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## Haiti: How U.S. Agreements can Aid Earthquake recovery

January 12, 2010 is a day the country of Haiti and all its inhabitants will remember forever ("Future of Haitian Cities," 2018). This is the day that an earthquake struck the country killing 230,000 and destroying \$7.8 billion dollars worth of infrastructure ("Future of Haitian Cities, 2018). Although there have been investments in recovery, namely the infrastructure and institutions emergency recovery project by the World Bank International Development Association, Haiti has not fully recovered ("Rebuilding Haitian Infrastructure," 2019). Haiti covers the western one-third of the island Hispaniola in the Caribbean and is one of the poorest and most corrupt countries in today's world. Many Haitians are living without proper education, clean water, food, and other necessities. Haiti is also prone to natural disasters such as hurricanes in addition to devastating earthquakes. Haiti also has a corrupt and biased government, making it unstable in its duties for its citizens and those who do business with Haiti. Although it may seem that Haiti is drowning in problems, there are solutions within reach.

Haiti is one of the most impoverished nations in the world. The poverty is partially due to Haiti's unstable and corrupt government. They have a president, prime minister, and bicameral parliament, but due to corruption, the current president Jovenel Moise has almost absolute power (Ferguson, 2021). Haiti has a population of over eleven million with 44.7% of the population living in rural areas and the other 55.3% living in urban areas namely the capital Port au Prince (Ferguson, 2021). Although a rather large percentage of Haitians live in rural areas, only two-fifths of the land is cultivated, and the land that is cultivated has poor yields (Ferguson, 2021). Another reason some plants do not grow well in Haiti is its warm and humid climate. This country averages seventy to eighty degrees Fahrenheit which is similar to other islands in the Caribbean (Ferguson, 2021). The typical family in Haiti differs greatly from that of the modern western world. Most Haitians are descendants of the black slaves who defeated the French and gained independence from France in the Haitian revolution in the early 1800s (Ferguson, 2021). The average household has 6.3 people who live in small mud huts (Lost Childhoods in Haiti, n.d.). Living in these huts leads to significant problems with parasites, diseases, food insecurity, and water cleanliness. The majority of Haitians do not have access to clean fresh water or sanitation which leads to rampant diseases such as cholera and salmonella. These diseases affect families because they are very contagious and can be fatal. Malaria is also prevalent there due to the lack of protection from mosquitoes ("Haiti: Events of 2020"). Food insecurity and lack of nutritious food also plagues this country. The typical Haitian diet of beans, rice, sweet potatoes, bananas, corn, cassava, and tero fritay does not provide all the key nutrients and therefore can lead to nutrient deficiencies and malnutrition (Ferguson, 2021). Most families obtain this food from growing it or buying it at small farmers' markets. Some Haitians also hunt for their food. Due to the lack of government support and overall corruption in Haiti, most jobs are low-paying and high intensity. These jobs are typically informal like street vendors or ag-related such as working a family farm (Ferguson, 2021). Some Haitians have sought income in other ways, the most popular one being one member of the family goes abroad to work as a migrant worker or nanny and then sends the money back to their family members in Haiti. Many Haitians are unable to obtain a job simply

due to the fact that they have no formal education. Over three-fifths of adults are illiterate("World bank Document: Haiti"). This is caused by Haiti's lack of education programs and school buildings. When there are schools, they are most likely expensive private schools that only the most elite can afford to attend (Ferguson, 2021).

There are many obstacles faced by Haitians on a daily basis. These challenges are ones that many in modern, developed countries take for granted. Three-quarters of Haitians lack running water which is one of the most important aspects of sustaining life (Ferguson, 2021). Even when there is water within a community or home, it is usually unsanitary and disease-ridden. One of the main problems that most other problems stem from is the government instability in this country. The government does not provide upkeep of infrastructure or education--both vital aspects of a functioning society (*Haiti's Political and Economic Conditions*). Due to the lack of government support, many people do not have the resources to improve their lives. Since most are illiterate, educating themselves is not feasible, and because most Haitians are too busy working long hours at a low wage, they do not have the time nor the money to improve their situation. The government's lack of control and unsteady tendencies leads to major problems within the country including a lack of infrastructure (*Haiti's Political and Economic Conditions*). Only 24.3% of roads in Haiti are able to be traveled by car (*Haiti-Roads, 2021*). Haiti also lacks internet access which is vital to becoming a more modern country.

