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Uganda, Factor 20: Farm to Market

Farms to Markets in Uganda

In developed countries people are able to visit their local grocery stores and purchase spices from India, bananas from Costa Rica, and pastas from Italy. There are many people who never have to worry about purchasing these goods, nor do they think about where it comes from. People walk across town on cement paths called side-walks, hop in their vehicles, or simply raise their hands and a taxicab pulls over and takes them to their desired location. However, in the country of Uganda, producers and consumers have to worry about how they will get to the product, let alone purchase it with high market prices, and little knowledge about the produce. Due to Uganda's infrastructure and bad markets, many small farmers have problems simply getting produce from their farms to the almost non-existent markets.

Life in Uganda

Uganda is a land-locked country, lying nearly 800 kilometers from the Indian Ocean, and bordered by Kenya to the East, Tanzania and Rwanda to the South, Democratic Republic of Congo to the West, and Sudan to the North. There is a total area of 241,038 square kilometers, and over 18% is water or swamp. Uganda's principal river is the Nile, and the country is dotted with many lakes. (Mwebesa 1) There is a total population of 34.5 million people in the country of Uganda, with an average family size of five people. The average Ugandan family does not have access to a variety of foods; therefore they eat to survive, with the exception of the upper class. Of the 34.5 million people living within Uganda, 15% of them live in Urban areas. This number is increasing by about 4.5% each year and is estimated to continue to increase with rising incomes throughout the country. Roughly 67% (23.1 million people) of Ugandans are either poor or highly vulnerable to poverty. This leaves a total of 23% (8.4 million people) trapped in absolute poverty. The biggest areas of poverty take place all across Uganda's rural areas. Though poverty is scattered throughout the entire country of Uganda, it is exceedingly high in the northern part of the country. Here, in the north, there are poverty levels of over 40%, and exceeds 60% in many districts. Outbreaks of civil strife have greatly disrupted the lives of farmers and Uganda's agriculture production in general. Hundreds and thousands of small hold farmers live in remote areas throughout the country. When people live in these extremely remote locations, it prevents them from benefiting from Uganda's balanced economic growth and constant modernization. Of the 34.5 million people living in Uganda, 40% of them are women living in rural parts of the country as small stakeholder farmers. Within many families, women are the overall caretakers of the families. Women are in charge of feeding, educating, and providing medicine and clothing for the children of the family. Many women are uneducated and work in various jobs where they receive very little wages to purchase food for the family. Within a Ugandan family, it is very typical for the father to be addicted to alcohol. Due to stress and low income, men are more susceptible to bad habits, causing them to be too unstable to support their families. All sexes of children attend schools where they learn the basic subjects, like biology, chemistry, mathematic, history, economic commerce, and sometimes English or other popular languages. Within rural areas, children usually begin school at six years of age, and three years of age in urban areas. Uganda's people often have little access to health care. Health care is usually found in urban areas, making it hard for rural people to reach them. The average hospitals are very small and unclean. Since Ugandan's are not educated at a higher level, they have little knowledge about hygiene. Most districts within Uganda have at least one hospital or private clinics; however, these are very expensive for the poor rural families.

Agriculture in Uganda

Most of Uganda enjoys a well distributed annual rainfall of between 1,000 and 1,500 mm. (60-60 in.) Soils that are generally moderately fertile, with moderate temperatures allow Uganda to have great

