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Picture This: Kenya's Food Insecurity and Improvement

On a Saturday morning the aroma of a mother's baking fills the air. A child runs upstairs and sits at the oven window to view the final browning around the rim of warm, soft, chocolate chip cookies. The timer goes off and the cookies are placed on a cooling rack. Those final agonizing moments waiting for them to cool for the sampling is when a child can almost shake the entire kitchen with the rumbling of her stomach. Once the cookies cool, she grabs as many as she can, saving a few for her younger brother. Satisfied, she wonders about her next meal. Three meals a day separated with snacks – this is a normal expectation for many in America.

Now, with delightful meals in mind, picture this: A young boy wakes up at the crack of dawn to the blazing sunlight and crying of his sister lying next to him. She is crying from the pain of not having a single piece of food in the past twenty-four hours. Not knowing when the next taste, let alone meal, will come, the boy begins to cry, too. And when these children have the privilege to eat, it may be nothing more than a small hand full of cooked rice. Most families in Kenya are food insecure. This example could be Kenyan children, a child like Diba Gonjobo Boru.

Diba Gonjobo Boru lives in his small community of Marere located in the Mt. Kenya Region of central Kenya. Diba was like the above boy until Food for the Hungry sponsored him. This organization aims to help children and families who are food insecure. However, there are lots of people in need of food like Diba and his family. Heads of families struggle to hold jobs and to find a sufficient source of potable water and food for their families. Especially beginning around 1975, agricultural employment in Kenya diminished from 42% to 27%. Mostly males dominate nonagricultural jobs where the GDB per capita wage was \$1,089 in 1992, and less in agricultural jobs (VanBiesebroeck, 2007). In Marere, however, agricultural work is still important, yet it is a hard life and crops are unpredictable. Although Diba's family represents a small percent of East Africa's most impecunious families, his family is, unfortunately, not alone in the endeavor to acquire food security. In fact, currently 2.3 million people in Eastern Africa are food-insecure and 70% of these people live in rural, drought-stricken areas. Like Diba's family, they are in need of relief assistance (Humanitarian Appeal, 2004). Many of these families are comprised of hard working men and women, but the dry, arid land cannot provide enough crops. Ninety-five percent of agriculture is rain fed, making land barren in the dry season. Insufficient and/or untimely rainfall is significant, but only part of the problem for the average family. The average family reports only about 52% have access to slightly improved drinking water, and only 31% are able to use sanitation facilities (UNICEF, 2008). These and other problems makes life difficult and sometimes impossible.

The average size for a rural family in Kenya is much like that Diba Gonjobo Boru's family size. Kenyan families have around five people, although the number can range from two to ten. Households may have a mother and father, along with children and possibly an elderly relative or friend residing with them. The families who can afford to eat what is considered "standard amounts of food" will eat eggs, potatoes, rice, fruit, and, for dinner ugali may be consumed along with some form of meat. Lamentably, this is not the case for most families. Due to annually low crop yields, most families have trouble feeding themselves, along with their children. The majority of children in Kenya depend on roughly one cup of porridge a day, assuming they attend school where the meal is provided by the government (Food for the Hungry, 2009). For many reasons, some children can not go to school. Instead they may work in unsafe conditions and may not obtain even one meal a day.

Many families experience the sadness of death early on. A person might lose a mother, son, sister, friend or even one's own life at a young age. The estimated number of adults (aged 15 – 49) living with HIV/AIDS is 6.3%, or around 1500 people and the number of mother-to-child transmission has risen in recent years to 760. The three thousand children orphaned every year relates to the number of adults becoming infected with HIV/AIDS. Additionally, many children suffer from malaria, diarrhea, and protein/calorie deficiencies. Thus infant mortality of 53 deaths per 1,000 live births and 80,000 Kenyan deaths due to AIDS in 2009 explains the mere 2.4% population increase in the country (CIA World Fact Book, 2011). The nearest clinics for treatment could be as far as 10 km away, so help for the ill is difficult to obtain.

