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Tanzania: Food Problems

In today's world, many young people worry about new technology. They want the newest phone, the newest iPod or the newest iPad. They think about going shopping and buying clothes or going out to eat or to the movies with their friends. They worry about someone not liking them or wonder if people are spreading rumors about them. Many of the things kids in America worry about seem so childish compared to what other kids in poor countries worry about. In Tanzania, there are many people so poor that all they want is food, not a new phone. Many kids in Tanzania have to worry about necessary things. Will they have supper that night, water to drink or a bed to sleep on? Will they have a mother or a father tomorrow?

No kid should be thinking these awful thoughts. They should be out having fun with their friends. Sadly, that's not the case in many parts of the world. Less fortunate kids worry about things that more privileged kids never have to even think about. The fortunate kids are so caught up in their own lives they don't care or even think about the problems others may have.

Mothers and fathers in the United States worry about their children. They worry about their child's safety. They worry about their children being bullied. Are they happy? Will they be in a car accident? They don't have to worry about the same things parents in Tanzania worry about.

In Tanzania, a parent's worries are much different. They worry about their children surviving some deadly illness such as malaria, HIV and AIDS. The worry about feeding their children. Will the government be there to help them live stable lives? They worry about putting a roof over their children's head. No parent, no matter the race or society, wants his or her child to die from hunger or a deadly illness. We need to show the people who are just trying to survive every day that some of us are thinking of them and that we are willing to help.

Economy: Tanzania today faces food insecurity and poverty. It is a major challenge for that small country. Agriculture is the mainstay of the Tanzanian economy, still employing close to four-fifths of the economically active population. Farming and livestock are among the key driving forces for relief of food insecurity in the country. And yet those two food sectors are being jeopardized. The government is doing very little to address the issues of poverty, food security and rural development. The country's Gross Domestic Product (GDP) has grown in the last decade but this growth has not improved the living standards of many ordinary Tanzanians. More than 40 percent of the population live in chronic food-deficit regions. Challenges in agriculture include a lack of appropriate agricultural policies and practices. Lack of funds to support rural development, and poor utilization of the agricultural budget at the local level impede productivity. Also, agriculture field technicians are unmotivated and inexperienced. "Train-the-trainer" programs are essential to bringing advanced farming techniques to rural communities (Stuck in Poverty). Technology has much to do with agriculture. "Eighty percent of farmers still do hand farming. It's not that they are unwilling to accept technology, but it's the price of the new technology that is a problem for many farmers. Maintaining, purchasing and up-keep of equipment needed for modern farming are just too much for an average farmer. Teaching by example can be the best way to introduce new technology. Talking one-on-one to farmers and explaining to them what the best farming methods are required for a specific area is the beginning. For example, we have two regions with two different typologies, weather and quality

of the soil. Farmers should be taught the use of [technology] such as genetically modified seeds to produce better products or seeds that work well with the climate of their specific region. There was a British farmer who came to Tanzania and taught farmers of the region called Kilombero how to farm rice by using a very small area to get lots of crops. As a result, the surrounding farmers who attended the training produced more rice than the British farmer. There is also another farmer who teaches how to grow tomatoes. Practices like these should be used to encourage the introduction of new technology,” Foster Mkapa explained. Foster Mkapa is a Tanzanian citizen. She is the daughter-in-law of the former president of Tanzania, Benjamin Mkapa. He was the third president of Tanzania and is still actively involved in governmental activities. I met Foster last year in Rwanda and decided to get her opinion as a Tanzanian citizen.



Foster Mkapa and I in Rwanda.

Government: To achieve sustainable economic development, the Tanzanian government needs to focus on issues such as rural development, agricultural improvement and economic empowerment of the rural population. The government also needs to increase the transparency in contracts with foreign investors and at the same time give legal and economic empowerment to local producers and traders. While issues such as budget allocations for agricultural and food security remain only partially addressed, Tanzanians will continue to suffer from hunger and poverty (Stuck in Poverty).

