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Burundi, Factor 20: Farm to Market

Bringing the Farm to the Market in Burundi

Imagine - starving, losing weight, and living in constant distress; left to wonder where the next meal, or even a minuscule bit of nutritious food, will come from. Hope of regaining health and a healthy weight is fading more and more each day while the muscle and any remaining fat continue to decline until there is nothing left to lose. Day to day activities become more strenuous than usual, but the farm must be tended to or else there will be absolutely no food for the family. Life is anything but easy, especially when you have a family to raise and a farm to tend to. With no commercial agriculture, grocery stores, or infrastructure, a nutritious, sufficient food supply is extremely hard to come by, and you are left with attempting to try to raise enough food for your family to get by on. For 795 million people this is a cold, excruciating reality they face every single day (WFP). Going to bed hungry is something no one, especially children, should have to endure. Something should and can be done about this problem in underdeveloped, poverty stricken, or overcrowded countries. With continual technological agricultural advancements the issue of malnutrition can be better combatted than in years past. Farmers around the world are becoming increasingly efficient and are able to grow and produce more on less land which can in turn feed the world more effectively. Burundi is one of the many countries ridden with malnutrition caused by the lack of agricultural infrastructure, and they need to start drastically improving their food security and supply in order to stop the millions of deaths from starvation that occur each year.

The typical family structure in Burundi is diverse. Traditionally, polygamy was the practice of most families. Although it has now been banned by law and the Christian churches, there remains a part of the population that continues practicing it. Families typically have many children, and these children are highly valued. Although each family has its own house, compounds are formed within these houses that include extended family members. Education of the children is inconsistent. While many families teach their children at home, there is a school system in place. It is technically mandatory for children ages seven to twelve years; however, this mandate is poorly enforced. In the typical curriculum, boys learn skills in public speaking, storytelling, traditional dances, and militaristic skills. On the other hand, girls learn how to tend to the gardens and take care of the house. Both boys and girls learn proper behavior and family values (Advameg, Inc.).

The basic diet of a family in Burundi includes beans, corn, peas, millet, sorghum, cassava, sweet potatoes, and bananas. These crops are typically grown on a small plot of land that is owned by each individual family. This is known as subsistence farming - raising enough food to support, or attempt to support, your family off your land. Subsistence farming is the only option of survival because there is little infrastructure and no agriculture storage facilities (New Agriculturist). These issues all contribute to a poor diet and limited agricultural economy.

Almost no animals are raised for the consumption of their meat or products due to land fragmentation, little technical knowledge, terrible soil fertility, and the absence of quality livestock breeds. This means little to no meat is eaten in a regular diet which accounts for a large percent of the population experiencing protein deficiencies. A protein deficiency is a form of malnutrition or undernutrition and it is what happens when the body does not receive a sufficient amount of protein from the diet. The body begins to break down the muscle fibers for energy, eventually leading to death (Schuna). This protein

malnutrition ravishes the immune system. This is complicated by the fact that Burundi has nearly no doctors. Treating and preventing illness is nearly impossible. Tragically, very poor water conditions spread illness to people and livestock making living conditions detrimental (Advameg, Inc.).

Crowded living conditions, lack of education, poverty, subsistence farming, malnutrition, poor soil conditions, land fragmentation, contaminated water, and inadequate infrastructure of any kind are some of the key factors responsible for placing major hindrances on the people and families of Burundi. Agricultural productivity is hindered because the people simply do not have the knowledge or the tools to be able to adequately support themselves. Since Burundi is so underdeveloped with absolutely no infrastructure of any kind, there really is not an economy or jobs available other than tending to your homestead. Almost 90% of the population lives on less than two dollars per day, and overall the country ranks 178th out of 186 countries on the Human Development Index. Burundi is experiencing rapid population growth, and with the lack of sufficient agricultural practices, the economy is failing to keep up with the growth (New Agriculturist).

The factor of lack of infrastructure, farm to market, affects a multitude of aspects of life in Burundi, but most importantly it affects the availability and quality of the food produced. According to David McCarthy, a researcher for the Yale Environment Review, "...Accessibility depends on the transport infrastructure. Less roads means reduced food access (McCarthy)." A place without roads is a place without food. Having roads and infrastructure is the first step towards developing a nation from a third world into a first world country. If we want people to have access to food they must have a way to get to it. Organizations like the Food and Agriculture Organization (FAO) have already realized severity of this issue and have started to work towards rehabilitating irrigation infrastructure, improving farmers' access to fertilizers and quality seed, and strengthening the capacity of farmers' groups by supporting and training in improved techniques and proper management of irrigation systems and storage facilities (New Agriculturist). By starting from the very bottom and building infrastructure, this creates a way for food and other necessary items to be transported and shared among the population. Currently, there is no way for the people to have access to nutritious food other than what they can attempt to grow for themselves and their family. The presence of this factor in Burundi is massive and it is getting worse and worse as the size of the population grows. More and more people living in Burundi without access to food means more and more people becoming undernourished. There are 3.1 million children under age 5 that are dying of malnutrition each year in countries like Burundi (Bloemen). If the infrastructure in Burundi could improve, the issue of food insecurity among people would decline. If the people could have a job of growing crops or raising livestock and being able to sell it, the economy would benefit as well.

