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Ethiopia, Factor 13: Demographics

Ethiopia: Population Growth and Food Security

Ethiopia is a landlocked country found in East Africa. It shares borders with Eritrea, Djibouti, Somalia, South Sudan, Sudan and Kenya. It has an area of 1,104,300 square kilometers with diverse ecosystems. It is a country with a rich culture, vast ethnic diversity and a captivating history that includes remaining independent from colonial rule. However, Ethiopia is commonly remembered not for its achievements but rather for the devastating famine in 1983-85 that killed almost one million people. In 2015-16 a record setting drought has brought the “f” word – famine – back to Ethiopia. Food security is defined by the United Nations as “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. For many of the poorest Ethiopians food security is currently only a dream. Today, per capita Ethiopia is still one of the ten poorest nations in the world (World Bank 2015). Seventy five percent of the population relies on subsistence farming and over thirty percent of its population lives below the \$1.90 USD/day poverty line and are vulnerable to food insecurity (World Bank 2015). In 2016, 10.2 million people needed to access emergency food assistance in Ethiopia while another 7.9 million citizens were labelled as chronically food insecure and were reliant on a variety of programs to meet their food needs (USAID 2015). In 2015 the UN passed a set of aspirations known as the Sustainable Development Goals with the second goal of the document being to achieve food security. In order for this mandate to be realized in Ethiopia, the population growth within the rural areas of the country needs to be addressed. Currently the population of Ethiopia is 101,815,305 people making it the thirteenth largest country in the world by population. It is predicted that the population of Ethiopia will double over the next twenty to thirty years. The present population is already straining existing resources, for example: degrading of soils, drawing down of water reserves, and depleting government and foreign aid budgets. Therefore, an increase in Ethiopia’s population of this size has the potential to create a humanitarian disaster on a scale not witnessed in my life time.

In Ethiopia the majority of the population lives in rural areas where the average family size is five people per household. Men are traditionally the head of the house and are responsible for providing for their family and making decisions that would affect the members of the house. Usually in the rural areas, women are in charge of domestic work, caring for the children and helping the head of the household. Education rates in rural Ethiopia are very low. In the poorer households that have large family sizes, fewer than five percent of the household heads have completed primary school (Ayenew). Also, males receive more education than females. While the average literacy rate in 2015 in Ethiopia was 29%, the average literacy rate for females in Ethiopia was only 20% (OXFAM). Additionally, in rural areas the average literacy rate drops to 22% (OXFAM). This rate should begin to improve as universal primary education was introduced in 2015. The traditional diet consists of spicy stews made with chicken, lamb or beef, as well as vegetarian stews made from beans, lentils and chickpeas. Injera, a pancake like dough, is served with the stew. In rural areas, meals are determined by what a family has been able to produce themselves through subsistence farming, what the family can afford to eat or even what the family has been given to eat. Rural families often lack access to basic healthcare services with only 42% being within walking distance to medical facilities (WHO 2012). Many people suffer from preventable diseases such as HIV, malaria, and tuberculosis. Even when residents can access healthcare, the quality of care is not the same between regions as not all facilities have trained medical staff or the necessary medicines and supplies. In the rural areas, many people still turn to traditional healing methods to deal with illnesses and disease. However, progress is slowly being made in the area of healthcare. In 2013 Ethiopia meet the Millennium Development Goal by reducing infant mortality by over 67% (Jobson).

