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Haiti, Malnutrition
Solving the Issue of Malnutrition in Haiti

Current demographics in Haiti point to three solutions. These solutions include increased educational opportunities, fixing roads, and different water purification systems.

Haiti's population is made up of urban and rural areas. The rural population is 45-percent and 55-percent is urban (Haiti: Population). Haiti's president is elected by majority vote and gets to serve for five years. They have a prime minister that is the head of the government. The prime minister is chosen by the president. Haitians must be 18 to vote in Haiti (Haiti: Government). Haiti has many major crops such as coffee, bananas, corn, rice, sweet potatoes, mangos, and cacao beans. Approximately 67-percent of the land in Haiti is cultivated. The average farm size is 2.5 acres. Haiti's climate, overall, is really hot and humid. The country has mountain slopes which is where Haitians grow their coffee beans. Farmers have irrigated planes where they grow bananas and sugarcane (Haiti: Economy).

A typical family in the urban parts of Haiti will generally have around two or three children. Houses are made out of cement and cinder blocks. In the rural parts of Haiti families have around four or five children. Their houses are made of mud, rock, wood logs and some used banana leaves as roofs. Almost all families don't have access to running water in the rural areas (Haiti: Family; Haiti: Housing). The earthquake in 2010 wiped out a lot of delivery systems such as roads. The earthquake also resulted in lots of standing water. This is how many diseases were spread (Haiti: Diet). The typical family across the country eats rice, beans, spicy food, pork, goat, chicken and seafood. In the rural areas most of the families get their money from farming and taking foods to the market.

"Wealthy" is a relative term. If "wealthy", a person eats three times a day with their family. If poor, a person generally gets to eat about one meal a day (Haiti: Eating). A Haitian family's average wage is \$500 a year. They have school but many children can't attend because they are too poor. Haiti doesn't have a lot of public schools. Most schools are run by private organizations. Schooling is often interrupted by political unrest (Haiti: Education). Families face a lot of issues such as malnutrition. Children don't get vaccinated. Haiti is a poor country. Only 30-percent of the land is farmable and has lots of erosion. Also the 2010 earthquake ruined lots of farmable land. This is where a lot of erosion now exists (Haiti - Agricultural Land).

Around 30-percent of Haitian people are malnourished and 19-percent is severely malnourished. "Malnutrition is the single largest contributor to disease in the world." (World Hunger Facts & Quotes.)

One in every five children in Haiti are malnourished. One in every 14 will die before the age of five. Things like, natural disasters, climate factors and lack of access to clean water and the spread of diseases causes malnutrition. Children are mostly affected by this. Children that become malnourished before the age of two will suffer lifelong mental disabilities (Haiti: Health).

The environment is affected by malnutrition and malnutrition is affected by the environment. The population decreases because children die. Certain upsets in the environment have caused malnutrition. In 2016 another hurricane hit and many roads were demolished. A local girl named Kayla Raymond used to

live in Haiti. Kayla is the owner and operator of Rosie's. Rosie's is a store that provides mothers with jobs so they can support their babies and have an income. The workers at Rosie's make different jewelries like bracelets and necklaces. They also make a bunch of other things. There is actually a Rosie's stateside in Rock Rapids, Iowa. At Rosie's stateside they have a little coffee shop with all the things the Haitians make. Kayla has now moved back to Rock Rapids with her husband, Webert, and their three adopted kids and two kids of their own.

Just last July when she was still living in Haiti Kayla shared about the shortage of gas and how the country was going "wild". She shared many pictures of cars broken down on the side of the road. The Haitian people were having many difficulties such as fuel shortages and lack of safe water. Different foods and other items couldn't be transported because of the broken roads. Within the past year, production of foods like rice, beans and sugar have risen by 34-percent. It is estimated that over 55,000 children under five will suffer malnutrition in the next year. Over half the country is malnourished. The governor was accused of embezzling two-million dollars. The money he was taking was supposed to go to health and education purposes. Many people are scared because no hurricane or earthquake is causing the upset but it's political. Before it was about climate. Now people are frightened of the people in politics (Malnutrition Statistics).

Forty-percent of Haiti's rural population hasn't had safe drinking water since the earthquake in 2010. "We have water trucks that they're driving around the city getting water to those that need it. But there are several water pipes in the city that have been broken," said James Sturcke, "So the water situation is grave as well. Fresh water is hard to get."

People in the urban areas have access to bottled water so that prevents diseases. Seventy-percent of Haiti is considered severely poor. Poverty rates in rural areas have stayed the same for about 12 years. In Haiti, only 11-percent of the people have access to electricity (Haiti: Housing). In rural areas the poverty rate is so high people can't afford to get things fixed. This contributes to malnutrition problems as well. Until Haitians get clean water people will continue to get sick.

Haiti's children are malnourished. This isn't decreasing or increasing and it's just staying the same. Nothing is getting better. Three things need to happen to improve the situation. These include improved education, repaired infrastructure and clean water.

