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Sierra Leone, Factor 20: Farm to Market

Sierra Leone: On the Road to Recovery

For eleven years, civil war desecrated the infrastructure throughout the small African nation of Sierra Leone. Tens of thousands were killed, and human suffering was widespread. More than a decade of constant fighting between the government and relentless rebels left the country in ruins. Roads were destroyed, bridges burned, buildings left in shambles, and the power supply nearly eliminated. The United Nations intervened, and assisted the government of Sierra Leone in establishing peace and setting up fair and honest, multi-party elections. The new government has since struggled in rebuilding the war-torn nation. More than half of Sierra Leoneans live in poverty, and nearly half are food insecure. Years of food shortages left nearly a third of citizens undernourished, with starvation and stunted growth the major issues plaguing their society (Sesay). Access to food is limited, but access to clean, potable water is a luxury most Sierra Leoneans cannot afford. Only 27 percent of the country has access to clean, running water, leaving the rest of the country to take their chances with river water, or water drawn from wells ("Water In Crisis"). Disease, along with malnutrition are some of the leading causes of death in Sierra Leone. Consuming spoiled produce and unsafe water, along with limited access to vital nutrients leads to a shorter life expectancy and poor living conditions for millions of people. Limited access to food and water are not the only issues Sierra Leoneans are facing. The civil war had a major impact on the power grid, nearly wiping out existing infrastructure. The power supply generated by two small power plants reaches larger cities, but has limited access to rural areas. The power supply is unreliable, and surges often disrupt service to many customers. The limited power supply, combined with poor transportation infrastructure and a dwindling food supply is leading to a humanitarian crisis. The issues facing the people of Sierra Leone are no small task to overcome, but there is room for improvement to save the lives of millions of people.

Agriculture is a way of life in Sierra Leone. It is necessary for survival in rural areas, with limited access to markets in the cities. More than two-thirds of the labor force are employed in agriculture, with agricultural services and products accounting for 50 percent of the GDP (Food Security Portal). A typical subsistence farmer in Sierra Leone grows rice, along with a variety of livestock, such as cattle, sheep, goats, pigs and poultry ("The Global Food Security Index"). The average smallholder farmers cultivate between 0.5 and 2.0 hectares of land, and 85 percent of the land cultivated is used for rice production (Larbi). Subsistence farming is common among much of sub-saharan Africa, including Sierra Leone. Most farmers are widowed women who lost their husbands in the civil war (Sesay). Women often use their children to help cultivate the land, only producing enough food for their family. Poor soil conditions, along with land degradation and food preservation issues lead to low productivity in the agricultural sector. Urbanization began taking over the rural areas near the major cities. Many farmers near the cities moved into urban areas, and small farms on the edges of the cities were developed and turned into ghettos. For urban residents, access to food is very limited. Most of the food produced in rural areas never reaches urban areas. Poor highway systems and food spoilage has lead to a food desert in the main cities. The food that does reach the cities comes at a premium, as residents spend on average 63 percent of their yearly income on food (Ighobor). More than half of Sierra Leoneans also must borrow money for food, as incomes are so low that food has become a luxury. Poverty and war ravaged the country's infrastructure, and are still prominent factors in the food related issues in the country today.

Transportation in Sierra Leone is poor, compared to highly developed countries such as the United States. Navigable roadways are few and far between, with only 7,000 miles of roads in the country. Of those 7,000 miles, only 500 miles of roads are paved and able to handle vehicles and trucks for shipping. The country has ten usable airports, mostly near the major cities on the coasts. However, only one airport has a paved runway capable of handling commercial airliners. Only three seaports dot the coastline, each of which is small and poorly run. Only one of the three ports is deep enough to berth large-hulled cargo ships and military vessels. Throughout the country, nearly 500 miles of waterways allow for limited shipping to rural areas inland. Of those 500 miles, only around 370 miles of those waterways are navigable year round. Fifty-two miles of usable railways run on a limited basis, and do not serve as a mean of transportation.

Farm to market access is limited, and most farmers lack the resources and technology to transport their surplus crops from rural areas inland to larger cities near the coasts. Markets are needed for farmers to sell their surplus crops in order to make a living and provide food for urban residents. Many farmers in remote areas are able to reach only one market or no market at all. Farmers must pay a high cost to transport their goods to markets, and most can simply not afford the luxury. For farmers that do transport their crops to markets are faced with high crop losses. Roads are poor and many are unpaved, and the route to the market is not an easy trip. Poor road conditions also force trucks to move at a sluggish pace. Food spoilage accounts for a 30 percent loss in profits for farmers. The high cost of transportation leads to low profit margins. Farmers are unable to raise crop prices as most people cannot afford enough food for their families.

