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Africa, affluent in natural and human resources, is the second largest heavily populated continent following Asia. Africa faces many agricultural challenges to feed the world today. Africans must defeat a one of a kind problem to reinforce food security. With a population that's predictable to double by the year 2050, the weight to produce sufficient food will only expand. Zimbabwe being a part of this wonderful continent already faces many of these challenges.

Most families experiencing a high poverty rate are found in the rural areas of Zimbabwe. Historically men had to leave the rural areas, which left the women at home to take care of the house and children. This occurred at the turn of the twentieth century due to one percent of the population owned over half the land in the country. This caused a gender imbalance in the household; although the imbalance is less than it was, still today the female is more commonly head of the household instead of the males. In certain areas of Zimbabwe up to fifty-nine percent of households are ran by females. These families typically are the most economically disadvantaged. The most important factor for the standard of living for small families is the farm. The populations most affected by poverty are found in the areas where the land is the driest and least productive.

The typical rural family or household has four to five people. This family is composed of the husband, wife, children, and possibly members of the extended family. Social skills are learned at an early age from family members, as members of the family typically spend most of their time together. The most important quality children can learn is respect for their elders. At age seven, the typical child will begin primary school. If they pass an examination, they can continue on into secondary school for two to six more years. However, they may not attend secondary school depending on the family's economic demands, values, and lifestyle as some families depend upon them for additional income. Zimbabweans tie bodily illnesses with the spiritual world. Herbal remedies are typically used for mental illnesses. Although there are hospitals, clinics, and a healthcare system in the urban areas, the rural areas tend to lead towards healing with the use of n'anga, which is a spiritual healing method.

Most farmers in Zimbabwe are of African descent they typically raise only enough food to feed their families. The main grain consumed in Zimbabwe is maize. Their main dish, called sadza, is made from corn that has been pounded into corn flour. In the Zimbabwe Valley, millet and sorghum are also considered staples to the diet. Flour from the grains is cooked into porridge that is sometimes eaten with green vegetables or meat. They collect their vegetables in the wild or grow in their gardens. They typically prepare meals with onion and tomatoes. Bread is a staple in the urban areas, but it is not as prevalent in the rural diet. Rice is grown but is not used in the everyday diet. Milk, boiled or roasted groundnut, boiled or roasted maize, fruits, termites, and caterpillars are grown and eaten in season. Agriculture is the foundation of the Zimbabwean economy, accounting for livelihood for seventy percent of the population. Commercial farming areas are large and have low population, while families dominate the communal areas. In 2002, Zimbabwean President Mugabe ordered most of the white farmers to leave their farms and the government took control of them. These farms became communal, and the government gave out leases to black farm families. Commercial farming makes up forty percent of the land of Zimbabwe. The average communal farm is 5 to 50 acres. The government, not by the families themselves, owns these farms. Most families are able to grow only enough food for themselves. They do this with human labor, work animals, and small hand tools. They do not have access to agricultural technology and large equipment.

In order to obtain a white-collared job, students must have a higher education, which is becoming increasingly important for jobs requiring technical skills. Families, especially in the rural areas, encourage their children to go on to receive further education, if money is available to do so. However, most children are needed to work at home on the farm. Without education, citizens are unable to obtain better jobs with higher salaries to improve their way of life in the future. Families only have access to the food that they are growing. Food in Zimbabwe is in short supply. Families do not have financial means for buying extra food they need. For example, one loaf of bread can cost as much as 35 million Zimbabwean dollars. Rural families live on communal farms that are owned by the government. They are not able to own their own farms. Their barriers to agricultural productivity include lacking access to technologies, from equipment to seeds. In 2010, studies showed that in some areas maize germination rate was as low as fifty percent. Without access to better technologies, families will be unable to increase their productivity.

Currently some Zimbabweans are at a disadvantage because they do not have a full access to a higher education. If they cannot pursue a higher education they will not be able to obtain a high paying job to purchase necessities for their family. If they are unable to purchase foods, they will either have to produce it themselves or go without. Even when producing their own food they are not growing a variety of foods with the all of the proper nutrients.

Typically families can only produce enough food for them and have no excess food to sell for additional income. Since most women are the head of the household, most are in charge of growing the food supply. The most critical aspect in the standard of living for rural families is weather or not they have an income that is generated from a source other than farming.

The current status of agriculture production is satisfactory but has been declining in recent years and has major room for improvement. Education about agricultural practices is also only satisfactory. The adult women that are farmers today did not have access to education about agricultural topics in their younger years, but they could benefit from an adult literacy program of today. Post secondary education is assumed to be highly connected to agriculture growth. The relationship between education and growth is the ability of post secondary agricultural education to train workers with the skills they will need to enter the agricultural career field. At most agricultural colleges one third of the student body is females, and this refers back to the fact that women are the head of the household and take care of the family farm.