Education

Education in Haiti is so important. Not a lot of people in Haiti are educated or have access to an education. They cannot afford it. This doesn't give young Haitians much of a future. They will most likely grow up and know nothing if they don't get an education. Food is also an essential that isn't always available in Haiti. Many people can't buy food because they don't have money. The government should build more schools. Students should get free lunches within the school. That way if students attend, they are guaranteed an education and at least one meal a day. In the school they could teach students how to grow and process their own foods so that they could take this knowledge home to their parents.

"School feeding programs can help prevent hunger, increase school enrollment, reduce absenteeism and improve learning outcomes" (World Hunger Facts & Quotes).

This is the story of a girl named Maria. Imagine Maria as member of a typical rural family in Haiti. Maria is eight. She normally has to wake up and do chores. Maria has to take care of her little brothers. She works in the field with her family. Today she gets to go to school.

At school she will learn how to plan a garden and learn about clean waters. Today she was able to bring home her knowledge and help her family improve their living conditions. Understanding how to clean water or plant crops so they could grow more successfully. Maria also got to have a free lunch at school. It was the best part of her day. She wanted to bring it home for her brother to try. She loved the rice and beans that the school provided. She also got to have milk. The teachers did a lesson on how to clean water and make milk out of powdered milk. By the end of the day Maria knew how to make a glass of milk. She is going to be sure to tell her mom to get powdered milk at the market. Imagine!

Infrastructure

The United States could send down a group of people to help teach the Haitians to fix their roads. This could be either a governmental or non-profit program. A group of workers or volunteers could go down to Haiti and teach Haitians how to fix and reconstruct roads. The Haitians can then teach their people. Later when or if a major climate event ever happens again the Haitian government can hire the people to fix the roads for pay. This income would benefit families. If the roads were fixed, people would have more ways to get different foods and items to the market. Broken roads also prevent imports from coming into the rural areas.

Imagine the rural farmers having good roads on which they can export their bananas, coffee beans, and sugar to the market. When the farmers arrive at market they could trade their foods and get different items like medicine, phones, food or cloth. They would take these items back to rural areas and families. Once back at their homes the families could use simple cell phones they buy to contact family members. They can use medicine they buy to stay healthy. The food they bring back from market can add variety and broaden nutrition.

Things that are imagined become real when funded. Utilizing taxes is an option. It's hard to set up a simple and fair tax system. It's hard to calculate because many of the people in Haiti work in agriculture. Their pay isn't regular and it isn't always the same amount. Many are paid in cash, so it doesn't have to be recorded in the books. Haiti and many other developing countries have an informal structure when it comes to taxes so that makes it difficult to create statistics. This makes all the incomes different. When this happens the rich are taxed more heavily than the poor, but in Haiti pretty much everyone is poor so they haven't reached this point of distributing taxes.

Because of this, determining the tax level in a developing country is difficult. Work needs to be done in this area. Government spending and national income are two factors required in determining what to collect. However, with limited statistics and information it is challenging.

There is much controversy on consumption tax and income tax. Consumption tax is tax on things consumed or purchased. Income tax is tax on money you make. Fairness of the tax and well-being of the people being taxed are the issues of controversy. For example, consumption tax on rice would make it more difficult for a poor person to pay for the rice than a rich person. This scenario is referred to as a regressive tax. The overall well-being of a poor person is decreased by the tax (Vito). Taxes, the usual way to increase funding for infrastructure, may not work.

Clean Water

Lastly, having clean water is essential. If people drink water that is infected with disease they will most likely die or be sick for long periods of time. Haiti has an ongoing issue with not having clean water. A system needs to be established to prevent Haitians from drinking bad water. People need to be educated about the benefits of clean water. They need to purchase and install water purification systems. Most of them don't have running water so this wouldn't be ideal. These people need to get chemical disinfectants that make the water safe. This is for small portions of water. Chemical disinfectant, like water purification tablets, are just tablets put in water to clean it enough to drink. The water purification tablets release chlorine into the water to kill most pathogens.

This process is very similar to many municipal plant treatments in rural United States. Municipal plants are typically city operated. In rural areas they can be cooperative and owned by lots of people. So what's so good about that? When people own things together they contribute time and money into making things work. People are very self-motivated and have self interest in the process. People check the waters every day and they have to be licensed. The licenses could be completed with school or through a study program. This could be provided by the government or nonprofit organizations. People in rural Iowa actually have used water purification tablets similar to what is being described so they can have clean water for drinking and cooking. This would work for Haiti and its rural populations.

The University of Virginia has developed one example of this that works. They came up with the Madidrop which is a water purification tablet. The tablet is injected with copper or silver nanoparticles. This tablet can clean and can disinfect water for up to six months by simply sitting where water is poured. The University of Virginia has set up a factory for making these tablets in South Africa. In the future the factory will be able to produce and sell around 1,000 water tablets a month. If we could get a factory started in Haiti this would provide jobs for the jobless. If people would start using the tablets they would have fewer deaths due to unsanitary drinking water (University of Virginia).