Infrastructure within a country includes roads, bridges, schools, power, internet, as well as various other structures. These structures, roadways, and institutions are vital to a society's function and success. Without these structures, the country cannot carry out daily activities such as trade through ports, education, travel, and other economy-sustaining actions ("Future of Haitian Cities", 2018)". Improving the needed infrastructure can lead to a better economy through trading and tourism; better literacy through education; and overall better health and wellness of individuals through clean water facilities and effective travel of food to those in rural areas ("Future of Haitian Cities", 2018)". Improving the infrastructure in the country of Haiti would improve the lives of those who currently live there and also future generations. Due to the current extreme lack of infrastructure, creating more will present a huge challenge. The government cannot keep up with the maintenance of roadways, bridges, and power lines currently, so it will be extremely challenging to get building material and workers where they need to be in order to build more infrastructure (Justin-"The Case for Building roads in Haiti"). Haiti is also prone to large earthquakes similar to the destructive one in 2010. This makes for problems building earthquake-proof buildings. In addition to already lacking infrastructure, funding is going to be a huge struggle for Haiti. They do not have enough money for clean water and food let alone big infrastructure improvement projects. Haiti is over four billion U.S. dollars in debt (Pelcher). This massive amount of debt is due to independence reparations to France, embezzlement schemes, and the aftermath of the 2010 earthquake--which is the biggest contributor. The lack of educated people and workers would also pose a challenge to infrastructure improvements. In order to improve these roads, bridges, and various structures, skilled workers are needed. Haiti does not have strong industries which leads to few workers skilled in professions such as construction (Ferguson, 2021). Therefore, if Haitians were to work on these projects, they would need extensive training. That training could be hard to complete due to the lack of literacy in Haiti. Although the training could be hard to complete, it would be an investment in the Haitian people and provide many with a stable livelihood.

Although making significant infrastructure improvements will be very challenging for Haiti, the impact it will have on those in the country will be worth it to those who live there. Improving infrastructure betters the lives of those who live in that country by raising productivity, stimulating private investment, and facilitating domestic and international trade (Gurara et al, 2018). Improving and adding infrastructure can raise productivity because people can get to and from their work quickly and more efficiently than they would before which leads to them contributing more when they work and being able to work longer. It would also improve the economy because it would open up the possibility for more trading and private investment through better travel and job possibilities. Infrastructure improvements could help with reducing inequality, fostering inclusion, and reducing poverty (Gurara et al., 2018). Having infrastructure--especially in poorer or often overlooked areas--will reduce inequality because it would give job, travel, and education opportunities to those who have never had them before (Guara et al). In addition to these improvements food security will be greatly improved. Fostering inclusion is another plus of infrastructure improvements. Inclusion will be fostered because those who were separated by terrain or lack of internet access will no longer be hindered by the lack of infrastructure forcing the closing of the gap in basic survival needs. Poverty is a big issue in Haiti, but by working on infrastructure it can be greatly reduced. There is a direct correlation between better infrastructure and less poverty because more resources can get to people and more jobs are provided (Justin- "The Case for Building Roads"). This also translates to food security because more food can be transported to more people and the government would have more resources to provide food options. There are many possible solutions to the infrastructure problem in Haiti including government investment, a deal with the U.S., and the World Bank funds. The best solution to these is to strike up a deal with the United States. Following the Angola-China model, Haiti should make an agreement with the United States of America (Begu et al). This agreement should include trading natural resources from Haiti for infrastructure investment by the United States. This model worked extremely well for Angola and China. They traded petroleum for what ended up being over fourteen billion dollars to date in infrastructure investment (Begu et al). Angola is now one of the richest countries in Africa, and although it is not out of the woods of poverty yet, the investments of China have made their economy skyrocket (Begu et al). In order for this agreement to work in Haiti, some adjustments need to be made. This treaty would be facilitated through the United Nations which forces both parties to follow all agreed-upon guidelines (*United Nations Treaties*). Doing so would make Haiti responsible for holding up their end of the bargain and the United States for following all rules and providing the correct amount of investment. In this proposed plan of action, Haiti would sign a deal with the United States where the United States can drill for and utilize Haiti's plentiful natural gas in exchange for the United States investing the value of the gas into infrastructure. Benefits to Haiti of this agreement include more jobs, improved infrastructure resulting in a myriad of other benefits, and better quality of life ("Future of Haitian Cities," 2018)"). The United States as a top consumer of oil worldwide would also benefit because it would create jobs, help boost America's economy, and provide them with much sought-after oil (Begu et al). The treaty would require the United States to use a workforce made up of twenty percent Haitians among the workers they bring to the island. Although this will be difficult with the language barrier of Haitian Creole between English, Haitians need the boost and the United States has the resources to help them. The economics of this solution can be tricky due to Haiti's instability, but with proper infrastructure that can all be improved. Therefore, the United States should first begin drilling for oil which would also provide additional jobs for Haitians, and then after six months should begin reinvesting the money into Haiti. The United States and Haiti already have a close trade relationship that does not tax exports (Ferguson, 2021). The United States and Haiti are also very