In 2011, Tanzania issued a six-month ban on non-governmental exports of grain and maize. Export restrictions, normally made each year, came across early in 2011 as a result of rising demand for food from across Tanzania’s borders, and growing concerns about hunger within the country. The Government planned to continue to trade with other countries, but the ban aimed to prevent the widespread smuggling of cereals onto the black market in Kenya. Most Tanzanians depend on cereals as their staple food. Tanzania is dependent on their rain-fed crops from maize, beans, wheat, rice, and millet to feed its people. Tanzania has heavy expectations to be able to feed itself, especially since over 80 percent of its population works in the agricultural sector (Mwakyembe).

Most people rely on small-scale farming in rural areas. The problem is that almost 57 percent of households do not have enough nutritious food to eat. Higher and more sustained agricultural growth is critical to reduce overall poverty in Tanzania (Farm Africa). A newly constructed, plastic-lined rainwater collection and storage trench has made gardening possible in the dry weather season.

In Tanzania, the government is the main provider of education services. Education services include a wide range of assistance to farmers in helping them identify opportunities, approach problems, assess capabilities and provide needed advice. The Tanzanian government is bringing education to small-scale farmers in their home communities. It has led to the creation of 6,700 Farmer Field Schools and training 70,000 farmers. The government has also provided fertilizer subsidies to 2 million farmers. Yet, many farmers still lack access to the education and training provided by government extension education programs. Farmers still lack technical knowledge, and the number of agricultural education staff is inadequate in most districts. It is crucial to firmly link research with education services. While research and development produce innovative technologies, education services take them to the farmers. Participation in decision-making has empowered farmers. It has also provided them access to issue-specific and gender-related assistance (Extension). “The government can help by subsidizing the seeds, fertilizers and also developing the market for produce. The government can also help by providing training and support to farmers,” Foster Mkapa states.

For more than a decade, Tanzania has been wooing foreign investors to help modernize and reinvigorate its agricultural sector. Maize is Tanzania’s major staple crop and about 85 percent of the population depends on it for their food or livelihood (Mwakyembe). Many smallholder farmers like Ahmed Kipanga, a 37-year-old father of five, feels short-changed. He said, “I used to work my land and grow enough food to feed my family.” Now, he no longer has access to his land. “I just gave my land because we were convinced by a politician that it would make us rich. I knew I would get money for the land, and also get a well-paying job when the [investment] company began operations. Now they didn’t do anything and they sold our land to another company we didn’t even know.”(Kipanga). Kipanga now has no farm to grow food on and he struggles to make ends meet by crushing rocks manually. Some 27 agricultural investment deals have been signed in Tanzania since 2008, covering 274,228 hectares. “There is mounting evidence that most deals have failed to deliver on their promises,” said Lorenzo Cotula, land rights and natural resources specialist at the Institute for Environment and International Development (IEID). He also added that villagers have lost land, many investments have been discontinued and jobs have been few and short-lived. For land deals to benefit farmers, villagers must have greater control over their resources through stronger rights, but also through collective action that can give real leverage to legal rights (Cotula). This is a problem that can only be dealt with by political leaders at the national level. Corruption at the local level must be stopped if farmers are going to have the opportunity to prosper, as they should.

Maasai: The Maasai are an ethnic group of semi-nomadic people who live in their own small communities. Tanzania has many communities of Maasai. They live in small houses that are built close together. The houses are made of mud and sticks along with cardboard and plastic. The Maasai are educated in their own small communities until they are finished with primary school. At that point they are tested, and depending on their scores, they are sent to boarding school to further their education. Only a few students have the opportunity to get a better education. The community of the Maasai fund the school costs. The money they get from tourists helps pay for boarding school.

The Maasai depend on herds of cattle and goats for their livelihood. They herd animals every day to graze. They move from place to place to find enough grass for their livestock. The rain and availability of grass drives the nomadic lifestyle of the Maasai people. If they must leave their homes for months, they will. The Maasai diet consists of meat, milk, and animal blood. For them, it keeps getting harder for their animals to get nutrition from plants because they get little rain



(James). “ Many children have little to eat each day, causing them to be sleepy during the day, and some even fall over due to hunger.” (Ceppi).

Me and the Maasai children in their classroom.

Homes of the Maasai people.

