

Amina Thompson
Marian High School
Bloomfield Hills, MI
Haiti, Malnutrition

Haiti: Immediate Solutions and Long-Term Plans to Eradicate Malnutrition

Introduction:

As a dual citizen of the Bahamas and the United States, I spend my summers usually in the Bahamas. During my time there I noticed a large population of Haitian immigrants. I wondered what their stories were. What led them to risk their lives to travel on dinghies to another country? Could it be that their basic needs were not being met? These questions lead me to research Haiti and its state of malnutrition. Haiti has the lowest healthy life expectancy rate in the world with a large percentage of deaths contributed to malnutrition. A “silent emergency”, in the Caribbean and Latin America, Haiti is leading rates of childhood underweight and wasting (Ayoya, “Child Malnutrition”). This paper will examine the current status of life in Haiti as it pertains to malnutrition. Additionally, it will give immediate and long-term solutions to help crush malnutrition in Haiti. This problem is solvable and can be addressed immediately through breastfeeding education, deworming and micronutrient supplements. In the long term more support for sustainable agriculture practices can assist in eradicating the problem. A long-term plan for reforestation and incorporating shade grown coffee practices can assist in eradicating the malnutrition problem at the root. These solutions will aid in combating malnutrition, raise the country’s level of sustainability and create a higher level of economic security.

Background:

Haiti is a Caribbean country that makes up about a third of the island of Hispaniola and it is surrounded by the Caribbean Sea and the North Atlantic Ocean (Ferguson, “Haiti”; “GLA Haiti”). The population of Haiti is 10.85 million people. In Haiti 40.2% of people live in the rural areas and 59.7% live in urban places such as Port au Prince, which is the capital of Haiti (Trading Economics, “Haiti- Economic Indicators”). The governmental system in Haiti is a Semi-presidential Republic system that utilizes a President and a Prime Minister (World Atlas, “North America”).

Right now, two fifths of Haitian land is currently cultivated because agriculture is the largest sector of the Haitian economy. Most of the crops grown are cassava, plantains, bananas, corn, yams, and rice. The major exports from Haiti include Arabica coffee and sugar cane. The average farm size in Haiti is 2.5 acres or 1 hectare, this is about the size of two and a half football fields. The climate of Haiti is typical of a Caribbean island, warm, humid, and tropical. Diets in Haiti usually consist of beans, rice, sweet potatoes, bananas, corns, cassava, and taro (Ferguson, “Haiti”).

According to Emily Iddings, “Haiti has a rich history full of vivid beauty and heart-breaking tragedy” (Iddings, “5 Important Aspects”). Creole is the most common language in Haiti while 2% to 5% speak French. Religion plays a large role in Haitian culture, 80% of Haitians are Catholic and 20% are Protestant, though Vodou is heavily practiced along with these religions (“Tip Sheet”). In Haitian culture family is valued above all and children are considered “gifts from God”. The family unit relies on extended family to work together to survive and usually put the children’s needs above everything else, including their own survival (Iddings, “5 Important Aspects”). Families in poverty in urban areas in Haiti often have a difficult time reaching food and clean water. Aside from the traditional crops that are usually found in Haiti, street food is a common income source and food abundant in the urban streets of Haiti. An average household in Haiti has 3.14 people who live in two-room houses with mud walls and corrugated metal roofs. The average income in Haiti is 350 to 405 dollars a year with the most common professions being fishermen, teachers, shopkeepers, vendors, and farmers (Ferguson, “Haiti”).

Challenges and Impact:

“Beyond the mountains are more mountains” is an old Haitian proverb that refers landscape of the Haiti but also to the daily struggles of their people that “beyond current problems lie others” (“Tip Sheet”). As the poorest nation in western hemisphere, life in Haiti is difficult for Haitians who are underprivileged because they have to deal with the consequences of unemployment and unsanitary environmental conditions (“Tip Sheet”). While this is sometimes caused by natural disasters, the major underlying reason is “the huge wealth gap between the impoverished creole speaking black majority and the French speaking minority, 1% whom own nearly half of the nation’s wealth” (“Haiti Country”). The major barriers families face are sanitation, clean water access, disease outbreaks, educational access, and unemployment. These often result in a malnourished population and even death. Poverty often makes it difficult to access clean water. Alarmingly only 55.2% of Haitians have access to improved water source. Moreover, close to 70% cannot access potable water. This leads Haitians to collecting water from 'garbage-filled' rivers to provide their families with their basic needs, including cooking, bathing and drinking. Unfortunately, natural disasters such as earthquakes and hurricanes add to the water sanitation problem. In Haiti, water borne illnesses are a leading cause of death and complications (The Haiti Project, “Water in Crisis”).

Due to Haiti being a poor country, 80% of Haitians are in poverty and cannot afford health care (Ferguson, “Haiti”). Accessing hospital-based treatment is especially hard for families living in remote villages. Getting to the location, food, medical supplies and missing work requires several months’ wages, even if the medical services are free. However, there are many organizations that take the initiative to provide health care to those who could not otherwise afford it. In particular, Mennonite Central Committee (MCC) and Partners in Health. They do this by partnering with other local organizations to ensure that are reaching those most in need (Fast, “They Were”; Perera, “Treating Malnutrition”).

