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Giving Kenya the Infrastructure for Growth

INTRODUCTION:

In Kenya, life can often be hard; food is scarce, water is far way, many people are sick and dying, others are orphaned and have no place to go.

In rural areas, families live in homesteads with more than one house. There are usually four to six children per family. Sometimes a man will have two or more wives. Parents, young children, and girls live in the main house, while the older boy and grandparents have their own homes. Women are always the busiest in the homestead; they cook, clean, collect firewood and water, care for children, farm, and build their own homes. A typical family farm consists of only 10-15 acres of cropland, and the land is not arable or fertile in most cases. The family farm is more than likely used for growing subsistence maize during Kenya's two rainy seasons.

The homes are usually built with earth-brick walls, thatched roofs, and a cement floor. Additional huts/ homes are used as kitchens and storerooms. There is an outside bathroom, which is shared by everyone. Oil is used for lighting lamps, and cooking is done on open hearths. Many villagers listen to a radio to catch up on news or soccer scores; televisions are expensive and electricity can be difficult to obtain. The average yearly income for a family in Kenya is equivalent to 250 US\$; Kenya is the seventeenth poorest nation in the world.

Many people move to the cities to find work. Cities are crowded, so people often live in apartments or poorly built shelters. The capital city, Nairobi, is home to the world's largest slum; 800,000 people living in less than one square mile. Because there is limited electricity in the city, water is often hard to obtain. Poor residents often have to buy a tap, or there may be shared taps connected to a bore hole or well from which a water pipe runs through the community.

Maize is the staple food of Kenya, averaging over 80 percent of total cereals (rice, millet, wheat, and sorghum). However, maize stocks are estimated to be depleted at all levels throughout the country. With a national maize utilization requirement (including food, feed, seed, losses) estimated at 3.21 million tons, Kenya will need to import around 1.4 million tons before the next main harvest (September-October) This lack of maize and other crops has left 3,500,000 without food, and if drastic steps aren't taken soon, they all will die.

RESEARCH:

The situation in Kenya is a complicated one. I once read the quote, **“Where there is poverty, there is hunger, as well as a raft of other problems. To address one without the others misses the complexity of the issue.”** As I conducted my research for this paper, I found that quote held entirely true in Kenya. There is a multitude of things that prevent Kenyans from being able to have more productive, healthier lives. Some of the major barriers to improving food and nutrition security include: Rural Infrastructure; Access to Water; HIV/AIDS; and Crop/ Land/ and Water Management.

➤ **Rural Infrastructure**

People in rural communities find their distance from the market a real concern. Rural poor people, like other people, need access to competitive markets for their produce, inputs, technology, consumer goods, credit, and labor. Small farmers in particular have trouble earning a

living when they cannot get their products to market efficiently. And when farmers do not prosper, neither does the rest of the local economy.

People with poor access to markets are forced into subsistence production. The only available food is what can be grown on their family farms, or in the local community, so isolated households naturally devote more effort to growing staple foods. But this can result in poorly balanced diets and make residents more vulnerable to even small disruptions in food production. The emergency food aid needed at these times cannot easily reach them because the sheer physical difficulty of getting it to them can present a huge barrier.

The costs of transporting agricultural commodities to major market centers are, of course, much higher for more remote producers. The products that poor people produce and sell are often heavy but not very valuable, which makes transporting them to market difficult as well as expensive. Because of these high costs, it is often cheaper for large buyers (such as maize mills) to buy from distant commercial growers rather than from small local farmers.

The poor condition of most rural roads in Kenya- badly maintained and sometimes absent altogether- adds to the costs as well. At the same time, it is also difficult and expensive to transport agricultural inputs, like fertilizer and seed, from market centers to remote areas. Transportation costs may make them too expensive for most poor farmers even when they do arrive.

