

Miriam Laizer
Muscatine High School
IRIS Exchange Student
Responses to Food Insecurity in Tanzania

Human survival relies on a thin layer of soil as well as seed. Food is essential to human life. The process of eating and keeping food in a safe way is known as food security. Approximately one billion people live in chronic hunger and more than one billion live in extreme poverty. Many are small farmers in the developing world, their success or failure determine whether they have enough to eat, are able to send their children to school and can earn money to save. This condition is worse due to the fact that a high percent of people facing poverty in developing countries are farmers. This is proven by the fact that most farmers live in the village and they are illiterate.

Tanzania is the third poorest country in the world, most of its inhabitants earn equivalent to 1 U.S. dollar per day. According to the World Food Programme (WFP), 44% of the total population of Tanzania is undernourished. The Global Hunger Index rates Tanzania's situation as 'alarming'. However, the Rural Poverty Portal suggests that while poverty is still a big issue, rural poverty in Tanzania has been decreasing over the past 20 year. This trend can only be continued through the improvement of agricultural education.

Tanzania is an agricultural nation; however, it can be better if science and technology is improved as well as education of the farmers. Farmers in Tanzania grow both food and cash crops. They have tobacco, sisal, cotton and pyrethrum as cash crops on plantations, while they grow maize, millet, coffee, tea, wheat, cassava and sweet potatoes for food. Maize is highly grown in a region called Mwanza, which is the second biggest city in Tanzania. It covers 35,187sqkm and 43% of it is covered by Lake Victoria.

Maize is very abundant in Tanzania because it is used to make *ugali*, which is the most common food eaten in Tanzania. Other foods are such as rice, beans, and bananas are used to make *mtori*, which is the most suitable food for babies and pregnant women. Fruits grown in Tanzania are mangoes, banana, apples, pawpaw, watermelons and peas. They also grow vegetables such as spinach, mchicha, cabbage and tomatoes. Tanzania's highest level of education is university, and there are less than ten in the country. Their farms typically occupy 5 to 10 hectares; however, very rarely they can reach 50 hectares. Most of the farmers in Tanzania practice small-scale agriculture; however, there are those who practice large-scale agriculture. Large scale can be found especially in growing cash crops. Small-scale agriculture is practiced by the majority farmers due to the fact that it's easier for them to buy simple tools such as hoes and rakes. Buying a tractor is far too expensive for farmers, even if they sell everything they own. Due to the use of simple tools, they harvest little amount of food which has poor quality. This gives them a poor market since their food has little quality.

Most Tanzanian families are extended families. They live as a group: grandparents, parents and large number of children (usually a minimum of four). This is very different from other nations where they have small families, making it easier to them to feed the family. In Tanzania is much harder due to the fact that farmers have to feed the large family as well as try to sell the surplus and earn income. This is typically impossible due to the most of food is consumed by the family members leaving little to sell. Having small farms and large families makes it very hard to meet basic needs, which is why we need to find ways to improve our agriculture. The best starting point is through educating farmers and providing access to support agriculture.

Tanzania's highest level of education is university, and there are less than 10 in the country. There are many primary and secondary schools. These are either government schools which are owned

by the government and charge little amount of money or private school not owned by the government which charge a lot of money.

Illiteracy is the major barrier in improving agricultural productivity and income. 30% of Tanzanian's farmers are educated while 70% are not educated. This really affects agriculture because the farmers don't have the knowledge of what is good or bad for agriculture and what can hinder their agricultural products and what can improve them. Also because of the lack of knowledge most of the farmers practice hand to mouth system where they grow and harvest food and eat without having any left to sell to make profit. Educating farmers will give them a better condition of life.

Illiteracy is not the only problem facing Tanzanian farmers. Poor science and technology also acts as an obstacle to improving agricultural products and income. Farmers use simple tools instead of tractors due to poor mechanization. We can see that it consumes a lot of time and physical strain to use these tools. Example: farmer 'A' uses a tractor and a farmer 'B' uses a hoe. It's obvious that the one who used a tractor will finish growing his crops in a shorter period of time while who used a hoe will consume a lot of time as well as will produce products which have low quality.

In Tanzania farmers have no access for implementing agricultural technology. This is shown by the fact that most of the farmers don't use the antiseptics to kill pests in their farm, making food that is harvested unsuitable for human life. This is very bad, especially in foods like *mtori*, which most babies eat. This food being bad will affect the babies' health, all due to poverty that causes farmers to be unable to buy medicines for their crops. In addition to that, farmers also lack quality seeds, fertilizers, irrigation, infrastructure (roads and communication), and other farming supplies. Most especially quality seeds; farmers need to be educated on seed quality to improve the crop diversity system. It is important for farmers to know how to select good seeds that can be re-used or recycled, as the late Dr. Norman E. Borlaug was looking at. Due to all of these facts, Tanzanian agriculture is low and is going to continue to be low if this is not improved.

Educating farmers and providing access to implement new agricultural practices will act as a key for agricultural improvement in Tanzania in both income and food production. When farmers are educated, they will know what chemicals they should they use to kill pests and keep their crops growing in a safe condition, as well as large quantity. Through this, farmers will earn more income and have a better market. On the other side of the coin, providing access to farmers is a great step towards agricultural improvement. That will enable farmers to grow quality, safe, sanitary food that will be the best for human life. This will also improve their markets, and as a result farmers will earn more income which will help them to develop and be free from poverty.

