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Haiti, Factor 6: Sustainable Agriculture

Haiti: Sustainable Agriculture to Rebuild a Nation and Supply Food For Future Generations

Haiti is a diverse country with a mixture of African and European Elements due to its French colonization. Eccentric art, a vibrant festival scene, and beautiful dances are just part of a rich Haitian culture. Despite being a nation that has been established for well over 100 years, the country still struggles in establishing a reliable government. Haiti has a generally hot and humid tropical climate. The north wind brings fog and drizzle, which interrupt Haiti's dry season from November to January. But during February through May, the weather is very wet. Corruption within the government, reliance on foreign aid, and a lack of infrastructure prevents the nation of Haiti from rebuilding their country. Sustainable Agriculture offers an alternative solution that can help Haiti reinvigorate its economy and stabilize its government.

Haiti is ranked the poorest country in the Western Hemisphere (Rural Poverty in Haiti). This can be directly linked to natural disasters that cause devastation to the Haitian economy and political infrastructure. Although agriculture makes up a large percentage of their economy, the lack of these resources keeps Haiti from producing enough food to sustain its people. Because the Haitian family relies so much on the help of their children at home, many do not finish school, and 50% of children do not even attend school (Haiti Statistics). Those who do attend schools are mostly boys, but 60% of those students will drop out before sixth grade (Haiti Statistics). The typical family will pull their kids out of school because they don't realize the value of education and look to their children for help around the house. The boys will work out in the family garden with their father, helping to grow food in an attempt to feed his family. Once a boy has become too old, he will either be kicked out of the house or leave his home, often times in search for education. However this commonly ends in a wandering phase; the boy will have nothing to do. Idleness leads to destructive behavior, and a jobless uneducated young man will increase his troubles by fathering a child, the cycle of poverty continues (Andy Stump). A young girl's life is different than that of a young boy, but will usually end up in the same place. Girls, if they attend school, are pulled out even earlier than boys are. A girl will stay inside with her mother to help around the house. Cleaning, cooking, and washing clothes will be the weekly routine for a young Haitian girl. As in a majority of developing countries, women are not given as much freedom as men; this is no different in Haiti. Women are not expected to excel in sports or education. The plight of women in Haiti is a difficult one, they do not seek a man who cares about them, but rather their main focus is financial status (Andy Stump).

A lack of domestic healthcare is the cause of many deaths in Haiti. While free health clinics do exist, many of them are funded by organizations from outside of Haiti, as the Haitian "government" does not have the resources to devote to healthcare. Despite these free health clinics, 76% of births occur at home (Emily Follo). This is due in part to the distance of travel of some of these health clinics. These at-home births leave both the mother and baby at risk of sickness due to low sanitary locations. In the case that a family or individual is able to get medical help via prescriptions, these drugs are often rendered useless as the lack of food keeps the drug from being effective in the body. Once again the lack of food security

creates setbacks for the Haitian people, as Partners In Health point out “Pervasive food insecurity is the most common underlying factor for poor health in the populations served by Partners In Health”.

Despite the massive food insecurity throughout Haiti, their agriculture sector has a promising future, although not without severe challenges. A large majority of Haiti’s food supply is domestically grown: fifty percent. For most families, their food comes from their own garden as land used for family farming covers 89% of Haiti’s total area (FAO.org). The typical crops grown on these small farms are cane sugar, cassava, maize and yam. Also, a typical Haitian diet may contain “mud cookies”. Mud cookies consist of dirt, butter, and salt. Mud Cookies are eaten because nothing else is available to the people of Haiti. Although these Haitian families barely produce enough to feed themselves, by using new technologies and learning new farming practices the potential yield of these small farms can increase significantly. The lack of modern farming tools, technology, and practice all contribute to the low agriculture sustainability throughout Haiti. If a Haitian family cannot get food from their own garden then they will bargain with other farmers to get what they need. Other countries, like the United States, often sell a product to Haitian people that can put a Haitian farmer out of business. The Haitian farmer is no longer able to compete against a product that was grown using modern technology and practices. This only causes further problems for the people of Haiti.