Climate: Tanzania, like other third world countries, has started to experience the climate change. Rainfall is said to decrease during the dry seasons and increase during the rainy seasons, leading to a growing risk of both water shortage and flooding. Rising temperatures and changing rainfall affect agricultural production and water resources, thereby threatening the livelihoods of millions of poor people living in rural areas. The ice cap on Mount Kilimanjaro has been disappearing, with serious implications for the rivers that depend on ice melt for their flow. Several of the rivers are already drying out in the summer season. Climate change is viewed as one of the greatest threats of the present and future of humanity in Tanzania (Climate Change).

A detailed analysis of climate change has been made using separate models (MAGICC/SCENGEN). All of the projections expect a temperature rise of 2.2 C by 2100. The average precipitation is 1,042 mm and temperatures range between 17C-27C. Some areas of northern Tanzania will get wetter (between 5 percent - 45 percent wetter), while other areas, especially in the south, will experience severe reduction in rainfall (up to 10 percent). The change in rainfall would make the central, western and southern part of the country unsustainable for agricultural production. In recent years, both the timing and amount of rain have become unreliable, meaning some farmers put crops in the ground too early and some too late. The soils have been damaged by erosion and overgrazing (Conservation). Foster Mkapa said the soil quality is not the problem. The problem has more to do with abuse of the soil with poor farming practices.

Education: Helping rural communities develop a system of producing locally grown, high-quality food from improved farming practices will help a lot. Having a system that will get rid of the pests that kill crops will help as well. Hiring agricultural technicians who are motivated and experienced is important to the agricultural improvements. Many of the workers lack motivation to work. They don't care about the business or improvements. They are only working for a paycheck. Inexperienced and untrained workers are a problem. Workers need to know how to do their job. Having classes to teach them how to work would be helpful. One source of education is Heifer International. Heifer International is a charity that helps around the world. Their mission is to end hunger and poverty and to care for the Earth using gifts of livestock, seeds, trees, and training in a sustainable agricultural community (Mission). Heifer links communities, helps to maintain agriculture and supports trading in areas with a long history of poverty. The animals they give away provide communities with food and reliable income. Agricultural products such as milk, eggs, and honey can be traded or sold at the market. Families share the training they

receive, and pass on the first offspring of their livestock to another family that is in need of food. Heifer International provides families with tools that they need to sustain themselves. Families are trained how to take care of the animals. Along with giving livestock, Heifer also provides training in community development, gender equity, sharing and caring, strategic planning and other subjects such as literacy. The literacy training helps women improve their families' income, health and nutrition (About Heifer).

Solutions: All around the world there are many programs and charities that are trying to help countries in need. United States Agency International Development (USAID)-Tanzania Agriculture Productivity Program (TAPP) held programs to educate farmers on agriculture. USAID-TAPP have participated in both the Arusha NaneNane and Morogoro NaneNane, setting up demonstration plots to promote agronomic practices such as pest and disease control, plant spacing, drip irrigation and quality hybrid seeds. Everyone who visited the USAID-TAPP plots has asked where they could find the displayed materials and technologies, such as seed trays, pumps and drip irrigation kits. USAID-TAPP opened a new office in Morogoro where farmers can visit the new resource center to access information and get technical advice. All USAID-TAPP activities work to improve food security in Tanzania as a whole, specifically for small farmers, women, children and disadvantaged groups. USAID-TAPP partner Multiflower, held a two-day seminar in Arusha to expand commercial seed production and train smallholders. More than 70 smallholder farmer representatives from 16 different districts attended. The seminar prepared new farmers for the planting season and taught them how to grow new seed varieties (TAPP).

What may be a great help with farming are the new hybrids of maize that Arnold Mushongi, researcher at Uyole Agriculture Research Institute in Mbeya, has developed. These new crops require little water, can grow in less fertile soil and are pest-resistant. The new hybrids mature in 125 to 130 days, up to three weeks less than is required for normal maize crops. Veremund Mfuse, a farmer who has had problems with his crops, says that these new hybrids are exactly what he needs to be planting. "Maize seeds that take so long to mature are a loss (in terrible conditions). We need seeds that take a shorter period to mature, so that when rains stop the maize is ready to harvest." said Mfuse.

In many parts of sub-Saharan Africa, rich and poor shoppers alike look down upon local foods. For example, in Senegal, many consumers and cooks consider local rice to be inferior and instead buy imported European brands that can cost four times as much. Local farmers make their living by selling crops. If people buy European brands, they are not supporting farmers and are spending a lot more money than if they would buy from local producers. Even though what they eat is very important, what may be even more vital over the long term is preserving knowledge about how to plant, grow, and cook what they eat.