Besides the difficulty of getting goods to and from the market, people in remote areas also have a hard time getting timely and accurate information. Without telephones or access to the Internet, farmers have no independent way of learning the market prices of their produce. They must rely on traders to name the prices of both farm goods and any consumer goods the traders are selling. It is difficult for farmers to distinguish between valid charges based on the extra costs of transport and those simply added by unscrupulous traders. In the most remote areas, farmers cannot even be sure that more than one trader will arrive, so they must take the first deal offered, no matter how bad it might be.

Rural infrastructure is related to every factor included in the this paper and more, It is infrastructure that keeps people from the safe water, education, food distribution, and media sources that they need and want.

Benefits of Improving or Resolving this Factor:

The benefits to improving this factor are obvious. More farmers would be able to sell their goods in the competitive markets, and the cost of transportation would be reduced if rural infrastructure were provided. People would have access to telephones and Internet, which would enable them to attain the knowledge they need to buy and sell products. There are so many benefits of rural infrastructure; the list could go on and on.

➤ **Access to Water**

Though water is not scarce in Kenya, in rural areas it is hard to come by. Most people have to walk miles to fill their bucket with water, and if they get there too late the well might be dry. Lack of access to water causes many problems when it comes to crop irrigation and human nutrition. In order for crops to grow, they need watered daily. Irrigation systems are needed, but without rural water pipes it is impossible to use them.

Rainwater is often collected for drinking, but it still has to be boiled and disinfected before anyone can drink it. Water often has parasites in it that can make a person sick. Even if a rural family is lucky enough to have tap water, they still have to boil it before drinking, and having a tap doesn't come with any guarantees for water; they often run dry because pumps quit when electrical systems fail.

The Millennium Declaration pledged to halve, by the year 2015, the proportion of people without sustainable access to safe drinking water. It also promised to “stop the unsustainable exploitation of water resources by developing water management strategies...which promote both

equitable access and adequate supplies,” UN Millennium Development Goals. So far, the water situation in Kenya has remained at the same level since the goals were set in 2000.

Access to water is also related to rural infrastructure, which proves that all systems fit together.

Benefits of Improving or Resolving this Factor:

For many small-scale family farms, gaining access to consistent, reliable water would be a huge benefit. With water infrastructure, Kenyan farmers wouldn't have to rely on the two unpredictable rainy seasons (April- May and October- December) to irrigate their crops. A CropLife International case study proved that with sustainable water resources, crop yields would have the potential to increase by nearly 50%. This crop excess would enable small-scale farmers to sell more in the local markets, hence increasing the family's yearly income.

➤ **HIV/AIDS**

The HIV/AIDS pandemic in Kenya is quickly sweeping over the entire country. Kenya ranks sixth in the world for the number of AIDS deaths per country. Kenya's population is 33,829,529, and at the end of 2005 an estimated 1,300,000 were living with HIV/AIDS. Over 1,100,000 children have been orphaned due to the HIV/AIDS pandemic. Antiretroviral drugs used to be hard to come by in Kenya, but on June 2, 2006, Kenya's president, Mwai Kibaki, announced that the price on the drugs would be lifted in hopes that the medicine would get to the most needy people. Once infected with HIV/AIDS, a person cannot work. The disease keeps a lot of farmers out of the fields.

Benefits of Improving or Resolving this Factor:

Reducing the number of people infected with HIV/AIDS would increase the number of people available to help do the farming. If more people are available to help, more work can get done in a shorter amount of time. Also, if people are healthy and able to work, they hold the potential to bring in more money and again increase the family's yearly income.

➤ **Management of Crops, Land, and Water**

One of the crucial factors, which influences crop yields per unit area of land, is the extent to which soil and water conditions are optimum for that crop species. Yet soil properties and annual rainfall and its distribution during the growing season vary from one area to another.