Lack of infrastructure and lack of adequate technology are the primary causes for the food insecurity in Haiti. Haiti’s poor financial status enables the government to allow funding to teach farmers modern agriculture practices as well as give them the appropriate technology to get the most out of their lands. This causes the farmer not to produce enough food to sell, bringing down the economy, thus not supplying the government any money to rebuild infrastructure. It’s this vicious cycle in Haiti that causes food insecurity to be so high.

In terms of infrastructure, Haiti has been plagued with reoccurring natural disasters. The last major disaster was an earthquake in 2010; the quake registered a 7.0 on the rector scale and killed over 200,000 people (Latest Posts). This earthquake destroyed an already fragile Haitian government. As of 2013, 350,000 displaced Haitians still live in squalid tent camps (Tim Padgett). Without proper buildings like homes, schools, and stores it can be hard for a farmer to decide where to take his product. Even more of a challenge can be transporting that crop, as the roads in Haiti are few and far in-between. Poor road conditions have had disastrous effects on farmers, who face serious problems in taking their goods to markets and towns (Haiti).

In terms of farming technology, almost all Haitian farmers use outdated practices that deplete the potential of their farms. Crops are cultivated with simple hand tools; the plow or animal power is only rarely employed, except on sugarcane plantations (Haiti). Practices in the United States such as GMOs, Drip Irrigation, and precision agriculture could all significantly increase food security in Haiti. But the lack of access, knowledge, and money all render these practices untouchable.

The immediate response from other “super power” countries following the 2010 earthquake was to implement foreign aid. Aid from all around the world came pouring in, but much of that aid didn’t stop until 2013. In this three year time span Haiti grew to be dependent on foreign aid. Foreign Aid is meant to help a country for a limited time by supplying food, health needs, and giving citizens the tools and ideas to make their country grow again. It can be strongly argued that much of the Foreign aid only contributed to Haiti continuing poverty. To begin, the aid was issued much longer than it should have been. These

countries failed in the aid aspect of “limited time”. “Also many of these countries attempted large scale projects before addressing basic needs. In their \$10 billion quest to “build it back better,” foreign donor countries, including the U.S., often got ahead of themselves by shooting for larger-scale projects like economic decentralization before they made sure that more basic and urgent needs like new housing were checked off” (Tim Padgett). What these countries should have been focusing on is the Agriculture sector and more specifically how to provide suitable agriculture practices to Haitian farmers.

Sustainable agriculture is the production of food, fiber, or other plant or animal products using farming techniques that protect the environment, public health, human communities, and animal welfare (Sustainable Agriculture). More importantly sustainable agriculture allows future generations to produce the same amount or more food. With sustainable agriculture, a farm is able to produce food and continue to produce food with higher yields and less impact on the environment. Sustainable agriculture practices include Crop Rotation, Drip Irrigation, Cover Crops, Soil Enrichment, GMOs, and Precision Agriculture.

As of now, very little sustainable agriculture is being practiced in Haiti. As mentioned earlier, farms in Haiti rely on old technology in order to produce food. This means simple tools such as a hoe, rake, and machete are the only tools used. The farmer’s lack of knowledge on how to take care of the soil and how to manage their supplies correctly and the lack of sustainable agriculture in Haiti have led to a degrading environment, low food distribution, and an overall scarcity of food. Sustainable Agriculture has been on the rise in Haiti since 2010. Much of a Haitian’s diet relies on fish, their main source of protein. Since 2010 the use of Aquaculture has been expanding and villages learn to harvest fish for food. Food for the Poor, for example, has constructed 40 tilapia ponds, further expanding the fish stocks in Haiti (Sustainable Agriculture In Haiti). Sustainable agriculture practices can be used by all people, no matter the gender or social class. In a country where 21% of land used for family farming is managed by women (FAO.org), this means no one is at a disadvantage.