Farming is the main occupation in Ethiopia and employs almost 80% of the population, mostly in subsistence and rain-fed farming and livestock production (Farm Africa 2016). The typical farm size has slowly been declining and the traditional small farm now sits on less than one hectare of land. This is due to a variety of factors such as an increasing population that must share or divide the land between many family members. Additionally, the availability of accessible arable land that is above the elevation of disease carrying insects is decreasing. The types of crops grown vary from region to region, depending on climate. However, large varieties of cereal crops such as teff, wheat and maize, pulses such as faba beans and chickpeas, oilseeds such as linseed, stimulants such as coffee, fruits such as papaya and vegetables such as potatoes, as well as sugar cane are grown. Many subsistence farmers also have livestock such as cattle, sheep, chickens or camels. This provides them with products to sell, food for the family, fertilizer or even dung for heating fuel. There have been lots of advancements in the agricultural practises used in Ethiopia since the 1980's especially in the area of conservation agriculture. However, continual cropping continues to be practised by farmers in an attempt to generate enough food and income to support their families regardless of the potential damage it may do to the soil. Owners of smaller farms are usually cash poor and cannot afford to fallow land, purchase fertilizer or the improved quality seeds. This contributes to the depletion of the soil. Ethiopia's growing population creates a situation where it is difficult because of the lack of money and time to allow for the nutrients in the soil to recover after use. Sustainable agricultural practices combined with traditional methods offer solutions to the harmful effects of climate change being experienced in Ethiopia. Access to improved seeds, building structures to retain water and to prevent soil erosion, committing to practices such as reduced tillage and other methods that help retain soil moisture as well as focusing on diversifying agriculture have all proved effective in boosting soil productivity across Ethiopia. Traditional solutions are also proving effective in Africa to increase productivity. An example is in Burkina Faso where farmers have been able to recover land previously lost to agriculture by following traditional farming methods. Farmers dig small pits on areas of land not being used and fill them with organic matter. This low tech approach adds nutrients back to the soil and has helped to reclaim upwards of 300,000 hectares of land previously degraded (African Renewal 2014). There are possibilities available for small farmers to help them adapt to the changing climate.

The average rural family in Ethiopia faces many major barriers in agricultural productivity. One main problem to agricultural productivity is soil degradation. Soil quality is being decimated because of intensive cultivation and overgrazing caused by farmers trying to produce enough food to support their households. The average farm size can only generate 50% of the minimum income needed for a family to live above the poverty level (Future Ag). Farmers, in effort to get the most out of the land, end up degrading the soil; a very important resource is being depleted. Soil is also being irreversibly damaged by deforestation. A growing population uses more fuel and needs more land cleared to use for farming. This also creates soil erosion. As a result it has been estimated that nearly two billion cubic meters of soil has been eroded in Ethiopia (FAO). Another significant barrier to agricultural productivity is climate change which is altering the country's rainy season. Ethiopia is currently facing a drought, caused by the failure of two successive rainy seasons. Sefay Funge, a farmer in in the Adamitullu Jiddo Kombolcha district of Ethiopia said, "The rain doesn't come on time anymore. After we plant, the rain stops just as our crops start to grow. And it begins to rain after the crops have already been ruined (FAO). This altering climate poses a huge threat to agricultural productivity and is causing many Ethiopians to become food insecure and reliant on food aid.

Ethiopia also faces several barriers to employment at a living wage. In 2015 unemployment rates were at a record low of 16.8%, but it is still difficult for many Ethiopians to find a job (Trade Economics). Policies and programs like the Growth and Transformation Plan have helped Ethiopia's economy to grow, but the country's population growth means that hundreds of thousands of new jobs must be created each year just to remain status quo. There is also no minimum wage and most workers are unable to

participate in collective bargaining to improve wages. In 2013 the average yearly income per capita was \$470 USD with more than 30% of the population living below the poverty line (World Bank 2013).

Finally Ethiopia faces many obstacles to accessing food markets and adequate nutrition. Seventy five percent of Ethiopian farms are at least a one day walk from any major road (Encyclopedia). Distance from town makes it difficult for farmers to access food markets, to sell their own products and buy essentials to survive. Also, access to food on rural farms is seasonal and depends on what the farms can produce on their own as well as what is provided by the government and food aid imports to supplement the diets of those in need. Adequate nutrition is problematic because of a lack of food and education on proper nutrition. Forty four percent of the children in Ethiopia suffer from stunting, a disease caused by malnutrition (World Food Programme). Eight one percent of childhood undernutrition goes untreated and sixty seven percent of adults in Ethiopia suffered from stunting as a child (World Food Programme). A harsh reality for Ethiopia is that thirty two percent of the population suffers from malnutrition and that approximately 20 million people are facing chronic food shortages (All Africa). Sadly, most rural families do not have access to proper nutrition, and may never unless some drastic measures are taken.

