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## Lesotho: Food Security in an Era of Increased Demand

Food Security and increased demand of agriculture fit hand in hand. I thought I knew a little about food security and more about increasing demands for agricultural products, I thought I knew because in Grundy County, Iowa there is an increased demand for different agriculture products. What I knew about food security had come from the various things I had learned through 4-H and FFA. I thought that only Americans had to worry about food security but as I worked and researched I learned that the whole world worries about food security. Food is a necessity all around the world so no one wants to take risks when it involves there own livelihood and the livelihood of there families. The idea of food security seems very simply; protect our food from hazardous materials. In reality I learned it is much more complicated than just protecting our food it is worrying about how the increased demand of different agricultural products will affect the world now and in ten years. When I started working on this paper I thought that the increased demand for different agricultural products were the same all around the world. When I started researching I realized that its not. Some places in the world need to increase food products simply to help stop starvation and malnutrition. I learned more about this then I ever thought I would. I have learned about different countries and how fortunate I am to live in America but I never realized how fortunate I really was. I had the opportunity to select a country to write about for the World Food Prize Youth Institution Paper. I choose to write about the small country of Lesotho and about how building agricultural extension programs offering education and advisory services to family farmers for implementing technologies and practices from research and development efforts.

Geographically Lesotho is located in Southern Africa. All nine hundred and nine kilometers of Lesotho's boarder is bordered by South Africa thus making Lesotho encaved in South Africa. The country only is thirty thousand three hundred fifty-five square kilometers. The land of Lesotho is not primarily used for permanent crop growth as thirteen hundredths of all land is permanent crop land. Some of the reason for lack of land being used for crop growth is that Lesotho has periodical droughts making it hard to raise crops. Nearly eleven percent is arable land. The other eighty-nine percent is listed as being used for other things such as the area for cities and homes.

There are nearly one point eight million people in Lesotho. This number is constantly changing due to the AIDS virus. The average age of both male and females is twenty one years old. The average age for males is slightly lower at twenty years of age. Females are on average twenty-two years old. There are twenty-four births for every one thousand people in Lesotho. The average family size is five people or members. The death rate is slightly lower than the birth rate at a rate of twenty-two people for every one thousand people. The life expectancy is forty years of age. More people are leaving Lesotho than are migrating to because the migration rate is negative one percent. The nationality of the people is Basotho. There are three main cultural groups in Lesotho: Basotho, Asian, and European. Ninety percent of Lesotho's people are Christian and the majority of the Christians being Roman Catholic. Sesotho and English are the official languages of the country.

Nearly seventy percent of all the people in Lesotho live in rural areas. Nearly have of those people are poor. More than twenty-five percent of them are extremely poor. Most of the farmers don't have a way to make enough capital to buy machinery. Most of the land is

overgrazed and has soil erosion and deterioration. The small farmers lack the technology and support to make farming efficient. Because the degradation of the soil yields are extremely low. Most families have sheep, goats and cattle that graze during the day and are kraaled at night. The kraaled animals provide the energy to heat and cook food for the families.

One of the factors that inhabits families to produce enough food is the virus AIDS. People who become sick with AIDS are often not strong enough to do work and need to be looked after by someone. This makes it harder for the families to get the work done because you are missing two of your workers. Another factor is the periodical droughts. With out ran it is hard for the crops to grow making it hard for the farmers to harvest when it is harvest time.

Drought has caused a lot of problems for the small farmers in Lesotho. The drought makes it so there crops don't get adequate rain fall. The small farmers are not able to get their crops any water due to lack of resources that would help them get the water to the crops. Drought is an effective way to kill crops that are much needed to the country. If the farmer does not have a way to stop or help prevent crops dying because of lack of water there is not much a farmer can do to protect themselves.

The situation is extremely severe. I can say this because over half of all the people in Lesotho are poor and more of them are extremely poor. The lacks of nutrients in the soil that are being replaced make it harder each year for the crops to be grown. Families that have women as the head member are normally the ones below the poverty line. Women in the urban areas are held at a high status with there opinions being important.

