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Guinea, Infrastructure

The Need for Improvement in Guinea's Infrastructure

There are many places all over the world that struggle with infrastructure. This is because many places put it on the back burner, not realizing how much of an impact it actually makes. Guinea, a small country in west Africa, is a country with very poor infrastructure. They have few roads and only a couple are in good condition. The country runs on hydroelectric power but only some families get access to it. Houses in the country aren't perfectly constructed but their conditions are much better in urban areas. Although Guinea isn't the only country struggling with these issues, it is the perfect example to show how it might affect an economy.

Guinea has extreme wet and dry seasons. The dry season is in the winter and the rainy season takes place in the summer. The coast gets nearly four times the amount of rain the other parts of the country get, but the inland experiences a longer period of the wet season (Climate-Guinea, 2010). In the dry season, they experience drought throughout the country. They don't have a way to keep their water from the overbearing rainy season and make it last through the whole dry season.

In Guinea, the average family has about six people. During the day, kids will walk into town to grab buckets of water. Most of the water they get is from a well that is not very clean. Most kids go into town to sit on the side of the street and study for their school or just to see their friends. Education is present in Guinea, but many rural families don't get the chance to send their kids to school. 40% of the 12.7 million in Guinea live in urban areas (Population, total-Guinea, 2019). This part of the population is where all the wealthy people live. These people have the money to pay for their homes to have electricity and clean water. The other 60% of people that live in rural areas are not as lucky. The percent of citizens in Guinea living below the poverty line is 47%. Very few houses outside of highly populated cities have electricity. Guinea is a country that functions mainly off of hydroelectric power. Most of that power is used up in the major cities.

Transportation in the country is rough. There are only a few main roads in the whole country that go between the capital, Conakry, and mining areas. Only 30% of all the roads are paved. 54% of the main paved roads are described as in bad condition. The country struggles the most with unpaved roads. Guinea has a huge rainy season, and the roads are not made to withstand it. Many of the dirt roads from town to town are in such bad condition that it would be nearly impossible to get a vehicle down them so they have to walk to get from place to place. The roads get washed away in the rain and they don't have the time or supplies to maintain them.

Guinea has an abundance of natural resources. Their mining industry is very popular with surrounding countries. They have deals with many countries that allow them to come into their country, take the materials they want, and leave without giving anything in return. Currently, there are no agreements between Guinea and other countries that suggest an even trade of goods or services. They should create a contract agreement that says that other countries can come and collect resources, but they have to help better Guinea in some way, whether that is funding them or helping with different construction projects. They could use this partnership to benefit their country by having the other countries help them create hydroelectric power and assist them with getting it out to the rural houses. That way they can live with power, even without being as wealthy as others. Sanatorium is a problem in the country. Housing and sanitation in rural Guinea compared to urban areas is significantly low. 36% of rural households have access to improved water sources and 41% of rural households have access to improved sanitation systems (Guinea-Housing, 2021).

The government in Guinea is extremely corrupt. It has increasingly worsened through the years, under the power of Conté, who was elected in 1984. Their government is based on French Napoleonic systems as the president is elected for five-year terms and appoints the prime minister and other ministers (Osborn, 2021). Although their constitution says that presidents stay in office for five years, their only two presidents have been in office for at least 25 years. Their current president, Conté, promised to help tackle corruption in senior officials (Samb, 2020). Even though he acknowledges that corruption is present, he has not done anything to make it any better. Their government is extremely militarized and their current president came to power through the army. He relies on the military as it supports him with all that he wants to enforce. Many young men find employment in the army as it pays, although a small amount, and provides shelter. This means that many men resort to the military, making their army very large.

The country also struggles to get medical supplies to the areas needed. Not only do they have a shortage of supplies, but they also don't have the roads to transport them to more rural areas. If you live far from the main cities, getting medical attention could take days. Even something simple, like a sore tooth, won't get treated until they find a way to travel to a big city. The CDC has been working in Guinea since 2015 (Global Health-Guinea, 2021). They started helping when the ebola outbreak occurred by helping people get better or prevent them from getting sick. They also help respond to public health threats. The top five causes of death in Guinea are lower respiratory infections, malaria, neonatal disorders, ischemic heart disease, and stroke (2018). If it was easier to access a hospital, these deaths may not be so prominent.