Women have a particularly difficult life. In Kenya, 53% of men and women reported that the beating of women is justified in some circumstances (UNICEF, 2008). Not only are there problems regarding rights and quality, but even without those problems, women simply have a difficult life. Women are expected to walk to dams and wells outside of the village to gather water and carry it long distances. When the wells dry up seasonally, women walk still further. Women work hard and are involved with field work, too. Many do not have land or agricultural decision rights. Raising children, tending to gardens and animals (if fortunate enough to have such), cooking and providing for the families -- all of this is done while being obedient and showing respect towards her husband. Women will want the children to attend school and will work towards that end. According to AfricaFlies, (2001), "It is the responsibility of the government to ensure that mechanisms are in place to achieve this valuable commodity (of education) for everyone at the right time and with good quality." This, however, is not the case in actuality in Kenya. The education is insufficient and the country generally poor thus basic supplies are lacking and old teaching styles exist. Possibly this is why education 'contributes positively, although not in proportion to the wage premium paid for education' (VanBiesebroeck, 2007). Additionally, many children have to drop out of school to help the parents or to provide for the younger siblings. Thus, some 4.2 million eligible children are out of school in Kenya. They do not receive the education they need to acquire an adequate income. Many are burdened growing up to tend crops, which, due to inconsistent weather, proves to be an unreliable source of income and/or food source for their families. So, while mothers will want education for their children, it may not happen.

So, we are left with a picture of a difficult life for Kenyans -- a need for food, rainfall, quality education, women rights, medical care, sanitation, clean and accessible water and much more. That is not to mention high food and fuel prices, the drought in the Horn of Africa and the Euro crisis which "makes it more costly and arduous for Kenyan farmers to produce high crop yields" (Worldbank, 2011). We may add to this picture infrastructure, climate change, demand for energy, and many more problems. Even then...we must turn the page and be optimistic while formulating a new picture for the people of Kenya.

Kenya's economy almost solely depends on tourism and agriculture, so, if by some means, a crop can be grown in barren soil, possibly a drought-resistant crop, or many and varied crops or value-added income ideas, using technology, education, and improved farming techniques appropriate to the locale and desired by the farmers – perhaps, then, the picture will improve.

The Kenyan government and non-governmental organizations are working to make this a pivotal time in Kenyan history. Farm-Africa, for example, is one of many organizations helping. Knowing that 2/3^{rds} of African countries rely on agriculture to survive, it is attempting to improve the lives of over 1,000 farmers in communities through training, and providing the supplies to get them started, while trying different seed types to see what works best for each individual farm land (Farm-Africa, 2012) Farmers are trailing a range of seeds from sorghum, commonly referred as the 'food for the poor', to cassava and, now showing up more and more, an American favorite – the sweet potato. In doing this farmers are reducing the risks that reliance on a single crop produces. Research has shown that these plant varieties will not only survive in dry habitats, but they excel in the type of environment such as Kenya's. Farmers are then educated on basic techniques and are encouraged to pass their knowledge on to others.

Other positive indicators involve markets and gardens. “In particular, the distance households traveled to the point of maize sale declined by 43% while the distance to fertilizer retailer declined from 7.9 km to 3.3 km between 1997 and 2007, a 59% reduction” (Mamahope, 2011). Still, the small farmers have the most difficult access to markets.

As to gardens, the Rita Rose Food Garden is an example of a four acre drip irrigated community vegetable garden that is maintained by two hundred women widowed by AIDS or are caring for HIV/AIDS orphans. Harvesting maize, millet, cabbage, kale, and sorghum as well as seven types of vegetables, it has made it possible for children to attend school and for youth to be trained in this method of growing food (Mamahope, 2011). Educating the next generation, putting the power of choice with women who tend the crop, while diversifying the crops and using water efficiently – these are the keys to this project’s success that may be valuable lessons that could be applied to other areas in Kenya.

Some other new techniques are proving effective. One technique is the push-pull strategy where “Napier grass is planted around maize crop as a trap crop. It pulls stemborer moths away from maize...and (along with the use of Desmodium) also improves soil fertility” (Farmers’ Guide on Planting a Push-Pull Field, N.A.) Still another idea came with the help of the German Trust Fund support and the United Nations Food and Agriculture Organization. This program involves crop rotation using a minimum disturbance of soil while maintaining ground cover to better improve soil fertility and effective weed management. This was done successfully in the Laikipia district. An interesting element to this project is that it involved “farmer field schools: with a 50-50 gender balance” – which makes sense since women are involved in field work and have a stake in the outcome. Taking the education to the farmer’s fields is also wise so that people can see the practice put in place and are engaged in learning the techniques. Conservation Agriculture farming practices also involves shallow-rooting crops alternated with deep-rooting crops, so that regardless of moisture, something will grow. Smallholder farmers in this district have been able to increase their yield by 30 – 40% by adopting these techniques along with in situ water harvesting methods and technologies. (Conservation Agriculture for Smallholder Farmers in Dryland Areas, Kenya, June 2012)

Additionally, more sorghum, sweet potato and cassava are now being planted in Kenya and this is a wise move. These crops can withstand the climate, proving themselves to be grown in areas with as little as 250 mm of rainfall. Also, this produce offers valuable nutrients. Since many of Africa’s children are malnourished and have vitamin deficiencies, consuming these plants that can be grown year around, means Kenyan children will be receiving potassium and starch, along with other vital proteins, that provide more calories and nutrients than the bowl of porridge they have been equipped with in the past.

