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Mining for Better Policies in Liberia

This essay was designed to solve a world issue in an underdeveloped country. The prompt was majority open ended.

Liberia, nestled on the coast of western Africa, is home to 5,057,677 people (Liberia n.d.). Due to the Ebola epidemic and lack of infrastructure, approximately 2.2 million Liberians struggle to meet standard food needs; Rural communities exhibit extreme poverty while 1.6 million people fall below the food-poverty line. Furthermore, only 4.8 percent of Liberian citizens are formally considered middle class, 15 percent of the available workforce is employed under an established agreement, and 79 percent of workers do not experience a steady income (Boley n.d.). However, by utilizing the country's substantial number of natural resources, an increased mining industry could provide jobs, increase the circulation of money, and result in the construction of more infrastructure. Liberia possesses extreme amounts of untapped gold, diamond, and iron ore. Using grants from outside investors, the Liberian government could begin mining valuable materials and providing reliable income to citizens. The waste produced during mining can be repurposed as building blocks for infrastructure. By implementing these practices, Liberian citizens can gain essential jobs and access to income.

While households usually have four to five children, depending on the income of the selected family, this number can vary greatly. Extended family members often live in households and rural families typically house more individuals. Individuals mainly use firewood in order to cook staple foods such as rice and fish. Between 1960 and 1980, iron ore exports accounted for more than 60% of the earnings from export and 25 percent of the country's GDP (Wilson et al., 2017). However, the civil war in Liberia, lasting 14 years, left the majority of infrastructure in shambles and demolished the economy. By 2004, the country had an 80 percent unemployment rate (*Liberia Data*. n.d.). In recent economic years, the gross national income of Liberians averages at \$400 and income disparities are often found. This hole in the economy creates a gaping, distinct difference between poor and rich citizens (Boley n.d.) The Global Competitiveness Report ranked Liberia's infrastructure as 126th out of 137 countries. By emphasizing the inaccessibility of financing within the country, the report detailed the low quality and infinitesimal number of railroads, telephone lines, and ocean ports (Schwab. n.d.).

In order to increase the mining sector, the government needs to spread awareness regarding mining licenses, safe mining practices, and available opportunities for employment. The dissemination of artisanal or small-scale mining (ASM-PACE. n.d.) could lead to a crucial increase in that specific mining sector. ASM provides steady income to an estimated 20 million

people across the globe. (ASM-PACE. n.d.). Small-scale mining rapidly generates income for rural communities. By recruiting nationals, individuals build their own mining operations and create jobs within their community. Liberia has ample opportunity for this practice due to its estimated three million ounces of gold and two to five billion metric tons of iron ore (Wilson et al., 2017). ASM could allow Liberian nationals to build a business around the plentiful resources currently located in their country.

Nevertheless, artisanal miner could pose serious implications to the environment. As a result, individuals wishing to receive a mining license must be educated in environmental hazards and preventing degradation of biodiversity. Without proper education, run-off water could kill nearby fauna and flora. Water, an essential compound in mining, can have astronomical effects on the surrounding ecosystem. Disposal of contaminated water and the use of proper drainage are key examples of necessary mining knowledge. By detailing acceptable mining locations and the use of water for mining purposes, the government could minimize the effect of ASM on the environment. The development of an educational course for mining licenses is crucial to the expansion of ASM. Additionally, the update of the Liberian laws surrounding mining could protect citizens who use ASM as a steady income. Due to the large-scale mining corporations located in Liberia, artisanal miners could be forced to move locations to an unstable ecosystem and, in turn, negatively impact the environment. (ASM-PACE. n.d.). The displacement of miners counteracts the creation of reliable jobs. However, this could be easily prevented by the implementation of new laws. These codes would center mainly around the protection of small-scale miners and their newfound businesses while ensuring the environmental education of Liberian miners. The implementation of ASM would provide jobs and begin a new chapter of entrepreneurship in Liberia.

By providing imperative education to artisanal miners, the Liberian government can curb the effects of ASM on the country's ecosystem. Currently, fish and marine life are threatened by rising sea levels and global warming (UN World Food Programme. n.d.). Since many Liberian citizens rely on the nutrition found in endangered fish, deleterious actions toward the environment could increase these food insecurities. The development of the mining sector, therefore, relies on the education of potential mining employees and employers. The government must be held responsible for enforcing new laws and instructing small-scale miners.

Furthermore, the investment of funds in medium and large-scale corporations could drastically contribute to the augmentation of the Liberian workforce. Using a mutual fund for the mining sector, the Ministry of Mines and Energy, an established Liberian governmental agency, could oversee investments made by outside sources (mme.gov. n.d.). Investors would gain partial share of the company and benefit as the corporation profited. Although the involvement of outside countries increases, the Liberian government would remain deeply involved throughout the entire process. Large companies could promulgate job opportunities and encourage the enlistment of individuals in rural communities. Reliable jobs, as a result, would flood the impoverished towns while Liberia harnesses its plentiful, natural resources. Reducing the chasms found between income classes in Liberia could greatly increase the overall

quality of life and development in the country; by investing money in medium and large-scale mining corporations, citizens in lower economic classes would receive access to a livable wage.