Developing Innovation in School Cultivation (DISC) is another great organization that helps educate farmers from this generation. Not only are they educating current farmers, they are also educating the next generation. DISC has helped improve nutrition, generated environmental awareness and helped preserve food traditions and culture for local students by establishing school gardens at fifteen day, boarding and preschools. By focusing on school gardens, they are helping not only to feed children, but also motivating an interest in farming local African vegetables and educating the next generation of farmers and eaters who can preserve culinary traditions and increase food security. "As a youth we have learned to grow fruits and vegetables to support our lives," said nineteen-year-old Mary Naku, who is learning farming skills from DISC (WorldWatch Institute).

Aid organizations can help by working with farmers and not agents, so they can agree with farmers on what methods work the best. Providing forums to discuss issues and also assuring farmers that their produce will get to market would be very beneficial (Forest Mkapa).

People in Tanzania would benefit greatly by food preservation. Many don't have electricity, therefore they have no refrigeration to keep their foods fresh and safe. Preserving food by drying or canning would greatly extend the shelf life of the food they eat. With canned or dried food there would be less waste and more people would have access to more food.

Lack of nutrition, overall food production, and rural development in Tanzania can benefit from a focus in three main areas: education of farmers in their home communities, greater political stability and financing of small farmers in rural areas both at the national and local levels.

The Tanzania Agriculture Development Bank (TADB) aims to increase growth in the agriculture sector by offering loans and credit finance deals to farmers who may not have access to financial services. The bank will also have an advisory committee that will work with the government on increasing Tanzanian exports by establishing more Export Processing Zones where goods are processed and ferried directly to the port (TADB). The chairman of TADB stated, "We have established that for a long time, agriculture has been receiving just about 10 percent of the total loans disbursed by commercial banks to the private sector. This is too little for a sector that is claimed to be the economic mainstay." (Moshia).

All the problems have a solution, but it is going to take many people working together to get to a final answer. Politicians, educators, and financial experts all need to be a part of this solution. If everyone came together to make their country better, Tanzania might not have as many problems as they do.

We need to educate people that local food is as nutritious and high quality as imported food. One way to do so is to get the government to promote local farmers markets. That strategy gives the local farmers an opportunity to sell their crops and not have to travel a long distance to market their farmed products. Focusing on one farmers market will be easier to begin with instead of having 200 markets going on at the same time. Developing a plan that will work for the market will be the first step. Getting the government, advertisers and local people involved is crucial. Having everyone involved, the market will have a better chance of succeeding. After the success of the first market, take the plan, make improvements if needed and expand it to other parts of the country. See what worked and what didn't. Work on the plan and keep improving it with each step we take. Twenty miles from the first market, set up another farmers market. And keep repeating the cycle. Hopefully, once the markets are set up and successful, the neighboring markets can exchange products and information about how to improve the markets and farming with each other.

Doing something similar to the Land Grant College Act that we have in the United States for Tanzania, could improve education. In the early days of agriculture, it taught farmers the best practices for farming and raising crops. It allowed for more applied studies that would prepare students for the world they would face once leaving the classroom. The Morrill Act, (enacted by President Abraham Lincoln's administration) was to teach agriculture, military tactics and the mechanic arts. The Act also gave educational support directly from the government. With this Act, America's agriculture grew.

Along with the Land Grant College Act, the Extension Service could be helpful. Extension agents

help farmers understand how to grow crops using the newest technologies. The Cooperative Extension Service gives individuals access to the resources at land-grant colleges and universities across the nation. The universities study crops and new and best ways of farming. The Extension Service gathers the information from the universities and teaches local farmers the results of the studies. It is a great way to help local farmers. They don't have to travel long distances to learn the latest farming practices.

Nutrition education is important on three levels; government officials, general population, and local farmers. Government officials need to be educated on governing people in a way that improves living conditions. The general population needs to be educated on nutrition programs and how to provide their families with healthy food. Farmers need to be educated on providing their local communities with nutritious foods that the people want and need. The three levels of nutrition education need to be coordinated and consistent.

The most effective tool in achieving the solution is a focused education program on nutrition and food production at the local level.

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