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Kenya: Produce to the Markets

In the United State we travel a lot. When we stop to think about how much we travel, we travel quite a bit. When traveling we have extremely decent roads compared to Kenya. We use roads to get to the grocery stores, to school, to friends and families houses, and in Kenya they do not travel often due to the lack of quality of roads. Kenya has a population of 44.35 million people, this is about the same size as Texas and New York combined. There are about 40 different tribes with varied cultures in Kenya. The major tribe is Kikuyu which is most of the population. Some of the other tribes are Luhya, Lou, Kalenjin, Kanmba, Madai, and Bantu. There are many different religions in Kenya and in various communities. 38% of Kenyan's are Protestantism, 28% believe in Roman Catholicism, 26% follow a religion that is unique to the eastern part of Africa, 7% follow Islam, but most of them follow Christianity. Kenya is about 580, 367 squared kilometers, this is about five times the size of Ohio, or slightly more than twice the size of Nevada. Their climate varies from tropical along the coastline and arid in the interior. The annual rainfall is also affected by the climate. In the more arid areas get between 200 - 600 mm (7.9 - 23.6 inches). In the more semi arid and cooler areas get between 500 - 1000 mm (19.7 - 39.4 inches). In Kenya one of the main problems is the infrastructure.

A typical family in Kenya has an average of two kids. This number has decreased in the last three decades, in 1963 the average family had five children, in 1976 they had four, and in 1992 they averaged three kids. The size also depends on where they live. In the Rift Valley and the western regions average six kids. The eastern and central regions have an average of three to four kids. The Nairobi woman averages three children. The average family size is five people. Income has a large influence on how big the family is, the more money made the bigger the family is, the less money made the smaller the family. And if a woman is educated then she can also influence the family greatly. When it comes to the different classes there is a huge gap between the rich and the poor. The middle class usually live in homes with two bedrooms, a living area, a bathroom, and a kitchen. Some may have indoor plumbing. Two-thirds live in slums, which are one small room (3 squares metres), there is also no running water, electricity, or sanitation.

In Kenya they have wood powered stoves that are mostly used to cook their food, they are trying to reduce the use of them, to help reduce deforestation. Their main meal is Ugali which is stiff cornmeal porridge, served with chicken, goat, beef, fish, or vegetable stew. They also snack on samosas, pastry fried in oil containing vegetables or meat. Another popular snack is chapattis, a thin pancake of unleavened whole-grain bread cooked on a griddle. A popular breakfast that is made ahead of time to warm up later is roasted corncobs, and mandaazi, semi-sweet flatbread. They also enjoy mini kebabs and piles of nyama chorma, barbecued meat. Kenya is a major producer of coffee and tea. The most popular type of tea is brewed tea with milk or sugar, served hot or sugary.

Kenya has many schools including international schools which incorporate international systems like American, British, French, and German. Classrooms are generally overcrowded and the teacher to student ratio is high. Kenya has an 8-4-4 education system. This system started in 1985. The eight is for eight years in primary school. In 2003 the government promised free primary education to citizens. They did this when there was an increase in population and a decrease in economy. 85% of Kenyan children attend free primary school. For some Kenyans sending a child to school can be a burden. The first four is for four years in secondary school. 24% of the children in Kenya attend secondary school. Few children complete their secondary education, there are about 150,000 kids annually finish. There is also free secondary education along with low cost for food, transportation, uniforms, and materials for school. The final four is for four years at the university level. Only 2% advance on and attend a higher education institution. There are 17 institutions of technology, and 12 technical training institution. The literacy rate is over 90% of people.

Access to health and medical care is not equally distributed across Kenya, which is the same for fertility rate and level of education offered. The Central Province and Nairobi are deemed the best facilities and North-Eastern Province is found to be the most undeveloped. Basic primary care is provided by primary health care centers and dispensaries. These places are usually run by registered and enrolled nurses who are supervised by nursing offices. Most of these places also provide outpatient services for cold and flu like illnesses. Sub-district and provincial hospitals provide secondary services. Sub-district hospitals are similar to health care centers but usually have a surgery unit. District hospitals have resources for comprehensive medical and surgical serves. There are also provincial hospitals are regional centers that provide specialized care including intensive care, life support, and specialist consultations. The third and final level of care is provided at general hospitals in Moi and Kenyatta. Both of those locations are in Nairobi. When it comes to people having health care poor families often go without medical care. Many Kenyans live in poverty. That being said, poorer people in rural areas who are ill and do not choose to seek care usually only have the option of treatment at primary facilities. 44% of Kenyans who are ill and do not choose to seek care were hindered by cost, and another 18% were hindered by the distance between them and the nearest facility. These places are unstaffed as well and have limited medications for patients. 56% of Kenyan population lives in poverty, of that 56%, 51% contribute of the total healthcare expenditure in 2002. In 2006 the life expectancy was 51 years old for women and 50 years for men. Also child mortality was 78 per 1,000 lives per birth. Also around a third of children under five are underweight.