Ultimately, the advancement of the mining sector will lead to increased exports and the growth of quality infrastructure. As the amount of cashflow in Liberia grows, infrastructure will begin to develop. The export of mined materials will require adequate ports and roads; money from mining will begin to positively affect various sectors. Leftover mining materials, also known as waste rocks, can be repurposed, and used for paving roads throughout Liberia. Waste rock, especially derived from iron ore, is able to be used as aggregate in the construction of asphalt roads (U.S. Department of Transportation/Federal Highway Administration n.d.). This process strives to eliminate any harmful environmental factors related to mining while increasing the quality and amount of infrastructure in Liberia. Additionally, the repurpose of waste rock will present more citizens with the opportunity to work. Paving streets and recycling rocks will distribute jobs and increase the range of Liberia's workforce. Since construction frequently moves locations, this will access more of the country's citizens and provide a stable income to rural families. Furthermore, due to the instability of income in Liberia, families are subjected to fluctuating food prices (UN World Food Programme. n.d.). The expansion of dependable income is critical in the reduction of food insecurity. Jobs, such as the ones in the proposed mining industry above, would generate jobs for rural communities falling victim to outrageous food prices.

As Liberia increases and improves its infrastructure, the country can begin implementing various practices in order to increase production in a slew of sectors. With the manufacture of new roads, children will have an increased opportunity to attend schools and adults will be able to effectively travel to their jobs. Children often struggle on the commute to and from their school. In Liberia, school is not federally funded, therefore most children do not have the luxury for school buses. As a result, children are forced to walk on perilous roads and are prone to violence. With the construction of paved roads, children may finally have safe access to their schools. In addition, a common cause of food security in Liberia is a severe lack of education (UN World Food Programme. n.d.). In 2014, only 26.7% of Liberian children were enrolled in their local school. This egregious statistic shows the utmost need for better access to education. Rural children seeking education may have to trek up a devastating 90 miles in order to attend school. (International, R. n.d.) By providing better access to education for Liberian citizens, the country may begin to curb the extreme food insecurity in the country. Using the newfound infrastructure, children may gain an increased possibility of attending school in Liberia. As a result of paved roads, food insecurity may decrease as children begin gaining a proper education.

Moreover, with the proliferation of education, Liberia may have the ability to dwindle the divide between social classes. The distinct gap in Liberia's social classes begs for the implementation of educated, working-class citizens. Since children could gain an increased accessibility to an education, the number of educated Liberian citizens will, naturally, rise. The workforce will begin to accommodate for the increase in human equity. By properly educating citizens, Liberia can begin the tedious journey toward technological advancements and economic stability. While the process of providing education is strenuous, one of the first, and

necessary, steps to expansion begins with attainable education. The expansion of roads, as a result, can assist Liberia in supplying education to the future generation.

While paving roads remains crucial, the construction of ports and railroads presents new opportunities for exportation of mined minerals. Due to Liberia's location on the coast of Africa, ports would present an easy avenue for selling newly produced goods. Using large vessels to ship materials will encourage mass production of products and expedited export of large quantities. Maritime transport also presents an economical and environmentally friendly solution. Since ships are able to easily transport large quantities, transport costs will be reduced and, in turn, more revenue will be invested in mining practices (United Nations. n.d.). Additionally, the use of trains will aid in the export of mined products. With railroads crisscrossing the nation, Liberia would be able to efficiently export goods with minimal costs. Roads, ports, and railroads are all avenues for selling the mining materials produced in newfound mines. With the increase of infrastructure, Liberia will be able to quickly expand the wealth to rural communities. Jobs will, in turn, gain access to more citizens and effective transportation will begin to become reality. The mining sector has the ability to directly impact and positively influence struggling pillars of society.

Additionally, the multiplication of jobs can bridge the chasm between income classes. The huge gap in income in Liberia creates two classes defined as "very rich" and "very poor" (Boley n.d.). Income disparities prove detrimental since the distribution of wealth remains extremely uneven. While some Liberian citizens have the luxury of sending their children to receive education abroad, other citizens struggle to feed their children. The low wages given to the "middle-class" barely cover the cost of food. For example, a security guard may earn \$60 a month, but the cost of a single bag of rice rests at \$40 (Boley n.d.). As a result, Liberia is riddled with families with food insecurities. Liberia's infinitesimal minimum wage engenders several economic and social issues. However, the implementation of a plethora of stable-income jobs can remedy the extreme poverty found in the country. The pursuit of jobs in the mining and construction industry would greatly benefit Liberia. New opportunities for occupations can scatter wealth, improve infrastructure, and allow citizens to support their families.

Mining can relieve a myriad of the struggles plaguing Liberia. With the implementation of open pit mining, the Liberian government can begin the long process of tapping into its natural resources. By utilizing the minerals in the country, Liberians initiate a new, enlarged workforce. As mines produce goods and products, the minimal infrastructure in Liberia can begin expanding. Ports, railroads, and roads will open new doors for education and job opportunities. Children can have better access to schools and adults can provide necessities for their families. Additionally, education improves food security and magnifies the possibility of a middle class in Liberia. Income disparities would decrease as the country gained educated adults. Infrastructure will, then, pave the way to economic expansion and income equality. Human equity will increase while the country begins to develop structurally. The mining sector equips Liberia with the quintessential tools for the road to advancement.

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