80% of the population in Guinea grows agriculture. They grow many things including rice, coffee, pineapples, mangoes, palm kernels, cocoa, cassava (manioc, tapioca), bananas, potatoes, and sweet potatoes. Many of their products can't get out to the people they need to get to because it is too difficult to transport them down a single road. Without being able to move the products, the country also struggles with some rural areas not getting enough food. If people in the country cannot get food due to the lack of infrastructure, they have to provide food for themselves by growing crops.

With 12.7 million people living in the country, many struggle with food security. 71.1% of the population that battles hunger practices farming. The farming families make up most of the poverty population. They don't have much availability to get seeds or fertilizer and have a lack of infrastructure. They have no way to transport their products to get money. Without money, they cannot afford food for their family. Some women in the country have low-paying jobs, but most are unemployed. Most women that are employed, work for their husbands, helping on their farms. Women make up 60 percent of people suffering from chronic hunger (Lecrivain, 2021). Unemployment is not rare in this country as only 32% of adults can read and write. Better infrastructure would help jobs become more available to a larger variety of adults because it would create a way to transport to a job and would make supplies easier accessible to grow businesses.

The World Food Program (WFP) is one organization that is working on helping Guinea. They focus mainly on feeding the people, especially kids in school. They also focus on helping struggling farmers thrive. They help the farmers adapt to climate changes, come back after natural disasters, and help them access affordable and profitable agricultural markets and supplies. The only main issue in Guinea that they don't work on is infrastructure. They could add one more project in Guinea as installing newer and better roads, and it would benefit the country greatly.

WFP gets its funds from governments, corporations, and individuals. They partner with many companies to help fund improvements in third-world countries. Working through WFP would give the funds and supplies needed. One idea to better the road conditions in Guinea would be to install water bars in dirt roads. A long hollow bar inserted into a gravel or dirt road can pull the water to each side instead of letting it settle on the roads. The main reason the roads are in bad condition is erosion. The water bars would help divert the water so it doesn't wash away the dirt. Water bars are a cheaper and easier to maintain alternative for culverts. As long as the road isn't too steep, the water bar won't clog and will work perfectly. If a water bar does clog, it should be replaced so the road condition does not worsen. If water bars aren't kept up with and go unmatched for too long, it can cause rough road conditions but that is rare.

Another idea to help put a halt to road erosion is using geonets. Geonets are a geosynthetic product that helps with drainage. If you place it under a layer of dirt on a dirt road, it will help drain water so it doesn't wash away the top layer. With both of these ideas, the water can be collected and cleaned to be used as drinking water. Better infrastructure conditions would not just benefit Guinea, they would also benefit their surrounding countries as they would be able to deliver products (such as food) easier. So, improving Guinea's infrastructure would help solve Guinean and surrounding countries' hunger. For paved roads in bad conditions, they just need to be slightly sloped so the water drains off the side. This could be done by simply repaving the roads again and adding a small slope.

A way to find people to work on improving the infrastructure of the country is to offer food and shelter to young men who agree to work for a set amount of time. This will take a small amount away from the military, but it will help the country over time. This will ultimately help

the military as they need to transport different supplies throughout the country and into other countries. Better infrastructure would provide more food for the troops and medical supplies when needed.

All of these ideas would be relatively cheap and fairly easy to maintain so they won't go back and cause the road conditions to decline again. It's not only Guinea that can use these improvements to their country. Almost all of Africa, or other continents that lack infrastructure, could benefit from using these same ideas. If every country had better infrastructure, the whole world would get a little bit better. As it would provide better means of trade and transportation.

One of my sources is my dad who was in the army. One of his missions was to be a part of a team to organize and train a Guinean army unit to conduct peacekeeping operations in the adjacent country of Mali. He was all over the country for several months and part of his team assessed the infrastructure in the country for the American embassy. He got to experience firsthand the effects of the lack of infrastructure to move supplies, to react to medical needs, and to feed his troops. He only lived there for a couple of months, but the people living in Guinea have to experience it every day.

Although the main problem found in Guinea is the lack of good infrastructure, there are multiple other problems present that make their lives difficult. Increasing the condition of infrastructure would improve the condition of the country and its people. There are already several organizations doing their part to improve the country, but many other projects could be added to further improve the living conditions in Guinea. There are always going to be projects to add to the list of things to do that could help Guinea, but the best way to get them all done is to tackle a couple at a time.

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