Moreover, the majority of Haitians lack access to a quality education because the government does not address this problem with a sense of urgency. The Haitian government provides minimal oversight to local school with more than 85% of the primary schools being managed by non-governmental organization, church or other private entities. Also, there is a lack of qualified teachers, with half of the public teachers not meeting basic qualification and 80% lacking in pre-service training. This results in poor literacy rates as only 61% of the adult population is literate (U.S. Agency, “Education Haiti”).

Haitian poverty has also resulted in a malnourished population which is one of the most urgent problems. Malnutrition in Haiti is in a very severe state with Haiti having the highest rates of child malnutrition in the Caribbean. In Haiti, 1 in every 3 children under 5 are stunted in the growth area and 2 in 10 children in Haiti are under weight. These numbers are supported by the fact that Haiti has the world’s lowest health rate with a high burden of disease. This problem is also worsened with many Haitians not having access to clean water or health care (Ayoya, “Child Malnutrition”). Dr. Perera a clinical fellow volunteering in Haiti, recalls facing a child with “gaunt eyes, sunken into their sockets; with cheeks, ribs, arms, hips, legs all melt away into boney prominences” and states that “the tragedy with malnutrition is not only a disease that senselessly kills, but it also denies countless little ones the opportunity to reach their full potential” (Perera, “Treating Malnutrition”).

Malnutrition is an unproportioned ratio between the nutrients your body gets versus the ones it needs. Malnutrition covers a whole spectrum of poor nutrition, but undernutrition is the most common globally and in Haiti. Symptoms of malnutrition include being under weight, protruding bones, dry skin, and brittle falling out hair. One type of malnutrition is protein energy undernutrition. Protein energy undernutrition is a deficiency of protein and calories for a long period of time. This type of undernutrition

is common in children in developing countries and it contributes to death in more than half of children that suffer from undernutrition (Morley, “Undernutrition”).

In Haiti, protein energy undernutrition is the most common of malnutrition. There are two types of protein energy undernutrition, marasmus and kwashiorkor. Marasmus is a severe deficiency of calories and protein and it happens commonly in infants and young children. Marasmus, like most types of under nutrition results in weight loss, loss of muscle fat, and dehydration. The most effective way to prevent and combat marasmus is breastfeeding. In Haiti parents sometimes take their children off the breast at too early of an age, or do not have the time to breastfeed frequently. This results in Kwashiorkor is a severe deficiency of protein more than calories. This type of protein energy malnutrition is less common than marasmus. Kwashiorkor is an African word that means “first child second child” because it usually develops to the first child when the second child replaces it at that the other’s breast, which means that most whom develop this condition are older. The children who develop this condition are usually only fed foods with a significant amount of carbs and calories but no protein. Some of these foods include yams, cassava, rice, sweet, potatoes, and green bananas. Many of these foods are very common in Haiti which can explain its prominence. Aside from protein energy undernutrition, starvation is the most severe type of undernutrition that results from a total lack of essential nutrients for an extended period (Morley “Undernutrition”).

Solutions and Recommendations:

The present severity of this issue in Haiti calls for some short-term solutions to keep it under control. Some suggestions to solve this problem include breast feeding education, deworming, and micronutrient supplements. Educating the community, especially mothers about the importance of breastfeeding over an extended period will aid in the prevention of malnutrition. Especially since protein energy undernutrition such as marasmus and kwashiorkor can be prevented and or treated by breastfeeding. This proved effective when after the earthquake in 2010, the Haitian government along with the United Nations Children Fund and other local and international organizations created baby tents for mothers to safely breastfeed and for non-breastfed babies to get ready-to-use formula. The goal of the program was to “promote and sustain optimal feeding practices while reducing health risk associated with unregulated use of formula” (Ayoya, “Protecting”).

According to Ayoya, the baby tent program provided registration and evaluation of mother and child health, one on one nutritional counseling for pregnant and breastfeeding women, counseling to caretakers on ready to use infant formula, infant growth monitoring and group education session on nutrition and home visits. A total of 193 tents were built, 70% of participants under the age of 6 months were exclusively breastfeed. Additionally, of those who reported mixed feeding in the beginning, 10% moved to only breastfeeding. The lessons learned from this project included: 1) education of infant and young child feeding practices need to occur before a disaster occurs; 2) clear and adaptable infant feeding guidelines needs to be established for emergencies; 3) and involvement of community leaders and care givers is vital to the success of any such programs (Ayoya, “Protecting”; Ayoya, “Child Malnutrition”).