agricultural potential. (Mwebesa 1) Because the country is landlocked, Uganda produces essentially all of its own food, and most of its agriculture is oriented towards production of food for domestic consumption. (Gollin & Rogerson 7) Almost all of Uganda's agricultural production takes place in the hands of smallholder plots, producing a vast variety of mixed crops. Ten crops account for over 90% of the smallholder plots under cultivation including the following: beans, cassava, sweet potatoes, coffee, groundnuts, maize, sorghum, millet, sesame, and a product similar to a type of cooking banana called matoke. With the exception of coffee, all are food crops that are produced primarily for domestic consumption. (Gollin & Rogerson 8) Ugandan families usually eat two meals a day, and they consume many of the crops listed above. On average, a smallholder farmer owns and manages about two and a half hectares, which is equivalent to about six acres. Farming is practiced to produce food for the smallholder families, and in hopes to sell any extra produce for a small profit. The farming methods are very limited due to the lack of technologies, therefore cultivation farming is the number one farming practice in Uganda. In 2007, the Uganda Bureau of Statistics recorded that very large fractions of agricultural households were growing bananas (73.1%), maize (85.8%), cassava (74.3%), and beans (80.8%). (Gollin & Rogerson 8) In 2004, Uganda Bureau of Statistics reported farms within Uganda also typically include livestock. About 20% of farm households reported owning and producing at least one cow, 30% reported keeping goats on their farms, and about 46% of households reported keeping chickens.

Within Uganda, households considered to be "well off" tend to be those that engage in non-farm activities such as trading, milling, shop keeping, lodging, bar keeping, and brick making. Most commodities in Uganda are produced by small scale farmers. Challenges to these small farmers include: ensuring quality and standards, responding correctly to market demands, building trust (especially in case of group market), and ensuring sufficient quantities and regularity of supply. In the remote rural areas of Uganda, farmers lack simple resources and benefits such as vehicles and roads to transport produce to almost non-existent markets. Farmers also lack agricultural inputs and technology. These two items reduce many areas of crop production including the following: pests and diseases, distribution, safety in the area of food processing, and consumer education about their foods.

Closing the Gap

There are many improvements that need to be accomplished within Uganda; however, the problems happening in the area of farm to market are exceedingly high. By carefully taking certain steps to improve Uganda's infrastructure, remote areas will no longer be a place of poverty, but a place of success producing cash crops with an income able to sustain their families. Increasing infrastructure and creating better markets, are steps that need to be taken in order to reduce the aforementioned problems, and provide stability for the great country of Uganda.

1. Increasing Infrastructure in Uganda

During the 1970s and early 1980s, Uganda's infrastructure was greatly affected by the civil strife within the country, low prioritization, and the country's multiple needs during that time. It was not until ten years later that the country's deteriorating infrastructure was affecting daily Ugandan lives. The National Resistance Movement (NRM) Government began taking the initiative to recover the country's roads and other infrastructures. According to the Uganda Agriculture and Rural Sector Review of 2005, the Ugandan national roads improved from 6% to 75% and district roads from 15% to 65%, all in a short time period of 1990 to 2005. However, the rural areas where the country's agricultural production takes place, are still-underserved with only 10% of community access roads noted to be in good or fair conditions. (Nyende, Alumai, & Nabiddo 6)

Along with many other countries in sub-Saharan Africa, Uganda has a very low level of physical infrastructure and public services. Existing roads and networks leave many communities inaccessible by vehicles, and very few rural residents have access to piped water or electricity. In the year of 2000, less than 1% of rural households were estimated to have access to grid-supplied electricity. In addition, many

towns and market centers lacked electrical access as well. Spatial data suggests that about 78% of Uganda's population lives two or more hours from a market center, while 25% live at least five hours or more from markets, limiting farmers' ability to quickly get food to market. Measures of road length support the fact that Uganda's road network is way behind those of developed countries; therefore, the Ugandan Government has emphasized the need for infrastructure development in a series of planning documents.

In Uganda, the cost to ship foods and other produce is extremely high. For example, the cost to ship maize is about \$2.30 per 100/kg/100 km in comparison to the United States whose cost to ship maize is about \$0.65 per 100 kg/100 km. These numbers tell us that the price is about \$1.65 more to ship maize within the country of Uganda than within the United States. Maize is not the only produce with a shipping cost that exceeds the average market price within Uganda. This goes to show that transport costs at all levels are high in Uganda due to the lack of infrastructure.

