

Style Haeffner
Danville High School
Danville, Iowa, United States
Haiti, Sustainable Agriculture

Haiti: Improving Sustainable Agriculture

Haiti, a country located in the Caribbean, shares an island with the Dominican Republic. As of February of 2020, the population of Haiti is 11,300,000 (Haiti Population). Of these people, 55.3 percent live in an urban setting. This means that over 6,248,900 people live in cities alone (Lagarde). My family visited Haiti and saw the massive crowds. The underdeveloped roads in Port-au-Prince were overflowing with traffic from all directions and traffic laws were not enforced. Five mountain ranges span across seventy-five percent of Haiti. The capital, Port-au-Prince, is built on a flat area between two of these ranges. Temperatures are usually between the high 70°F and mid 80°F and are dependent on the time of year as well as the elevation (Pike). Haiti is governed by a Republic system that utilizes a president, elected by the public, and a prime minister, appointed by the president (Pariona). Together, the president and prime minister hold executive power. Like the United States, there are three branches of government in Haiti: executive, legislative, and judicial (Ferguson). The government has not been able to overcome ongoing behaviors that have led to corrupt decisions regarding human rights, development, and poverty. Throughout our trip we were escorted everywhere we went for safety reasons. We even had to stay in a safe house with armed guards at each entrance because of the crime levels in Haiti.

Haiti is 10,714 square miles, and of this, 66.4 percent of the area is used for agriculture (Haiti Land Use). Many farmers grow coffee as a cash crop, but coffee needs a shady environment to grow. Farmers have begun growing banana and plantain trees to provide this shade while also producing other crops to sell, such as sugar cane. The average farmer has a field of about 1 hectare (2.5 acres), and very few are larger than 12 hectares (30 acres). In comparison, the average farmer in Iowa has a field of about 330 acres which is exponentially larger than that of a farmer in Haiti. We were able to tour the countryside and see small villages and farms. The extreme poverty is both a cause and an effect of their lack of using the land productively.

In an urban area, the typical family consists of two children, and lives in a one room house made of cement blocks. When I was in Haiti, I saw that most houses have rebar sticking out of the top and I learned that is so that if they have money, they can build another level in the future. They put barbed wire and glass shards in the top layer of cement walls as they are trying to injure thieves who may try to climb over. I also saw Haitians producing the cement blocks used for the buildings. As we traveled through the city, natives were at work in the streets, forming blocks with their own mixture of materials. No factory, no standards; just wooden forms, the mixture, and the hot sun.

In rural areas, the typical family has five or more children so that they can help support the family by working on the farm. These families typically live in a structure made of many small bedrooms all built around a central area similar to a courtyard, called a *Lakou* (Haiti: Family). It is common to have large, extended families living under the same roof.

In both rural and urban areas, most children must work to help feed themselves and their brothers and sisters; the elderly are also dependent on the family. Typically, the grandparents will live with their children and grandchildren once they cannot support themselves. This causes more work for the family to be able to support multiple generations.

Most Haitians eat primarily rice and beans, while those who can afford it eat meat on a regular basis. Also, if a family can afford it, vegetables will be added and sometimes fruit. Those in rural areas may not be able to afford three meals a day so they only eat breakfast and supper (Haiti: Eating). When my family visited Haiti, we saw poverty-stricken people making cookies out of dirt. They started with dirt and added water, salt and shortening. Before we went, we were told that this was part of their diet and it was terrible to see them actually do it.

Haiti's gross domestic product (GDP) per capita is near the bottom of the list, ranked at 169th (List) in the world at \$765.41 (IMF). There is a shortage of skilled labor in Haiti. Half of the population works in the service industry, 38.1 percent work in agriculture, and 11.5 percent work in industry (The) The unemployment rate is 40.6 percent, which is why 58.5 percent of the population lives in poverty.

Children in Haiti do not have access to high quality, rigorous education. The Haitian government claims they would like to promote free public education, but because there is no funding, this movement has not made headway (Facts). As recently as 2016 there have been changes in government policy that put in place training services for teachers in order to improve schools and add rigor in classrooms across the country (Education). Because there is no government funding for free education, most of the schools are private and costly. Many Haitians are questioning what the government is saying on this topic, because they feel the government is corrupt and in reality, not trying to provide free public education. Also, more than 80 percent of elementary school children who attend school, attend private schools, because there are not very many public schools (Education in Haiti). The literacy rate in Haiti is 52.9 percent (Facts); this could be increased if the government would provide high quality free education. Families living in poverty cannot afford the costs of tuition, let alone the books and uniforms required by private schools.