Demographics have the potential to play a large role in Ethiopia's ability to become food secure. The country is already the thirteenth largest in the world based on population and as stated the number is expected to double within the next twenty to thirty years (World Bank 2015). The large population growth is placing a tremendous amount of stress on food production, government revenues and programs, as well as foreign aid programs. The growing population is making it difficult for Ethiopia to escape poverty. Therefore one of the keys to Ethiopia's success is to significantly reduce population growth within the country. This would allow for the sharing of limited resources between fewer people. The current trends suggest that population growth is greatest in the rural areas and lowest in urban areas. Trends also highlight that large families are more common in poorer households. This means that the expanding population will most affect poorer, small farmers. The situation created by the increasing population is very serious. If the population doubles it will overwhelm current systems and create a humanitarian catastrophe that is very difficult to fully comprehend. Food insecurity will cause malnutrition and starvation. Ethiopians living in crowded conditions and weakened by the lack of food will become more susceptible to diseases. Lack of resources could lead to conflict. The death toll under such a scenario is unthinkable.

Improving demographics by decreasing the population growth rate would improve Ethiopia's food security. Curtailing population growth would lead to fewer people to share resources amongst. Food resources, already strained by the large population, would not be stretched even thinner. A reduction in the population might even give the land and other resources a chance to recover. This would result in more efficient and sustainable farming practices. Small farmers would find the lean months easier to get through. Malnutrition rates would drop. There would be a greater hope that Ethiopia could break its reliance on foreign aid.

Food security in Ethiopia is a complicated issue. Besides rampant population growth many factors come into play that affects the wellbeing of the rural farmer. One of the most serious is climate change which is causing altered weather patterns, droughts, floods, spread of diseases, crop failures and widespread hunger. Climate change could affect population growth by increasing the number of deaths per year in the country. It has the capability of killing so many people that the population would actually shrink. In 2009, the United Nations stated that 300,000 deaths per year were linked directly to the severe heatwaves, floods, storms and forest fires caused by climate change (Vidal). Ethiopia, as a poor nation, is very vulnerable to the weather fluctuations as seen by the devastation caused by the recent droughts. Another scary factor is the country's reliance on foreign aid. With so many developed countries struggling financially, there is no guarantee that contributions to foreign aid programs in Ethiopia will continue. A country facing an economic crisis at home or even a change in government might cut all foreign aid

funding leaving Ethiopia without the programs that are currently helping to soften the blow of poverty and hunger on the rural farmer. Without this aid many Ethiopians could starve to death.

There are many ways to reduce population growth in Ethiopia but it is important that all actions are ethical and respect the citizens' human rights. History shows many examples of forced sterilization and mandated family sizes. Each example violated human rights and caused more harm than good in the short term as well as long term. Ethiopia's population growth can be ethically reduced simply through an aggressive marketing campaign, mandated education and continued effort by government and organizations to reduce poverty.