In the year of 2010, Douglas Gollin and Richard Rogerson, both members of the NBER Program on African Successes, set out to determine why so many Ugandans live within rural areas, when the standard of living in urban areas is so much higher. In addition, they also wanted to determine why the country of Uganda depends so much on subsistence agriculture. Both Gollin and Rogerson agreed that the poor state of Uganda's transportation infrastructure is the answer to both questions. (Gollin and Rogerson)

A major solution to help invest in roads and infrastructure within the country of Uganda is through government subsidies. In 1858, the Economist wrote, "When great schemes of public utility are brought before the country, it is natural that the government should extend its aid to such enterprises." (Eichengreen 10) Although this ideal holds true throughout many democratic nations, it does not always happen within the country of Uganda. Yes, there are some government subsidies within Uganda; however the amount of money needed is not there to accomplish this task. Therefore, if government money is not available to invest in infrastructure, the Ugandan government needs to reach out to foreign nations or private investors in search of loans and investments that would lead to infrastructure developments for high potential areas of need.

Another solution to poor infrastructure within Uganda could be through civic service. Civic services are duties that all citizens of a particular country are required to participate in for a certain amount of time, or even in times of need. An example of this today can be seen within the country of Germany. Citizens are required to serve in the military for at least six months after turning 18, or participate in social services such as hospital or retirement center work. The Uganda government could weigh the option of requiring civic duties within their country to provide labor for infrastructure and instill pride within its citizens for the improvements they make for their country. This course of action would ensure Ugandan infrastructure is built by citizens of Uganda, save government money, and teach useful skills to all Ugandan youth. All as side benefits to establishing the ability to transport food across the country in a more efficient way.

2. Creating Better Markets

Markets bring new opportunities to farmers, and the country of Uganda is modernizing markets each day. Producers and consumers are lacking important information causing marketing problems such as: lack of funds, high costs leading to the buying of inputs in small quantities, poor flow of market information, small quantities difficult to market, after harvest losses due to poor storage, selling after harvest when prices are low, and weak bargaining power. There are many ways to improve markets including produce storage, and delivering market information to Ugandan farmers.

Good storage within markets is an area that needs assistance greatly. The condition and management of most stores in Uganda are poor and farmers tend to sell early in the harvest season to avoid losses caused by rapid deterioration. Not only does poor storage affect the crop itself, it also affects the consumer.

Produce is not always stored in the recommend temperatures, causing it to lose nutritional value and accumulate a large amount of bacteria. Food is often stored in tubs or on containers that have not been properly sanitized to dispose of any residue left from the previous material. Produce is also handled by a large variety of people, causing pathogens to reside on or in the food and infect the next person who touches or consumes the food. When buyers consume these foods they have an increased chance of acquiring a food-borne illness. Food-borne illnesses can lead to major problems including stomach aches, diarrhea, dehydration, and in more severe cases kidney failure, chronic arthritis, brain damage, and eventually death. These effects are magnified in children and pregnant women. In most countries, including Uganda, the government has passed health regulations that require particular limitations and produce handling methods. The Ministry of Health (MOH), Ministry of Agriculture, and Animal Industry and Fisheries (MAAIF) have all come together to form the Uganda Food and Nutrition Policy (UFNP). This policy began in the summer of 2003 and focuses on food security, improved nutrition, and increased incomes. Three of the twelve main factors focused on by the UFNP involve food safety, food standards and quality control, food processing, preservation, storage, marketing and distribution. If this organization can improve conditions in their areas of focus, markets for Ugandan farmers will increase in demand and duration.

Market information is a service that aims to increase efficiency and use of agricultural markets. In most developing countries, market information is a public service provided by a government department. These services generally involve the regular collection of commodity prices and conditions from major market centers by government staff. Technology appropriate to an area plays a large part in market information. The spreading of prices and market news is achieved through various media options such as radio, newspapers, email, mobile phones and notice boards for farmers, traders, government officials, policy makers, development agencies, and other consumers. (Ferris, Patrick, Kaganzi 5) It is easy to assume Ugandans don't have access to the type of technology needed to spread market information, but within one week, over 96% of Ugandans listen to radios at least once, 29% watch television, 18% watch a DVD/VCD, 30% read the newspaper, 2% attend the movie theatre, and 25% make a call using a fixed line. Market media through each device increases consumer interest making markets a better place for producers to sell their products.