You could say that this process is a chain reaction. If farmers produce better crops they can earn an income and provide an education for themselves and their children. An education is what would allow them to grow better crops. It's a never ending cycle. The World Food Programme also reported that in one school in Tanzania they started providing school lunches and the children's exam results skyrocketed. Not only do these farmers need to be able to send their children to school, they also need to be able to keep them nourished.

Usually people in urban areas are the ones who are educated, and most of the farmers live in the village where the majority are not educated. As listed before 30% of the farmers are educated while 70% are not. As a result most of the farmers are poor while they struggle hard to cultivate their crops however they receive 30% of the food and income at last. Also soil is degraded due to over use where farmers do not conduct shifting cultivation, crop rotation, and building of terraces that could make their soil fertile as well as produce good products. Tanzania is also facing a loss of forests due to cutting of trees to find new

farmland. If only farmers could be educated there could be a reduction of environmental degradation or pollution.

In Tanzania 80% of the work in the farm is done by women yet they get little or no support and receive 5% of the salary. This is unjust because they are the major workers and yet they get low salary and don't have the right to inherit land or anything. Women also practice the irrigation system, where they collect water, manage it and store it in a safe way. It has also been shown that women work more efficiently than men, but still they are not given the right to own anything and they are not paid equal as men. Women have a great advantage in the farm since they are the major producers. Women make up 49.7% of the labor force in the urban areas, so rural areas need to catch up on the value of women in Tanzania.

An easy way to see the effect of illiteracy and un-education on farmers is to compare U.S.A and Tanzania. You will see that the U.S.A is developed and they have all the working equipments and all the knowledge on how to handle the farm. Tanzania, on the other hand, lacks all the equipment and has farmers who are not educated; making their agriculture is less effective.

When agricultural productivity is improved it will lead to farmers earning better incomes and being able to live a suitable life. It will lead to farmers being able to get their children into school and having enough to eat as well as surplus production that they can sell. This also will improve the market which will be good and provide high income. In addition to that, when agriculture productivity increases, there will be a surplus availability of food which Tanzania can use to help other nations where there is starvation. Surpluses can also be stored as food for the nation to be during hard times.

I recommend that farmers should be educated on how to handle the agriculture activities. They need to know what factors can improve their agriculture and which can hinder it. Farmers also could be given skills on how to grow their crops. For example, tomatoes must be grown in terraces so as to grow well. Therefore farmers should build terraces so as to produce suitable tomatoes. Also, farmers need to be educated in how they can make their soil fertile through crop rotation and also shifting cultivation. If farmers are educated, food will be secure and their income will rise. Farmers also have to be supplied with all the equipment they need. Making farmers able to use tractors instead of hoes, and teaching them to use fertilizer which will help their crops to grow fast and well as well as make their soil fertile. Also they need to have a good selection of seeds which will produce healthy food. Generally I recommend farmers to be given all the support that they need.

I suggest the government should help and support farmers because with out farmers the state will be in a severe hunger. The government should provide loans to the farmers as well as tools and chemicals for their crops. Motivation is also important, the government should motivate their farmers in different ways, maybe by having days where they can go and build terraces, remove weeds and grow crops with good seeds they have selected. On the other hand the communities should also co-operate and work effectively for secured food. As we know, Tanzania is among the poorest country in the world, so perhaps the government won't have such money to support the farmers. I suggest companies and organizations should contribute money or equipment so as to help the farmers as well as helping to improve agricultural productivity. The World Food Programme is on the right track in helping Tanzanians. They have different programs helping in areas from helping refugees, encouraging development, and purchasing excess to provide farmers with an income. Furthermore, if it is possible, developed countries should help developing countries' farmers through giving them support by providing access to agricultural activities.

Eventually I conclude that the most important thing to be resolved is illiteracy to the farmers. If only farmers could be educated things would be much improved. Farmers need to know the skills they

can use to make their agriculture better and through that they can earn as more income. Also, when farmers get the agricultural equipment they need, they will be able to grow their crops faster. As a result, they will save their time so that they can work on other activities. Farmers will have knowledge of how to make their soil fertile and conduct shifting cultivation methods as well as crop rotation and building of terraces where necessary. If farmers were educated and provided with access to improved agriculture Tanzania would be as high as Mount Everest in terms of agriculture.

Bibliography

Food and Agriculture Organization of the United Nations. Sept. 2009. <<http://www.fao.org/>>.

“Mwanza.” Wikipedia. July 2009. <<http://en.wikipedia.org/wiki/Mwanza>>.

“Strategies.” The Global Crop Diversity Trust. Sept. 2009. <<http://www.croptrust.org/main/strategy.php>>.

“Agricultural Development.” Bill & Melinda Gates Foundation. Sept. 2009.
<<http://www.gatesfoundation.org/agriculturaldevelopment/Pages/default.aspx>>.

“Women and Water Resources.” Women in Development Service (SDWW) FAO Women and Population Division. Feb. 2001. <<http://www.fao.org/sd/fsdirect/fbdirect/fsp003.htm>>.

“United Republic of Tanzania.” World Food Programme. Sept. 2009.
<<http://www.wfp.org/countries/tanzania-united-republic>>.

“Rural Poverty Portal.” International Fund for Agricultural Development. Sept. 2009.
<<http://www.ruralpovertyportal.org/>>.