close in proximity to each other which allows for easy trade and low travel costs. Also, Haiti has one of the most open markets in the Caribbean, making it a desirable trading partner.

Every solution does have its drawbacks and this one is no different. The potential problems with this solution include Haiti running out of natural gas, the oil market falling, shipping problems, and the language barrier. Scientists have hypothesized for many years the likelihood of large natural gas reserves in Haiti due to the fact that Haiti is on the ocean where two tectonic plates meet ("Haiti's Natural resources"); therefore, Haiti should have many years worth of natural gas for America to exploit from the land. On the unlikely chance that Haiti runs out within five years of the treaty, both countries would have to come back and reassess. If they run out after five years, America would have invested enough into infrastructure to make a significant difference in Haitian life. The biggest problem with this solution comes if the oil market has a steep decline so the United States would not need as much oil. The U.S. would then drill in Haiti less and, therefore, invest less, making it a hassle for both parties. Shipping problems are minor and should be able to be resolved since over one billion dollars worth of United States exports have been sent to Haiti each year in recent years ("Haiti Market overview"). Another possible problem could be the displacement of those living on drilling sites and the inclusion of foreign workers. In order to not ruin the lives of those living there an incentive program made by Haiti should be utilized. This program would provide an incentive such as more land or a well to those who move to a new location. Integrating foreign workers can be best done by providing classes to those workers before they travel to Haiti and have guidelines in place to help promote kinship between Haitians and the new workers. Lastly, the language barrier can also be a solvable problem since there are many Haitian Creole speaking people in the United States and many English-speaking people in Haiti. Improving Haiti's infrastructure would help eradicate food insecurity in this country because it would allow food to travel to rural areas, allow people to travel to sustain their livelihood, make jobs more accessible, and provide opportunities to impoverished people. Although it will be challenging to develop infrastructure in disaster-prone areas, modern engineering has prevailed and come up with numerous solutions. Without infrastructure a modern society cannot function well, and creating infrastructure has been shown to reduce poverty and food insecurity rates (Justin- "The Case For Building Roads"). Without food security a nation cannot funcion healthily and in order to provide the security a country such as Haiti needs adequate and ethical infrastructure must be established. Food insecurity is one of the most important issues in today's world, and the best way to tackle that in Haiti is for Haiti to become independent of its bothersome problems and offer support to help build and educate the people thus creating new structures and wealth in the country.

Haiti has a complex set of problems that can be fixed by improving infrastructure. The best solution is to make a United Nations sanctioned agreement with the United States to trade natural gas drilling rights for infrastructure investment. Being one of the most corrupt and impoverished nations in the recent era, Haiti has had its share of problems previously outlined. All through these problems, Haiti has persevered and now is on the cusp of a great solution that will reduce food insecurity. Although there are drawbacks to this solution, in the end, the benefits greatly outweigh the downfalls. The solution outlined here would provide the way to best improve food security in the impoverished nation of Haiti.

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