Agriculture is the most important economic activity in Kenya. 80% of the jobs in Kenya are agricultural jobs or food production. In Kenya 8% of the land is used for crop growth and feed products. There is 20% or less land that is sustainable for cultivation, of that 12 % is classified as high potential land and the rest is medium potential. The other 8% of the 20% is medium potential land. The rest of the land in Kenya is semi-arid or even arid. Kenya is the leading producer of tea, black tea is the most common exchange earner, in Africa and in 1999 was 4th in the world. In 1999 Kenya produced 220,000 tons of tea. More than 260,000 producers of tea are small farmers. In 2001 Kenya made \$404.1 million of exporting tea, which is 18% of the money they made off exports. The third leading exchange earner is coffee. The coffee production boomed in the 1970's. There was 52,140 tons of coffee produced from 2001-2002. In 2001 coffee earned \$91.8 million. Horticulture is another big thing in Kenya. 30% of the horticulture products exported are fresh products. There are many fresh products including green beans, cabbages, onions, snow peas, avocados, passion fruit, and mangoes. The smallholders were the ones that grew the most corn, which Kenya produced 2,110,000 tons of corn in 1999. The also grew 5,200,000 tons of sugarcane, 135,000 tons of wheat, 40,000 tons of rice, and 5,000 tons of cotton. They also grow and export many different types of flowers. Some of the flowers are roses, carnations, statice, astromeria, and lilies. Kenya however is the world's largest producer and exporter of pyrethrum, which contains stuff that is used in pesticides. They also raise dairy goats and cows, as well as pigs and chickens.

Small producers usually cultivate no more than 2 hectares (about 5 acres) with extreme limitations of technology. There are about three million family farms which only cultivate 2 hectares of land, which is about 75% of the total production in Kenya. From gaining independence in 1963 to the oil crisis in 1973 agriculture has expanded in two major areas. The first area of improvement is the acceptance of private ownership and cash crops. The second area of improvement is the intensive nationwide efforts to expand and upgrade the production of African smallholders. After the oil crisis agriculture slowly went down as untapped land became less and less available. Before WWII ended agriculture in the "White Highlands" allocated to immigrant white settlers and plantation companies. Most of the agricultural productions were

directed to provide food for the domestic consumption and the rest were exported. The practices of agriculture that most Kenyans do are very unorganized and a mess. When it comes to planting seeds some farmers do not pay attention to the little things like the spacing of the seeds. They use broadcast planting, which is when the seeds are just thrown wherever, all over the soil. This is unorganized and when it comes to harvesting it is hard to harvest because there are no rows. They also do not have the proper weeding and fertilizing materials or machines.

There are many barriers a typical family in Kenya faces on a day to day basis. The first is a barrier to improving agricultural productivity. Agriculture plays an extremely important role in Kenya's economy, since agriculture accounts for about half of the country's exports. There might be some barriers that would make it hard for the government to start to help overcome the infrastructure problem. One barrier would be they do not have the fund to afford new infrastructure or better the infrastructure. Another one may be that they are not able to help solve the problem. Since agriculture is a huge part of their everyday lives, and is how they live, unpredictable rainfall patterns are a serious worry for the future. When they do not get the adequate rainfall they are not able to grow their crops as well, which means that they will lose money because they did not have a good enough crop to pay for their expenses that came along with that crop. There is a particular concern that recent droughts have been worsened by local deforestation. Kenya's forests have shrunk 60% in two decades, with wood cut down for fuel and land used for farming. They have also had poor planting methods and selection of seeds which is also another leading factor to low yields. There is a specific company in the U.S. that is trying to help people in Kenya improve their agricultural productivity. Monsanto is about helping people improve their lives by improving agriculture. One of their biggest ways to help them improve their agriculture lives by research and education. One of the other biggest things that Monsanto is doing is they pledge a total of \$13 million to improve the crops yields. Another thing that they have pledged to do is conserve resources by developing a seed that uses less than one-third of the resources.

