also be created where flooding water could drain into the barrier to help alleviate some of the flooding in certain areas. Ugandans need to be taught techniques that in the 1970's Modadugu Gupta created, such as; raising multiple species of fish in a one area habitat to effectively feed and harvest more varieties of fish with higher nutritional value and to use abandoned ponds, roadside ditches, and seasonally flooded areas into fish farm "factories."

The next step to this solution would be to capture the rainwater and store it, as it's hard to access clean water and having to walk long distances for it. Ugandans can be taught on how to capture this water and store it for their long list of needs. Besides basic needs, when the environment goes into a heavy drought, the captured rainwater can be used for irrigation, with which is another aspect Uganda has a problem with. Citizens can also help alleviate illnesses with captured rainwater by washing their food with clean water before consuming it. If Ugandans simply let water run off their roofs into barrels they can save on average 50,000 gallons of water each year. By simply putting out barrels, watering cans, children swimming pools, pots, etc. so much rainwater can be taught. It's important though to after cover these with something such as a tarp to keep bugs out as well as making sure these water catching systems are clean before water gets into them.

Organizations such as; Action Against Hunger, United Nations World Food Programme, etc. can help put the solutions into action by finding people who can travel to Uganda to help teach the methods listed above as well as raising money to produce the systems needed for solutions. The government of Uganda needs to help by making it easy for educators to travel to the country to teach aquaculture, capturing rainfall, and irrigation methods. They can also help by funding some of the systems to put into action. The citizens and the communities of Uganda need to remain open minded and be able to learn the methods that will be taught to them because even though they may go against religion they will make their lives easier and more successful. They need to be coachable and willing to work on creating facilities needed for the solutions. Ugandan's lifestyles are in huge need of some kind of movement as many people are dying from starvation and diseases. With help from organizations and the Ugandan government steps can be taken to help stop the factors relating to these.

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