Although lack of infrastructure, roads, internet, railways, and electricity, is a major problem facing the citizens of Burundi, there are many other factors contributing to food insecurity. The amount of available, clean water is very slim which does not help the problem of poor health. If the people are unable to eat or drink clean water, then there will be no healthy citizens who are able to withstand the physical labor of building roads and constructing the infrastructure of the country. Without the construction of infrastructure, particularly roads, with the help of foreign volunteers who are capable and possess the needed skills, there is not a way to obtain food. Without the ability to obtain food and the knowledge of how to effectively and efficiently produce nutritious food for themselves and the rest of the country, the problem of food insecurity cannot be resolved.

This factor needs to be addressed with the help of foreign assistance from developed countries. Countries like the United States can aid Burundi through the use of American citizens instead of the American government. Without the proper tools and education, Burundi does not stand a fighting chance of

overcoming chronic malnutrition and food insecurity. It would be highly beneficial if groups of educated, willing people could travel to Burundi to help educate them and show them how to improve their agricultural practices. For example, a family from my area recently moved to Russia to start a cattle operation and show them how to make use of the large amounts of unused farmland for food in order to increase food security in the country and lower the price of meat. They are in charge of several hundred thousand head of cattle and they train the locals and show them how technology can be used to help feed their country, generating a healthier economy and lessening the dependence on foreign markets for their meats. This same model could be applied to Burundi for livestock and crops alike. All it takes to start a change is education and hard work, and there are people who are willing to do it to help make a change.

Many farmers and ranchers would love to spread their knowledge of agriculture and agricultural technology. If these farmers and ranchers would help educate willing people who are able to travel to Burundi, the problem of no infrastructure and lacking knowledge of modern agriculture could start to be worked on. By having the people who would be sent to Burundi directly trained by American farmers and ranchers, it would allow them to have sufficient knowledge to educate the Burundi people. It would also allow farmers to remain in America while still having educated people sent to Burundi to work. These groups of trained volunteers would be able to teach the people of Burundi how to better cultivate the land they have, how to implement irrigation practices, and how to select crops that are more suitable for their land. By teaching Burundi farmers the importance of rotating their crops, their soil's health could be improved. At the same time, while some volunteers are teaching better agricultural practices, other trained volunteers could begin to work on infrastructure, starting with roads, so the people of Burundi will have a way to market and transfer their crops once grown. An example of a group of people who could easily get involved, starting by adding Burundi to the list of optional places to volunteer at, is the Peace Corps. This group is already full of volunteers and is working abroad with local leaders to tackle the most pressing issues of our generation (Peace). We have seen the progress and success of Peace Corps in other underdeveloped countries and their effort could make a huge impact on lessening food insecurity in Burundi. If people knew how serious this issue was and how many lives were being lost, contributions would be made to help the people of Burundi. Groups of agriculturists could use their knowledge and skills towards furthering the infrastructure in Burundi, starting with roads.

The national government of Burundi needs to start attempting to infrastructure into the country, even if it is small steps at a time. Without the support of the country's government, it will be impossible to overcome the problem. Though it may be difficult to change the entire structure and way of life in the country, it is vital for the revitalization of Burundi. Ordinary citizens must voice their concerns and issues to their government if they want to be heard and if they want change to be made. Another factor that could make it difficult for the government to get involved is the social and political unrest currently in Burundi. This social and political unrest, however, could be directly linked to being an underdeveloped country. If the country were to become more developed with the building of infrastructure such as roads, railways, and electricity, we may begin to see a decline in the unrest among citizens. The volunteers being sent to Burundi must be aware of these concerns before entering the country. By learning the basics of the county's culture and being respectful and understanding of the Burundi way of life, minor, potential difficulties could be avoided. Organizations like UNICEF have started programs before to travel to Burundi and help to educate communities on the importance of a nutritious diet, but it is still difficult to get the country to where it needs to be in regards to food security without a strong agricultural infrastructure (Bloemen). There are many communities of eager agriculturists wanting to help decrease food insecurity around the world, but Burundi is such a small country and it is often missed by the public's eye. The typical family in America can help by raising money and contributing to the cause, allowing progress in Burundi to be made. Burundi's situation of food insecurity effects more than just Burundi. Burundi could potentially become a trade partner if they had the means of transporting and

shipping the products of their toil, thus boosting both countries' economies. The typical Burundi family can be involved by accepting the help and realizing that their current situation can be improved and they shouldn't have to live in constant fear of starvation. This group effort of education and implementation can and will be accomplished.

Food security is something most people in America take for granted because they have never lived with the constant worry of where their next meal is coming from. America is blessed to be able to produce a sufficient food supply for its citizens. American agriculture is constantly evolving to become more and more efficient as well as able to feed more and more people. Other countries are not this lucky though, and millions of people across the globe are experiencing the excruciating, everyday pain of hunger and starvation. The country of Burundi is no different. With its severe lack of infrastructure comes death and malnutrition. With the support of Burundi's national government, other organizations, and foreign assistance, infrastructure can be built, citizens can be educated, and lives can be saved. No one should have to endure the constant struggle of trying and ultimately failing to produce enough food to survive on. By implementing this infrastructure lives can be saved and the knowledge of modern agriculture can be spread into new parts of the world as countries become more and more developed. Something can and should be done to help alleviate this problem. America can be part of the solution, the World Food Prize can be part of the solution, and I can be part of the solution. My generation of agriculturists can help to change this miserable fate of many people around the world through advocating and implementation. We have the power to cause a change and now is the time to do it. We can and will create a sustainable, food-secure world.

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