Another barrier that a Kenyan family faces is employment at a living wage. Among Kenya, the extra cost of supporting a child in school can be a huge burden, especially when children need to help the family earn a living. When children have to stay home to help their families work just so they can live has made it hard for children to get the proper education. That is why few people complete a secondary education because after primary education they need to stay home just so that they can live. Due to lack of education there is a high rate of unemployment in Kenya, around 40% and that is particularly among the younger people, who make up a large portion of the population.

The final big barrier is the access to food markets and adequate nutrition. In Kenya it is hard to get adequate nutrition because people are poor and it is hard for people to pay for things. Also it is hard to access food markets. Kenyan's do not have the best infrastructure and it is hard for them to get places fast and safely. The traditional lifestyle in the countryside revolves around subsistence farming and trips to the local markets and shopping centers. It is not like Kenyan's can go to the store every day to get things that they need. The shopping centers and local markets are hard to get to and often far away. They also do not have the money to be going to the store just to get one thing here and there, which in the long run could be why they do not have the adequate food that they need.

Farm to market affects agricultural productivity in multiple different ways. One of the biggest things is the poor infrastructure. Poor infrastructure has led to higher transportation costs for agricultural products. Due to higher transportation cost, the products also go up because in order to make a profit they have to cover their expenses. Poor infrastructure can also lead to spoilage of products during transportation. If the roads are bad that can cause the products to bounce around and bruise. Also if infrastructure is bad they may not take trips to the market often, which means the products sit at the farm longer and get older and then it may take a while to get to the market. If the products are spoiling the farmers are losing money and

not making a profit. If they do not make a profit that means they are more than likely struggling to live and have the adequate supplies, machinery, and food that they need to live.

Farm to market also affects a typical family in Kenya for multiple different reasons. A typical family could also be considered a small scale farmer for many different reasons. One of the big ones is that they do grow their own food and animals. They may not be large but just enough for them or a little extra to provide for someone else. In this case they are losing money because they are not producing enough to pay for their expenses or their transportation cost. When transportation goes up, often times the cost of goods will go up. This makes it hard for people to buy the products when they can not even afford to supply their family with other needs as well as food.

According to the U.S. department of State Country Commercial Guide 2000, the status of most roads would be considered deplorable. There is a total of 63,800 kilometers (39643.482 miles) of highway and of that only about 8,868 Kilometers (5510.32 miles) are paved. With that when it is not paved it is hard to travel because it is so bumpy and rough and makes it uncomfortable. Also transporting goods on bumpy roads can also lead to bruising of the goods, which leads to spoilage, which ties it all back together and the farmers are losing money. In general the land transportation in Kenya is undeveloped and could use some help getting it to become more developed.

Improving farm to market could benefit Kenya in many different ways. One of the biggest ways is that the prices would go down and not be as high. When prices are not as high more people will be able to afford food and will have the adequate nutrition that is needed. Farmers will also be able to grow more because they will be able to grow more. Improving farm to market will also help the transportation go down which means farmers will not be paying as much, which then they can put that money towards improving their farms to suit their needs and the public's needs. When prices go up the markets will be making more money. Some of the money will go towards improving the markets and making them better and then the rest will go towards the government. When the government gets the money they can put it towards infrastructure and in turn they will improve the roads.

There are also many other issues that cause bad infrastructure, one is the pavement temperatures which goes along with the air temperatures. If it is hot the pavement temperature will go up asphalt roads will become soft and heat will lift three to four foot pieces of concrete making the concrete crack and become extremely bumpy. Heavy rainfall can destroy many roadways since some of them are not paved. With rainfall the roads become mud and make traveling hard and messy. Infrastructure in Kenya is affected by many different weather patterns.