Zimbabwe is known as the country with the most excellent extension services in Africa. This extension program is still taking place. The most limiting factor in the usefulness of extension is not in bringing poor farming families into the existing agricultural economy, but the mentality of the rural families. Their way of living has always been one of a survival mentality – producing enough food for themselves and their families to survive. In order for agricultural production to increase, this mentality must change to a mentality of farming as a business – to produce goods to sell to others in the society. In order to instruct farmers, extension groups the farmers according to what commodity they are producing. They then hold workshops for those farmer groups to instruct them about production practices. Even though the extension program in Zimbabwe is in place and known as one of the best programs in Zimbabwe, it is not without its faults. One of the main problems extension experiences today is not having an experienced staff to train farmers.

If more people are able receive a higher quality education they will be able to get better jobs, which will lead to a higher income for the poor rural families. With a higher level of education they will also be able to grow more quality and more variety of food to meet their family's nutrition needs. This will directly benefit women as they are typically head of the household and in charge of meeting their family's nutritional needs.

The factor researched was: Investing in education, training, and extension for improved implementation of agricultural research and technology. Other major issues that will affect this factor include: urbanization, lack of proper infrastructure to markets, and population growth. Urbanization will not be able to increase without farmers being able to provide food for more than just their own families. In Zimbabwe, there is a lack of proper infrastructure. Poor roads are making it difficult for families to even try to get their goods to market. Another major problem that families will face in the decades ahead is population growth. By 2050, the population of Africa is expected to double. This will put a great stress on the farmers and the land to meet the food demands not only in Zimbabwe, but the surrounding countries as well.

Millennium Development Goals (MDG's) that are related to the current situation in Zimbabwe are: 1 - Eradicate extreme poverty and hunger; 3 - Promote gender equality and empower women; 5 - Improve maternal health; and 7 - Ensure environmental sustainability. All four of these goals are directly related to agriculture.

Goal 1 – Eradiate extreme poverty and hunger – is related to agriculture in that economic growth in the agricultural sector will allow for more choices and a better quality food supply to meet nutritional needs. Economic growth will also increase employment and wages to help enable the poor to be able to provide for themselves.

As previously mentioned, women are often times the head of the household. Goal 3 is to promote gender equality and empower women. If women are given tools to help reduce household tasks, they can gain time and resources to help improve their farming practices. Goal 5 also deals with women. As farmers are able to produce a wider variety of crops, it will increase nutrition in women's diets and improve their health. Nutrition in women is very important, especially if they are the head of the household.

The fourth goal related to Zimbabwe is Goal 7 – Ensure environmental sustainability. Currently, farmers are using communal properties as best they can to provide food for themselves and their families. If they are not using the correct practices, they could be harming their land and the environment around it. As agricultural technologies in the country advance, farmers will better be able to conserve their land and the surrounding environments.

To meet these goals, several strategies have been recommended. The first two strategies are directly related to agriculture. First of all, to have the strongest impact on strengthening the agricultural economy, the concentration should lie on improving staple crops. Staple crops make up sixty-five percent of the economy today, with most of these crops being grown by small farmers. Therefore, increasing the ability to grow staple crops would have the most direct benefit to poor, rural families. Factors that will help improve the production of staple crops include using higher quality seeds and improving the effectiveness of fertilizers. Another strategy is to improve the country's infrastructure. The country is lacking proper roads for farmers to even try to market any excess products. Additional strategies to meeting the MDG are proper education, health care, and social services.

Communities, corporations, governments, and organizations can implement the following practices to help aid rural families. Families are already producing some if not all of their own food; these families just need access to better quality seeds, more variety, and increased farming technology. If outside sources can provide, or assist rural families in gaining access, to these items, families will be able to provide for themselves better. For long-term productivity in the country, there will need to be much research done on plants and livestock. The farm families could easily be involved in carrying out and conducting this research. Individuals who grew up in rural families but have an education could play a vital role in conducting and facilitating this research as well. As families are able to produce more food and have excess to sell, they will however need access to getting this food to market. This will require a

better infrastructure, as well as education about how to enter markets. Families are unable to provide for themselves healthcare as well, which they will need access in gaining. All of these practices will require money from the private sector. This money would not have to be given but could be loaned- especially as families will be able to produce more food and have excess to be selling. Funding is also crucial for research and education, as well as infrastructure and healthcare. Finally, as more families are able to provide for themselves, it will mean that they will be able to become financially independent. They will eventually be able to pay for their own education, healthcare, and some will be able to move to more urban areas. As the agricultural economy expands, so will the country's economy, and eventually the country will be able to pay for it's own infrastructure improvements, research, and implement more health care facilities.

Bibliography

- "Average Family Size Reduced in Zimbabwe." Xinhua News Agency. [China] 30 Aug. 1997.
- Food Security in Zimbabwe. Rugby, UK: Practical Action, March 2010.
- Metzler, John D. "Zimbabwe." World Book, Inc. 2005 ed.
- Muir, Ann. "Zimbabwe." Countries and their Cultures. 2011
- Narman, Anders. Education, Training, and Agricultural Development in Zimbabwe. Paris, Oct. 1991.
- Schlein, Lisa. Food Security in Zimbabwe Improves, Many Still in Need. Greenville, North Carolina: Voice of America, 10 Aug. 2010.
- The World Bank. <u>Agriculture and Achieving the Millennium Development Goals</u>. Washington DC, 2000.