Only a low percentage of Haitians living in rural areas have access to healthcare of good quality. In fact, according to the World Health Organization's three-point scale, 57 percent of urban residents have "good" access to quality healthcare and only 8 percent of rural residents have "good" access. This is because there are no private healthcare companies. The government controls the cost of healthcare and makes it too expensive for all residents (Gage). Families in urban areas are more likely to have access to clean water, toilets, electricity, telephones, roads and markets (The). Those living in rural areas, which is 45 percent of the population, have difficulty getting to a clean water source which means people are more likely to acquire a disease. Also, the rural areas do not have adequate sanitation or roads. According to the CIA website, in 2013, the total population with access to electricity was 38 percent. Of those living in urban areas, it is 72 percent, and in rural areas it is 15 percent (Living). In 2013 I saw the infrastructure being built. Pipes were being installed along the roads in the city. This was to be their water system. When we showered, the plumbing looked similar to that in our own home on the inside. The difference was where the wastewater was taken. Instead of being taken into a sewer system, it was taken through the pipes dumped right out of the wall and into the trash covered streets below.

One major barrier that families face is that they cannot grow food on the land primarily because the land has been misused and is in terrible condition. Land has been overused and nutrients have been stripped from the land. Natural disasters cause much more harm to Haiti than to other countries, including the Dominican Republic, because of the deforestation that happened on the island many years ago. Forests are no longer there to protect the people and the land from major storms such as hurricanes and floods. Leaving the land barren of trees also promotes soil erosion. Soil erosion washes away what nutrients are there to help grow essential crops causing barren and stressed areas unable to produce essential foods.

Deforestation is very extreme. When the French settlers first landed in Haiti, they immediately started cutting down trees to make room for sugarcane farming. As more and more space was needed, these forests continued to be quickly removed. At one time, almost all of Haiti was covered in forests, now less

than two percent of those forests remain. This has caused many major problems in the country. One of the most outstanding problems resulting from the deforestation of the island, is that it has caused the soil to lose its ability to retain the water. In other words, the lack of trees has caused the soil to no longer be farmable because the soil dries out very quickly. The nation has quickly reduced its once 4.1 million acres of forest to 100,000 acres in just 80 years. This has caused much of the land to lose its ability to retain its moisture, making it extremely difficult to farm (New).

The farmland also has not been properly used. Farmers in Haiti have very little knowledge about crop rotation, irrigation, and field tilling practices. Farmers are not following current practices to produce crops efficiently and in the correct ways to feed their own population. Their main cash crop is arabica coffee, and their main subsistence crops include cassava, plantains, bananas, corn/maize, yams, sweet potatoes, and rice. Haiti imports nearly three times the amount of products than they export (Lagarde). The urban population is in greater need of food than the rural population. This is because the rural population is mostly made up of farmers who are growing their own food. In the urban setting there is a great demand for food with little supply. The farmers only sell the very little they can spare. The rest is all brought in from different countries.

One thing that would help solve these problems would be to provide supplies that farmers need to Haiti and teach them modern farming practices. Teaching them how to rotate their crops correctly, how and when to till their soil, and how to use any equipment provided to them would allow them to provide much more food for their own citizens. Educating the farmers is important for creating sustainable agriculture and improving the field conditions. Missionary trips are made throughout the year by numerous organizations and church groups. These missionary trips focus on building and restoring infrastructure. It may be possible to include in these trips individuals who can also teach farmers about better farm practices. Another idea in educating Farmers is to bring back programs like the Peace Corps who would send individuals into rural areas to teach farmers new techniques while working side by side with the farmers for long periods of time. Programs like this gain trust of the people being helped and allow for follow through as long as the programs are kept in these areas for long periods of time.

Another solution would be to plant trees throughout the country and forbid anymore deforestation. Deforestation is causing the soil to lose its ability to retain moisture and hold the nutrients needed to be productive. Trees should be encouraged as crops as well as protection. Fruit and nut tree varieties that grow in the climate zone of Haiti, would bring rise to new income opportunities for the island. Tropical nut trees such as macadamia could provide protection and jobs that would also boost the economy. If we can slow and even reverse this deforestation, it will help the farmers to be able to produce crops in that space. Not only will their yield increase, the time for the crops to come to full maturity will be much shorter as well. This will also help recover some of the land that was once farmable. Nutrients supplied by the trees will also create richer soils to allow for better growth of crops.

Finally, the government could implement higher import taxes and lower any taxes on things purchased locally. This would help promote buying home grown crops from farmers and even people who have small gardens. Monitoring the tax would be critical so that the government uses the income from this tax in a useful and productive way. The money from import taxes could help pay for the equipment and education for the farmers as well as the trees and labor needed for planting them. This solution would require a less corrupt and more disciplined government in order to be successful.