Transportation is extremely important in people's everyday lives. In the U.S. we have great infrastructure, which could be taken for granted most times. When one stops to think that some people struggle to get to the market once a week because the infrastructure is not good, and in the U.S. people can go anytime due to our excellent infrastructure. In Kenya they lack paved roads so one thing they could do is use the money they get to help pay for concrete to pave the roads to make them better quality and easier to use not just for farmers but for average day people trying to get from place to place. If they were to slowly start paving roads they could get eventually have quite a bit paved and then less people would have inadequate nutrition and would be able to get what they need/want when they need/want it. When getting the adequate needs they will be able to focus more on educating the younger rather than keeping them home so that they can have adequate food. This would also help individuals earn money and be able to afford more to become a more advanced country. Overall better infrastructure could help out not just the communities but the country as a whole.

Work Cited

- Adams, Christopher R. "Impacts of Temperature Extremes." *Impacts of Temperature Extremes*. N.p., n.d. Web. 25 Mar. 2016. http://sciencepolicy.colorado.edu/socasp/weather1/adams.html.
- "Africa :: Kenya." *Central Intelligence Agency*. Central Intelligence Agency, 14 Mar. 2016. Web. 25 Mar. 2016. https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html.
- "Encyclopedia of the Nations." *Agriculture*. Advameg, 2015. Web. 16 Feb. 2015. http://www.nationsencyclopedia.com/Africa/Kenya-AGRICULTURE.html.
- "Food & Daily Life." *Our Africa.* SOS Children's Village, n.d. Web. 11 Feb. 2015. http://www.our-africa.org/kenya/food-daily-life>.
- "Healthcare in Kenya." *Healthcare in Kenya*. N.p., 2015. Web. 15 Feb. 2015. http://www.allianzworldwidecare.com/healthcare-in-kenya.
- "HIV and AIDS in Kenya | AVERT." *HIV and AIDS in Kenya | AVERT*. N.p., 1 May 2015. Web. 08 Mar. 2016. http://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/kenya.
- "How Do Weather Events Impact Roads?" *How Do Weather Events Impact Roads?* FHWA, 10 Dec. 2015. Web. 25 Mar. 2016. http://www.ops.fhwa.dot.gov/weather/q1_roadimpact.htm>.
- "Improving Agriculture." *How Monsanto Is Helping to Improve Agriculture*. N.p., n.d. Web. 01 Aug. 2016.
- <http://www.monsanto.com/improvingagriculture/pages/what-is-monsanto-doing-to-help.aspx>.
- "Kenya Education." *Kenya Education*. N.p., n.d. Web. 14 Feb. 2015. http://www.mapsofworld.com/kenya/education/>.
- "Kenyan Food Typical and Traditional Cuisine Kenyan Ugali Kenyan Ugali Kenyan Food Typical Dishes." Go Backpacking. N.p., 2016. Web. 8 Mar. 2016. http://gobackpacking.com/travel-guides/kenya/kenyan-food-typical-traditional-cuisine/>.
- "Kenya Infrastructure, Power, and Communications." Nations Encyclopedia. N.p., 2016. Web. 23 Mar. 2016. http://www.nationsencyclopedia.com/economies/Africa/Kenya-INFRASTRUCTURE-POWER-AND-COMMUNICATIONS.html>.
- "Kenya Population." *Kenya Population*. N.p., n.d. Web. 14 Feb. 2015. http://www.mapsofworld.com/kenya/geography/population.html>.
- Kibet, Caleb. "Major Challenges Facing Kenyan Agricultural Sector." Major Challenges Facing Kenyan Agricultural Sector. N.p., 21 June 2011. Web. 02 Mar. 2016. http://extensionconference2011.cta.int/node/111>.
- Manani, Henry Kemoli. "REUNION OF INSTITUTE OF EDUCATION GEOGRAPHERS." *Geography* 31.3 (1946): 120. 17 Nov. 2007. Web. 8 Mar. 2016. http://info.worldbank.org/etools/docs/library/241473/MananiAcceleratedLearningNo2.pdf>.
- Oketch, Angela. "Five Children per Woman: How Kenya Lost Family Planning Battle." *Five Children per Woman: How Kenya Lost Family Planning Battle*. Daily Nation, 6 May 2014.

Web. 15 Feb. 2015. <http://mobile.nation.co.ke/lifestyle/-How-Kenya-lost-family-planning-battle-/-/1950774/2305196/-/format/xhtml/-/j9ok60/-/index.html>.