Even though there are ideas like these, nothing in Haiti seems to be getting better. Children are still malnourished. Some hopeful solutions to the problem include education, repaired infrastructure and access to clean drinking water. With this new education system, children could learn how to grow and produce food. The government could hire people to repair roads and pay them. Better roads also mean that people could reach the market. Simple water purification systems would result in clean waters. All of these solutions are related and dependent. Education helps people know how important clean water is. Good roads help get people get crops to market. Educational opportunities are vital for learning to grown crops. These solutions can help. Imagine!

Bibliography

- Ayoya, Mohamed Ag, et al. "Child Malnutrition in Haiti: Progress despite Disasters." *Global Health, Science and Practice*, Global Health: Science and Practice, 14 Nov. 2013, www.ncbi.nlm.nih.gov/pmc/articles/. Accessed 10 February 2020.
- "Haiti - Agricultural Land (% Of Land Area)." *Haiti - Agricultural Land (% Of Land Area) - 1961-2016 Data | 2020 Forecast*, tradingeconomics.com/haiti/agricultural-land-percent-of-land-area-wb-data.html. Accessed 04 February 2020.

“Haiti.” Countries and Their Cultures, www.everyculture.com/Ge-It/Haiti.html. Accessed 04 February 2020.

“Haiti.” *Countries and Their Cultures*, www.everyculture.com/Ge-It/Haiti.html.
Culture of Haiti - History, People, Clothing,
Traditions.<https://www.everyculture.com/Ge-It/Haiti.html>.
Accessed 10 February 2020.

"Haiti: Diet." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Diet&snid=13. Accessed 04 February 2020.

"Haiti: Eating." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=Haiti&sname=Eating&snid=10. Accessed 10 February 2020.

"Haiti: Economy." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Economy&snid=19. Accessed 04 February 2020.

"Haiti: Education." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=Haiti&sname=Education&snid=21. Accessed 10 February 2020.

"Haiti: Family." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Family&snid=11. Accessed 04 February 2020.

"Haiti: Government." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Government&snid=18. Accessed 04 February 2020.

"Haiti: Health." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=Haiti&sname=Health&snid=21. Accessed 10 February 2020.

"Haiti: Housing." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Housing&snid=27. Accessed 04 February 2020.

“Haiti: Nutrition Profile.” *US Aid From the American People*, US Aid From the American People, Feb. 2018,

www.usaid.gov/sites/default/files/documents/1864/Haiti-Nutrition-Profile-Mar2018-508.pdf.
Accessed 10 February 2020.

"Haiti: Population." *CultureGrams Online Edition*, ProQuest, 2020,
online.culturegrams.com/world/world_country_sections.php?cid=69&cn=&sname=Population&snid=3. Accessed 04 February 2020.

Hunger in Haiti: Ten Years After Catastrophe Struck, a New Crisis Looms
Jessica Obert.

<https://www.thenewhumanitarian.org/news-feature/2020/1/13/Haiti-insecurity-famine-malnutrition-health-aid-displacement-protests>. Accessed 10 February 2020.

Living Conditions in Haiti's Capital Improve, but Rural Communities Remain Very Poor.

<https://www.worldbank.org/en/news/feature/2014/07/11/while-living-conditions-in-port-au-prince-are-improving-haiti-countryside-remains-very-poor>. Accessed 10 February 2020.

"Malnutrition Statistics." *Meds & Food for Kids*, 23 Apr. 2015, mfkhaiti.org/malnutrition-stats/
"Haiti Nutrition Profile." Global Nutrition Report, 23 Mar. 2020,
globalnutritionreport.org/resources/nutrition-profiles/latin-america-and-caribbean/caribbean/haiti/

"Malnutrition Statistics in Haiti." *Meds & Food for Kids*, Meds & Food for Kids, 2020, "Malnutrition Statistics." *Meds & Food for Kids*, 23 Apr. 2015, mfkhaiti.org/malnutrition-stats/. Accessed 10 February 2020.

Sturcke, James. "Haiti Earthquake: Survivors' Stories." *The Guardian*, Guardian News and Media, 14 Jan. 2010, www.theguardian.com/world/2010/jan/14/haiti-earthquake-survivors. Accessed April 4, 2020.

Tanzi, Vito and Zee, Howell. "Tax Policy for Developing Countries." International monetary fund. Mar. 2001, <https://www.imf.org/external/pubs/ft/issues/issues27/>. Accessed July 14, 2020.

University of Virginia. "Innovative water purification tablet for developing world." ScienceDaily. ScienceDaily, 8 February 2013. <www.sciencedaily.com/releases/2013/02/130208105307.htm>.

"World Hunger Facts & Quotes." *Rise Against Hunger*,
www.riseagaisthunger.org/understanding-hunger/world-hunger-facts/. Accessed April 4, 2020.