As the Covid-19 has taken over our own lives this past spring, it has also affected the people of Haiti. The country continues to struggle with all areas of food insecurity and with the constraints of the restrictions imposed by the virus, the imminent threat continues to grow rather than get any better. Recently, I had the opportunity to sit down and talk with the Haitian administrator of My Father's House - Haiti, Predestin

Pierre Herard. I asked him about the impact of the Covid-19 on everyday life in Haiti. He said that there hadn't been many cases in Haiti and that not very many people were visibly worried about it. He said the only place requiring masks was the government building. Some people wear them in public places and the streets but not many. He said the biggest impact Covid-19 has had on Haiti was the early shutdown of their border with the Dominican Republic. This shutdown quickly caused a food shortage in Haiti because much of the imported food in Haiti is food that the tourists didn't want or need in the Dominican Republic. This food shortage led to a large inflation of the Haitian Gourde. This country, already in economic distress and struggling to keep the population fed, is now at an even greater disadvantage because of Covid-19. Much like our own country, slowly the virus has made its way to Haiti and in August, a mask mandate was declared by the government. But on a good note, the two international airports are now open and shipments of food and supplies are making their way back into the country.

The people of Haiti are capable of working through these solutions and learning how to sustain their population. If the land health could be improved through the planting of trees and improved farming techniques, then the extreme poverty rate could be decreased. In turn, so would the hunger problem across the nation. If these problems were resolved, the literacy rate would also increase due to the poverty rate decline. This would cause the Haitian population to be a happier, more unified, flourishing country. In order to move forward with these solutions, the Haitian government would have to be much more disciplined and much less corrupt. The corrupt government is hindering the development of Haiti through their greed and abuse of power. Without change, Haiti will struggle to benefit from any solution.

Works Cited:

- "Education | Haiti." *U.S. Agency for International Development*, 25 Jan. 2018, www.usaid.gov/haiti/education.
- "Education in Haiti." *Education in Haiti | Global Partnership for Education*, 26 Sept. 2018, www.globalpartnership.org/country/haiti.
- "Facts About Haiti." *Schools for Haiti*, 5 Apr. 2016, schoolsforhaiti.com/facts-about-haiti/.
- Ferguson, James A., and Christian Antoine Girault. "Haiti." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 16 Jan. 2019, www.britannica.com/place/Haiti/Climate.
- Gage, Anna D, et al. "Assessing the Quality of Primary Care in Haiti." *World Health Organization*, World Health Organization, 4 Sept. 2017, www.who.int/bulletin/volumes/95/3/16-179846/en/.
- "Haiti: Family." *CultureGrams Online Edition*, ProQuest, 2019, online.culturegrams.com/world/world_country_sections.php?cid=69&cn=Haiti&sname=Family&snid=11. Accessed 24 March 2019.
- "Haiti Land Use." *Haiti Land Use - Geography*, 20 Jan. 2018, www.indexmundi.com/haiti/land_use.html.
- "Haiti Population (LIVE)." *Worldometer*, www.worldometers.info/world-population/haiti-population/.
- "{IMF Article}." *IMF*, www.imf.org/external/datamapper/NGDPDPC@WEO/OEMDC/ADVEC/WEOWORLD.
- Lagarde, Loïc. "Haiti." *OECD*, oec.world/en/profile/country/hti/.
- "List of Countries by GDP (Nominal) per Capita." *Wikipedia*, Wikimedia Foundation, 26 Mar. 2020, [en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)_per_capita](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita).
- "Living Conditions in Haiti's Capital Improve, but Rural Communities Remain Very Poor." *World Bank*, www.worldbank.org/en/news/feature/2014/07/11/while-living-conditions-in-port-au-prince-are-improving-haiti-countryside-remains-very-poor.
- "New Agriculturist." *New Agriculturist: Country Profile - Haiti*, www.new-ag.info/en/country/profile.php?a=202.
- Pariona, Amber. "What Type Of Government Does Haiti Have?" *WorldAtlas*, 13 Oct. 2016, www.worldatlas.com/articles/what-type-of-government-does-haiti-have.html.
- Pike, John. "Military." *Haiti - Geography and Climate*, 6 Jan. 2017, www.globalsecurity.org/military/world/haiti/geography.htm.
- "Haiti: Eating." *CultureGrams Online Database: Subscriber Area Only*, online.culturegrams.com/world/world_country_sections.php?cid=69&cn=Haiti&sname=Eating&snid=10.
- "The World Factbook: Haiti." *Central Intelligence Agency*, Central Intelligence Agency, 2020, www.cia.gov/-library/publications/the-world-factbook/geos/print_ha.html.