Sustainable agriculture can increase the amount of food that a plot of land can produce. Due to these higher yields a farmer has more food to feed his family and more food to sell at a market. This only puts more money in the hands of a Haitian farmer that he can use to support his family. Sustainable agriculture also offers benefits to an already overused Haitian environment. With a strong history of the land being exploited by the French, Haiti has suffered from deforestation and natural disasters making its land far more depleted than most (Emily Follo). Practices such as Crop Rotation and Cover Crops allow soil to regain important nutrients and help avoid soil erosion, thus helping the environment. With more small farms practicing sustainable agriculture more food will be available for families and markets. Food availability and the distribution of food will increase because more people going to markets and buying food. This will lead to economic growth. Also, when enough food is available more people will become specialist in a field other than agriculture, thus stimulating the economy.

With Haiti having a past filled with natural disasters devastating the country, it is even more important for the country to practice sustainable agriculture. Although a farm practicing sustainable agriculture can be destroyed, the practice of sustainable agriculture cannot be destroyed. This means that even after another disaster occurs in Haiti, a farmer can still use sustainable agriculture to improve their situation and help rebuild the country. Sustainable Agriculture can also help feed a growing Haitian population, as these practices are meant to provide more food than traditional farming techniques. Water Scarcity is also combated by sustainable agriculture, as it uses techniques such as drip irrigation to minimize the water

used in the fields. Urbanization is not a factor of concern for sustainable agriculture as it relates to food security in Haiti. If Haiti ever reaches a point of rapid urbanization growth, the sustainable agriculture practices can still be used. Sustainable agriculture includes the practice of urban agriculture, the growing of plants and raising of animals in or around cities.

It is important to realize that the solution to some of Haiti's problems, sustainable agriculture practices, is a solution that will take time. As noted earlier, when other countries think of helping Haiti they get caught up in having an immediate impact. When searching for solutions to help Haiti we can't make the same mistake. An immediate impact can be impossible to come by or an unrealistic dream. Rather, focusing on solutions that in time impact Haiti's economy positively and offers the country and its people long lasting solutions is what needs to be strived for. This means taking time to build research centers in rural Haiti to learn more about the environment, the soil, whether conditions and patterns, and even cultural practices. USAID has a program set up that helps Haitian farmers learn sustainable agriculture but as far as research centers go, a large notable one does not exist. These research facilities offer Americans to experiment with what works best for Haiti, and allows Haitian Farmers a place to go and receive information to help their farms. Only after these research centers are set up can programs be assembled to go reach farmers and teach them sustainable agricultural practices. These programs would include visiting farmers and giving them access to new technology and new practices. It is also important for the Haitian Government to help with these programs that visit farmers in order to properly secure the knowledge themselves and help pass on the information. The Haitian Government's role is to eventually take over these programs and still put them to action. Working with Aid organizations, Universities, the USDA, and the National Government on some level would be required. This plan does involve patience and time, but if one truly wants to help out the nation of Haiti then patience is a required asset. It is better to have a solution that will help over time than to have a plan that doesn't help at all.

Haitian farmers like Lionel Saint-Lot, who still uses a machete to cultivate his crops in Léogâne, west of Port-au-Prince, say "they're still waiting for a meaningful government project" (Tim Padgett). Aid that came to the Haitian people via their own government or outside countries often failed in providing for their basic needs, when rebuilding a country agriculture should be the main cornerstone in which your government will be built. The beginning of the civilization of humans dating back thousands of years ago was built on agriculture. Thus it is only plausible that when aid is needed for a country, agriculture should be the first thing that is tended to. It should not be the focus of other countries providing aid to just give free food or food at a competitive price, as proven that over time this hurts the country more than it helps it. Aid should be centered on developing the agriculture industry in a country of need. This means teaching Haitian farmers sustainable agriculture practices by visiting their farms and showing them modern farming techniques. Because the principle behind foreign aid is to help for a limited time, aid should also be centered on working with the developing countries government in order to create programs that hand the responsibility over to the Haitian government over time to teach sustainable agriculture. Organizations like the United Nations and the World Bank, among others need to focus their energy towards giving farmers knowledge about sustainable agriculture. Yes, an immediate food supply is important, but an immediate food supply is not built to last forever. Sustainable agriculture gives farmers the ability to produce food for themselves and for generations to come.

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