Farmers not only have trouble getting their products to the markets, but they also have trouble selling the goods that make it there. Purchasers take advantage of rural farmers who have no current knowledge of agricultural prices. Many farmers have no other options than to sell their produce for less than it is worth. Smallholder farmers are forced to sell their goods for unjust prices which lead to low incomes for thousands of people. The lack of communication between farmers and other marketplaces leaves farmers unable to expand sales and compare prices. Internet access is limited, and telecommunications are spotty and unreliable. Advertising is hard as many Sierra Leoneans are illiterate and unable to access television and radio broadcasts. Farmers are forced to rely on their own knowledge of goods and market prices, which are rarely accurate.

Farmers unable to reach markets have limited access to storage facilities for surplus crops. Silos for grains and clean storage facilities are too expensive for most farmers to afford. Sierra Leone has inadequate and underdeveloped storage systems and facilities for storing and exporting food. Access to foreign markets is not an option as shipping is too expensive, and limited access to storage facilities leads to high percentages of crop spoilage. Many farmers face huge losses after harvest, as unsold crops often go to waste. Losses ranging from 50 percent and sometimes 100 percent are common. Farmers incomes are unable to increase due to major losses and poor access to markets.

The issue in Sierra Leone is not how to produce more food, but more of how to transport the food already being produced and eliminate unnecessary losses. In order for farmers to sell their crops, they must be able to access marketplaces near the consumers. Many of the farms in the country are far away from consumers, and most do not have access to paved roads and highways. The first step to combating the

food insecurity issues in Sierra Leone is developing a vast, reliable system of roadways, waterways, railways and airways for shipping by trucks, trains, boats and planes. The poor infrastructure leaves the country unable to trade with foreign countries, and unable to transport goods from the farm to the market. The government of Sierra Leone must work with the United Nations and foreign governments to raise funds to develop a system for transporting goods throughout the country. In the United States, a vast highway system allows trucks to reach nearly every part of the country, something that Sierra Leone is unable to do. Throwing money at the issue is not going to help, but effectively raising money and spending the funds wisely on reliable infrastructure will allow farmers to access markets and increase sales and incomes. The government should also invest in a climate-controlled shipping system that is able to be accessed by farmers paying a premium. A climate-controlled system would help keep perishable goods fresh for longer periods of time, leading to a decrease in food spoilage. Developed countries have access to refrigerated semi trailers that can transport goods via highways long distances. Farmers in rural areas are several hours away from markets, and a highway system would help speed up domestic shipping. For international shipping, larger seaports and airports are required to handle large-hulled cargo ships and commercial and cargo airliners. A federal transportation regulatory agency would be needed to manage the highways and shipping outlets. The regulatory agency would be in charge of enforcing laws and establishing new infrastructure for transportation throughout the country.

Transportation is only a small part of the infrastructural problems in Sierra Leone. Only 13 percent of citizens have access to electricity, and only 1 percent of the energy generated in the country reaches rural areas ("Voltage in Sierra Leone"). The country has two working power plants, both of which are outdated and in poor condition. The energy generated by those two plants is unreliable. Customers often report power surges and power outages occur frequently. Interior areas of the country have no access to the power grid, as 90 percent of the energy is restricted to the four main cities of Freetown, Kenema, Bo, and Makeni. Farmers are unable to use electricity to power equipment and help preserve food using climate-controlled systems. In order to fix the dwindling energy supply issues, the government must establish a regulatory agency to oversee development and manage the energy sector. The government should invest in updating the current power plants to increase energy production, and they should also invest in building new power plants in the interior areas of the country to provide access to rural areas.

Energy and transportation are only two of the major issues facing Sierra Leone. Urban residents in the four main cities currently live in a food desert, meaning that there are few markets that sell produce for consumers. Sierra Leone, along with most African countries do not have supermarkets or large farmers markets like the United States does. The government must work with farmers and consumers to establish marketplaces that are easily accessible. Those markets should be equipped with climate-controlled food preservation equipment, along with areas for storage and room for farmers to sell their products directly to consumers.

An increase in energy availability, transportation efficiency and market access will ultimately lead to an increase in productivity for farmers, and a decrease in waste food insecurity. Farmers must be able to efficiently transport their goods to consumers. Highways, airports, railways and waterways must be utilized to transport goods to both foreign and domestic markets. Efficient shipping will help farmers reach markets near the cities to sell their goods and earn a living. Shipping must be made affordable so that poor farmers and successful farmers have equal opportunities to reach consumers. Communication must also be made more efficient to help different parts of the country arrange sales, shipping, and set competitive prices. The energy sector must be revitalized and revamped to serve more citizens in both

rural and urban areas. Energy production must increase to support new infrastructure and allow for future development. Access to climate-controlled food preservation systems and storage facilities must be increased to reduce food spoilage and waste. Combined, these solutions will help lift farmers out of poverty and increase agricultural production and efficiency, leading to a reduction in food insecurity and starvation. The process of rebuilding the country will be a long and tedious process, but the people of Sierra Leone, along with foreign governments, must work together to improve the lives of millions of people. The issues seen in Sierra Leone are sadly a common sight in poor nations throughout many parts of the country. In the future, Sierra Leone can be used as a model country to help jump start development in other parts of the world. Providing safe, affordable, and quality food for all people should be the number one goal for society.

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