The solution to reducing Ethiopia's population growth must start with a vast and extensive marketing campaign that promotes the idea that smaller families make for better lives for children and parents. It is human nature for a parent to want what is best for their child, so show rural farmers that it is better for children to have fewer siblings to share resources with. Surround them with messages showing how healthy and happy children from smaller families are. Through mass media put forward the idea that children who come from smaller families have unlimited potential to be successful and are better able to help their parents and look after them as they age. Let the parents and the children see or hear what life is like for others outside of their community. Describe to them a different type of normal. Give them something to dream about and to work towards. Demonstrate through the marketing campaign all the possibilities the world holds for their children - that there is a different world out there that doesn't include poverty, sickness or hunger. Show them that this is more attainable in households with fewer children. Help them to change the norm. Such a marketing campaign would be similar to the ones run by large companies in developed countries used to convince a generation of youth to change phone plans or buy a specific brand name of clothing. It could incorporate similar strategies and be delivered a variety of ways to rural farmers in Ethiopia. Organizations already involved and connected to the people in Ethiopia could be used to help spread the message. One of the most effective forms of mass media in Ethiopia is the radio. Between 2002 and 2004 a soap opera called Yeken Kignet was played over the radio in Ethiopia. It was listened to regularly by 45% of women and 47% of men (Ryerson) This soap opera provided an entertaining form of education for listeners as it dealt with issues such as reproductive health, family planning, educating daughters, women's status, HIV/ AIDS as well as other prevalent topics. Over a two year period, this soap opera was able to change the behaviour of the listeners: fertility rates fell from 5.4 to 4.3 in women, the demand for contraceptives rose 157%, HIV testing increased, more females attended school, and the belief that women were fit to hold public office increased (Ryerson). The media campaign to promote the values of small families should build on the success of this soap opera and other media efforts. More programming promoting small families should be designed based on the lessons already learned and aired. Radios are relatively inexpensive, so part of the campaign should also focus on ensuring that each household has access to the programming. It would be beneficial to handout radios to families who do not have one or even place radios in community meeting locations so that all Ethiopians are exposed to the on air campaign. Often the power of media is underestimated, but in Ethiopia's case media has already proven to be a game changer. Messages could also be displayed on all aid provided to reinforce the ideas. The campaign could be a part of school curriculums. Individuals connected to local communities might be able to act as speakers for the movement. Small incentives could also be provided in order to encourage people to attend educational workshops and promotional talks within the small rural communities.

Education must also play a major role in helping slow Ethiopia's population growth down. Statistics show that the better educated a person is, the more likely the person will have a smaller family. The government has instituted universal primary education. Families must be provided with incentives for their children, especially daughters, to attend in rural areas to compensate for the lost labour. Curriculum needs to reinforce the ideas of the marketing campaign. Secondary school also needs to be made universal. Family planning needs to be a part of the secondary school curriculum. Incentives need to be

provided to encourage females to attend secondary school. By educating the youth a whole new mindset will develop. Girls will marry later and many will choose to have smaller families. The youth will know what life has to offer, such as food security, and be able to work towards it. For the adults, education on family planning is crucial. Currently birth control in some areas is not a common practice. In the rural communities it is important to continue to have locally trained and respected individuals educating the adults on the benefit of family planning, birth control and contraceptive methods. To encourage attendance, incentives could be provided to those in attend.

The final part of the equation to reduce population growth is to have the Ethiopian government and other organizations continue to work on reducing poverty in the country. Their work not only makes the lives of the rural family better but it also helps to reduce population growth. The Growth and Transformation Plan and Universal Primary Education are both important Ethiopian government programs that indirectly work to reduce population growth. The work of the UN agencies as well as NGO's like Womenkind, Oxfam and Wateraid to name just a few, need to continue their work in progress. Reducing poverty will reduce the birth rate.

Many factors contribute to the food security problems facing Ethiopia. The list is long and daunting. Most of the problems are beyond the scope of the small subsistence farmer to be able to fix on his own. However, demographics and the projected population growth is one part of the food security issue that the rural farmer has control over. Their choices will either cripple Ethiopia or set it on a path of becoming food secure. Ethiopia has met two Millennium Development Goals in the areas of child mortality and water. If the country can do this, it can with the help of governments, organizations, and Ethiopians slow down the population growth and avert disaster. It will take a lot of time, effort and money but there is definitely hope for Ethiopia.

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