Additionally, there is ample evidence that Kenya is experiencing serious depletion of its soil resources even in formerly very fertile areas while rainfall is not efficiently used. The nation has generally not given adequate attention to the protection of water catchment areas. Consequently, soil is lost through both water and wind erosion, and soils require additional/ mostly more expensive inputs to sustain profitable crop harvests. These losses also result in environmental degradation including pollution of rivers, water logging, and salinity and increased incidence of waterborne human and livestock diseases. The scenario is rendered more damaging because most Kenyan farms are rain-fed. Only 1.5% of the land used for farming is under irrigation. At the same time, many people have migrated to the arid and semi-arid lands (due to population pressure in the high and medium potential areas) where rainfall is low and unreliable. These ecosystems and 'fragile' and require a concerted effort to ensure that the resource base is not degraded further.

Benefits of Improving or Resolving this Factor:

Management of crops, land, and water is an essential key to growing great produce. The soil is currently depleted because of farming practices used. With little help, the soil could be restored, but it won't maintain itself. If farmers were to alternate crops (bean one year, corn the

next) the soil's nutrients wouldn't deplete as fast as they do now. With healthy soil, crop yields would increase.

SUSTAINABILITY RESEARCH (What is being done to help the poor):

Without research in sustainability, the situations listed above will only worsen. As of the end of 2005, only 1.7% of Kenya's land was arable and fertile, and that small portion is decreasing. This factor puts EVERYONE at a disadvantage in gaining access to food security.

The Kenya Agriculture Research Institute (KARI) is leading the way in sustainability research. They are conducting several different projects with hopes of helping the rural poor. Five of their projects and expected outputs include:

A. Biotechnology Research

Biotechnologically improved and bio-fortified food crop varieties resistant/ tolerant to pests and diseases developed, tested, and validated and released.

B. Food Crops Research

High yielding, environmentally stable varieties of food crops, fortified with genes for nutritional factors and resistance/ tolerance to biotic and abiotic stresses.

C. Land and Water Management Research

Appropriate soil and water conservation technologies for protection and proper conservation of productive soils and rehabilitation of highly eroded and degraded developed and adaptation/ adoption fostered and effect on profitability of principal agricultural enterprises monitored.

D. Regional Adaptive Research

Contribute in the development of cost effective technologies, which are relevant to the needs of the local farmers, and gender focused and produce long-term sustainable impacts.

E. Seed Research

To develop a self- sustaining seed unit system in Kenya Agriculture Research Institute. (KARI)

KARI isn't the only company working in Kenya; many international organizations (including, but not limited to, United Nations Food and Agriculture Organization, World Vision, The Peace Corps, and GAIN) are in Kenya trying to educate farmers and improve the soil and water resources.

CONCLUSION:

I think if all the organizations in Kenya would WORK TOGETHER they would get more done. Each group is implementing their own projects, and while some impact has been made, I think their results would be greater if they all (the NGOs and Kenya's government organizations) collaborated. By working together, they would be able to reach the very rural areas that currently aren't being helped. They could divide into groups, and each group could be in charge of a different area of the country. That way. Everyone would be receiving the help they needed. Currently, the organizations working there are in the same area as the others, but they are teaching different things. For example, some are teaching about HIV/AIDS, others focus on childhood education, others work with the farmers to develop working farming practices, and others help improve rural and urban infrastructure. If they could have one group teach everything in one community, they could reach more communities. It would take longer to do things that way, but more people would be getting the help they desperately need.

As far as the international community, I think they first need to be educated on the issues. Very rarely do you ever read in the paper or see on the television that family farmers in under-developed countries are in need of assistance. I think too many people, especially those in the United States, don't have any idea what is going on half way across the world, or maybe they just don't care. However, I think if more people knew about the problems facing many third-world countries, they would at least help a little by funding the organizations that are trying to improve the state of the world.

If the international community knew and understood the issues AND would be willing to work together and help those in need, I think the burden of the issues plaguing so many vulnerable countries could be lessened. I don't know if all the problems would be completely removed, but they wouldn't be as severe. I also think if the international community worked together, equal food distribution would be possible to acquire. We have more than enough food on this planet to properly feed all of its inhabitants and more, but it is not equally distributed for various reasons- including rural infrastructure.

I wish I knew the answer or held the key to the end of global poverty, but I don't; and the only way we will ever find out is to take action and work together.

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