Another short-term solution is deworming. According to Rad Hazelip, Assistant Executive Director at Love a Child Haiti “deworming is at the foundation of being able to help the malnourished people recover unless you rid their bodies of the parasites first, no amount of nutritious food you provide them will help”(Pace, “One Simple Pill”). Deworming is the preventing and or removal of parasitic worms, and it is most commonly done in children. Malnutrition can be caused by worms in contaminated water, to which some Haitians only have access. Depending on the type, parasitic worms can suck all the nutrients out of a person’s system resulting in malnutrition. Deworming also prevents intestinal infections, which can be the result of worms or the possible fatality that comes with the neglecting of treatment (Global Alliance, “Five Ways”). Creating a deworming program in the school system would most effective as school age children have the highest intensity of worm infection and it is the most cost-effective way to administer

pills regularly. With just two single dose pills approximately once a year for a cost of approximately US\$0.02 for albendazole and US\$0.20 for praziquantel, the program can assist in solving an immediate problem. In groups of 40-50 teachers can be trained in less than one day to understand the benefits, administer and keep records of the deworming drugs. Additionally, the community and parents should be informed on the benefits and expectations. Treating school age children has the potential of reduce intestinal worm infection by 70% in the community. Based on the cost, positive outcomes deworming in the school can not only improve children weight and health but also improve school attendance. Funding for these programs can come from the World Bank in partnership with nongovernmental organization like Deworm the World (Muralidharan, “Deworming”; “School Deworming”).

Another solution is micronutrient supplementation, which has already been shown to work in Haiti as it has contributed to the decline in malnutrition rates. Micronutrient supplementation treats and prevents malnutrition. Micronutrient supplements could possibly reduce micronutrient deficiencies by 20% to 30%. It is most commonly done with an oral supplement of Vitamin A, which is given because it can replace some the nutrients in breast milk (Global Alliance, “Five Ways”; Ayoya, “Child Malnutrition”). Right now, vitamin A supplements are being given to children by outside organizations such as Nutrition International that works in collaboration with the World Food Program-Haiti. One of their programs, Micronutrients for Every Meal Initiative has supplies 110,000 pre and primary school children lunch with extra vitamins and minerals (Nutrition International, “Haiti”).

Though this problem can be controlled with a series of steps for the short term, it would not be cost effective to continue controlling the problem instead of eradicating it. Child malnutrition and wasting can be significantly reduced or even almost entirely defeated by educating the population of Haiti on sustainable ways of agriculture such as reforestation and shade grown coffee. Agriculture is Haiti’s largest sector of economy, but it has been declining because of Haiti’s high rate of natural disasters and coal usage. It is estimated by the United Nations that 30% of the nation’s remaining trees will be destroyed every year. That is alarming, as 98% of Haiti forest has already disappeared.

These natural disasters, such as hurricanes, have had a worsening effect because of Haiti's deforestation problems. Trees act as sponges for water and a shield for flooding, which would explain why without them hurricanes have an increasing effect on Haiti’s agriculture. Trees also absorb CO₂, which would help with climate change. A reforestation project in Haiti will decrease the occurrence of natural disasters and their effects, therefore increasing Haiti's economy and decreasing malnutrition (USAID, “Haiti”; Eden Reforestation, “Haiti”). According to the Eden Reforestation project “as people lift their environment they also lift themselves out of extreme poverty;” reforestation will give Haitians a chance to see “soil restored again, see water restored, aquifers refilled, and the streams, rivers, and springs begin to flow again.” For about 0.10 to 0.35 cents a tree, including labor, transportation and maintenance, this is currently being done in Haiti by the Eden Reforestation Projects. They employ local villagers and to date 759,809 trees have been planted in Haiti and 7,598 workdays have been created (Eden Reforestation, “Haiti”). Projects like this can occur all over the land of Haiti and with the help of partnerships with Universities , nongovernmental organizations and having wealthier countries with a large carbon output displace their carbon in Haiti, the reforestation efforts can set Haiti on a new path for generations to come.

Finally, the government could set up programs to teach citizens of Haiti about sustainable ways of agriculture and how to plant crops that are acclimated to the climate, in particular shade grown coffee. Growing coffee in Haiti is a part of its fabric, like a religion, skills and land plots are passed down through the generations. Haitians drink more coffee per capita than any other third world country, which is why it is important to grow it in a way that benefits the country economically and ecologically (Topeca Coffee, “First Taste”). A typical coffee farm cuts down many trees have higher yields, however shade grown coffee upholds it canopy trees and outperforms traditional method in measurements of sustainability. Repeated studies have shown, shade grown coffee “increased the numbers and species of

birds, improve bird habitat, soil protection/erosion control, carbon sequestration, natural pest control and improved pollination” (Smithsonian National Zoo, “Ecological Benefits”). Thus, benefiting the land, the economy and the health of the Haitian people.

Conclusion:

This paper described one of the most pressing problems in Haiti: malnutrition. This problem is a result of economic instability, lack of proper education, deforestation, water scarcity and natural disasters. Its impact on the population has been drastic resulting in extreme poverty and malnutrition. Though Haiti has made great strides in short terms solutions such as breastfeeding education, deworming programs, and micronutrient supplements, more focus is needed on long term solutions. These programs include education on sustainable agriculture, specifically reforestation and shade grown coffee. While all the solutions offered can lead to the eradication of malnutrition, another suggestion for further study is the utilization of technology, specifically the use telemedicine in remote areas. Although this recommendation was not listed previously in the paper it can be used enhance the recommendations already offered. The integration of this type of technology will allow those living in rural hard to reach areas to have access without cost to quality medical care and therefore requires further investigation.

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