Building agricultural extension programs offering education and advisory services to family farmers for implementing technologies and practices from research and development efforts would help Lesotho out greatly. The extension would provide information that would help farmers choose better crops to produce on their land and would help the farmer make a better choice on when to plant and harvest the crop. The technology the extension would be able to provide for farmers would be irreversible if you could start by teaching them different things that would make farming easier.

Increasing the yield of a small farmer would prove building extensions very useful and helpful. This small change would improve the lives of rural and urban families in Lesotho. With an increase in yield it means there will be an increase of food. The increase in food would not just strictly be for human consumption. If research would show that feeding some of the extra grain would improve animal health and help the animals get to market weight faster that would be another option for the extra grain. Feeding animals the grain would also improve the livelihood of people because there is more meat on the market for consumption.

The improved yields would also create a drive to use more of the extensions information. If just changing a few things can improve yield the farmers will want to stay educated on what the best methods are to keep yields up. An extension would be a vital part of agriculture in Lesotho. The skeptical people would be more prone to get help from the extension if they see that other farmers improved their crops. Higher yields would improve the quality of life for everyone including the extension.

My recommendations to increase yield are that you work on improving soil conditions. If the soil conditions continue to poor there is no hope for improved yields. You could improve the genetics of the crops but that would not help until the soil is in good condition to support crops. Increasing yields would help people in all areas of Lesotho. Improving the soil conditions would help because then there is a possibility of an increased yield. An increased yield would mean more food for more people.

Another recommendation that I would recommend is crops that are able to go through drought or to find a way to get small farmers to have the right equipment to make it easier to get water to the crops. Providing the farmers with a crop that withstands drought is a better option of the two. Improved seeds would make an incentive to go to the extensions to get a better crop or to find out how to get a better crop.

I think it would be beneficial if the government of Lesotho worked together with different organizations to help the country. If the government would promote the extension it would help get information out to the people faster. The extension could help the government with different aspects of what the government does for instance the extension could keep a record of the different farming families and how often the go to the extension. The government could use the extension to help promote better health after the extension is established.

The government could use the extension just as much as the extension would use the government. The extension could provide different health information to the people that they help. If the government wanted they could use the extension to provide health care instead of establishing a separate place for medical help. The extension could also work as a place to vote for the area surrounding the extension.

Having other organizations involved in Lesotho such as World Food Bank or United Nations would also be a helpful. The organizations could help the farmers as they (the farmers) work to producing more food. Different organizations could help the extension. The organizations could be apart of the extension working with the people. Involving different organizations in the extension would bring diversity to the extension. The extension then would be able to provide help for a greater range of people. The organizations would provide a diverse background for the extensions starting points. The diversity would help the extension relate to different people. The extension would be able to get help from more places if the extension would need it to get the ball rolling to say.

Lesotho as a long ways to go before they can have a farming system like the United States but I think it is very big possibility. Lesotho has many different factors that make it hard to become an extremely productive country. Having frequent droughts and poor soil conditions makes it hard to get a consistency in farming. There are many different solutions for the problems in Lesotho. I think that the best way to solve these problems is to build an extension office. An extension office would be able to provide farmers with information about the best way to produce a product or even different seeds that can withstand drought. After the extension is established the government could use it (the extension) as a resource to distribute different health products. With some small improvements Lesotho can improve there rural areas and improve the health of people all over the country. I truly that the people of Lesotho can make change to there country they just need a little help. There are many different ways to do that. Some of the ways to improve agriculture is to improve the technologies that farmers have access to, improving soil conditions, and by improving the crop seed quality. Some government assistance would be a great asset to the extensions. Overall thought more information to the farmers is what is needed if an extension can't be built. People through out Lesotho are in need of help. I believe that the people do not need to have a completely different style of life. I think that they only need a large amount of help to get a change started and then only a little bit of assistance once different programs are instated. The programs should be what the farmers want to do to improve their agriculture. I think that changes in Lesotho would help change the world because it would help other countries to

realize that change is not a hard thing but something that can be relatively simple. Lesotho has the possibilities of going up and beyond expectations of anyone who things that they can't improve their world.

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