Other changes are taking place in Kenya, political changes, and that includes more women in politics. With women empowered in government, policies and laws may be passed so that women will have land rights and more say in on the local or individual level in seed selection, agricultural improvement, access to education, and decision-making. A country should benefit by using the whole of its brainpower and efficaciousness.

The Kenyan government has also implemented a Strategy for Revitalizing Agriculture (SRA). The SRA aims to help deliver efficient services to the agriculture sector and the people of Kenya (Endpoverty, 2012). The biggest step that the government has taken is providing free primary education and this has increased enrollment in schools. The Environmental Management Coordination Act helps to regulate and manage waste disposal, ozone depletion and enhance water quality, all of which may help to improve life.

The Millennium Development Goals (MDGs) are good goals, yet progress is difficult and problems complex. Still, one must be optimistic in picturing the Kenya of the future where Kenyans will acquire food and water security, good health and education, equality and empowerment, a protected and sustaining environment with conservation practices that produce an abundance of crops with excess to sell

and fund a thriving economy and an improved standard of living, length and quality of life for all. Each generation will improve upon the past generation in this picture and Kenya will be the model for the rest of Africa...the rest of the world...and people like Diba Gonjobo Boru will enjoy a treat on an already full stomach with the security of knowing his life will be a long, productive, and fulfilling one. Wouldn't that make a nice picture?

Works Cited

- “AfricaFiles/HOMEPAGE”. HOMEPAGE. N.p., 1 Mar.2012. Web.21 Mar.2012. <http://africafiles.org>.
- Chamberlin, Jordan. “Has Kenyan’s farmers access to market access to Markets and Services Improved?” 2010. <<http://www.tegemeo.org/documents/conference>
- CIA World Fact Book, July 12, 2011.
- “Ed Poverty 2015/ We are the generation that can end poverty.” End Poverty 2015. N.p.,n.d. Web.21 Mar.2012 <http://edpoerty2015.org>
- Food and Agriculture Organization. United Nations. Conservation agriculture for smallholder farmers in dryland areas, Kenya. 2012. <http://teca.fao.org/read/4676>.
- “Homepage-FARM-Africa.” Homepage – FARM- Africa. N.P., n.d. Web 22 Mar.2012. <http://farmafrica.org>.
- Integrated Regional Information Networks. “PreventionWeb.net Homepage – Serving the information needs of the disaster reduction community.” PreventionWeb.net Homepage –N.p., 5 Aug.2005, Web. 19 Mar. 2012. <http://preventionweb.net/>.
- International Centre of Insect Physiology and Ecology, Kenya; Kenya Agricultural Research Institute; et.al.. “Farmers’ Guide on Planting a Push-Pull Field”, pamphlet, n.d.
- “MamaHope.” N.p. 2011. Web 28 Mar 2012. [http://www.mamhope.org/losi,i-lemua-dro\[-irrigation-food-garden/](http://www.mamhope.org/losi,i-lemua-dro[-irrigation-food-garden/).
- “The Organic Farmer.” The Organic Farmer. N.p., 23 June 2011. Web 27 Mar.2012. <http://organicfarmermagazine.org>.
- “UNICEF – UNICEF Home.” UNICEF – UNICEF Home. N.p., n.d. Web 19 Mar. 2012. <<http://www.un.org/>” Welcome to the United Nations: It’s Your World.” Welcome to the United Nations: It’s Your World. N.p., n.d. Web 27 Mar. 2012. <http://un.org/>.
- VanBiesebroeck, nes. Wages and Productivity: Fact or Fiction. University of Toronto, 2007, Print. http://www.economics.utoronto.ca/working_papers/tecipa-294.pdf.
- “World Bank Group.” *World Bank Group*. N.p. 8 Dec. 2011. Web 21 Mar. 2012. <http://webworldbank.org/>>