Markets are increasing in size and quality all throughout the country of Uganda due to healthier foods being sold, and a better understanding of what is happening throughout the rest of the country. These new advances are producing a healthier life style for Ugandan consumers. However, a common question is still being asked, "How does Uganda pay for these advances?" The answer to this question remains within Ugandan's Government. Many organizations are being formed throughout the world to sponsor certain markets in high hopes to increase market efficiency. A few examples of these sponsors helping Uganda markets are the Uganda Cooperative Alliance, and the Uganda National Farmers Federation.

1. The Uganda Cooperative Alliance (UCA)

The Uganda Cooperative Alliance was developed to be the solution for the marketing problems listed above. This alliance is used to promote group markets through organized cooperatives of all types. There are about 100,000 Ugandan farmers that are organized into 400 primary societies and 80 marketing cooperatives in over 50% of districts in Uganda. (HOTEL EQUATORIAL 2.2) In simple terms, the UCA is taking new steps and experiments to solve marketing problems in the country of Uganda.

2. Uganda National Farmers Federation (UNFFE)

The UNFFE is a non-profit organization that promotes the development interests of Ugandan farmers. UNFFE recognizes the fact that for smallholder farmers to raise their incomes and hence reduce poverty and improve household food security, their products must access the markets. The UNFFE is helping markets become more successful, causing Ugandan markets to show an increase in both numbers of satisfied producers, and satisfied consumers. (HOTEL EQUATORIAL 3.1)

Conclusion

The country of Uganda is a great country, despite its rural economy's status. Farm to market infrastructure is an immediate need in Uganda, without it, food scarcity and poverty levels will increase. Lack of infrastructure is the biggest setback within rural Uganda, causing 23.1 million people to live in poverty. Beginning in the 1970s, infrastructure has deteriorated. Though steps have been taken to repair infrastructure in urban areas, rural areas lack these improvements. More government subsidies would be a great benefit to Ugandan roads and other areas of transportation. These would undoubtedly increase transportation because remote areas will now be able to repair infrastructure, simply because they have the money. In a country like Uganda, with a total population over 34.5 million people, the government encounters many problems. Infrastructures within rural areas are not their top priority, and nothing is being done. In this case, the country of Uganda needs to reach out to other "developed countries" in search for loans and investments to help infrastructure problems. If the country does not agree with reaching out to other countries in their times of need, they still have options within their own country. Civic duties, or civic laws, are another item that could be implemented. The Ugandan government could pass simple laws for Ugandan citizens that state citizens must participate in certain duties that their country will benefit from. Some countries have already discovered civic duties, whether it is serving in an army, practicing emergency medical training (EMT), or working on roads and other infrastructure.

When infrastructure is increased, food will successfully enter markets to be sold. Low quantities of food cause food to increase in price. When this happens, foods are sold for almost double the price, causing consumers the inability to afford it. Lack of market information is another cause to price increases, and even health problems. When farmers do not know how to safely handle produce, diseases and pathogens are created and spread throughout the food, causing food-borne illnesses. To have better markets, these problems cannot be happening, and something needs to be done. At this time, government health regulations need to be put in use. Health laws and regulations are usually government funded, and if the government is unable to afford these laws, organizations throughout the world are there to help. If organizations help limit the improper handling and storage of food, Ugandan markets will increase in demand and duration.

When both areas are improved, so will poverty levels within rural Uganda. Families will no longer be supported by uneducated mothers, but a family in unity. Stress levels will decrease due to better family funds, reducing the changes of male Ugandans becoming addicted to alcohol. Small holder farmers will no longer have to worry about selling their produce, and consumers will successfully be able to afford these goods. People in Urban areas will also benefit from these steps because farmers will now be creating enough food for the growing urban population, including remote rural areas. This will allow the government to save money in the area of purchasing foreign goods in times of need, and will allow the government to continue to use money to better the economy of their own country. So, the next time you crave your favorite fruit, and you decide to hop in your vehicle to drive across town, or raise your hand for a taxicab that will take you one block down the road, think about the Ugandan producers and consumers who walk a four hour round trip, to find food in which they aren't for sure they will afford.

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