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Major Issues in Haiti and Solutions for Providing Food Security for Haitians by Establishing a Sustainable Agriculture System

Introduction

Long ago, a beautiful land filled with vegetation laid in the center of the Caribbean. The area, known as Hispaniola, was inhabited by the Taino Arawak Indians. The land was rich with resources for a plentiful life for the Indians. Sadly, this peaceful island was disrupted and took turn for the worst at the arrival of the Europeans. On December 6, 1492, Columbus and his men arrived on Hispaniola. The Europeans brought diseases such as smallpox that the natives were not immune to. Eventually, the Arawaks were nonexistent. Today this western area of Hispaniola is known as Haiti (“Pre-Columbian Hispaniola – Arawak/Taino Native American”).

The country of Haiti is about 27,750 square kilometers, which is about the same size of Massachusetts. Most of the country’s natural beauty has faded away due to the economic tragedy that is engulfing this area. Today, the population of Haiti is about 8,300,000 people, with a growth rate of about 1.39% per year. With an estimated amount of 270 persons per square kilometer, Haiti is one of the most densely populated countries in the world. The country’s economic struggle has caused Haiti to lack many basic needs for survival. Most Haitian families are starving because of exceedingly or overpopulated areas, very scarce resources, and low crop production. Subsistence crop production, the means of survival for most of the natives, is scarce because of the mountainous country. Mountainous land causes poor drainage and flooding in the cropland. Consequently, crops drown and die due to excessive water. Since the 1980s only 11.3 percent of soil was highly sustainable for crops. With such a small amount of farmland the country has a shortage of food. (Haiti – Land Use and Farming Technology). Because land shortage and overpopulation, many Haitians have tried to move to neighboring counties, such as the Dominican Republic (the eastern part of the Island) or even the United States. Today the country faces severe agricultural stagnation, acute environmental degradation and widespread poverty (“Background Note: Haiti”).

Poverty is a major economic setback for Haiti. Most Haitian families live under pitiable conditions with few material comforts. The average family has a minimum of five members and live in shacks made from sticks and woven plant material. Most Haitian homes have roofs made of corrugated sheet metal or straw, and approximately 40% of the homes have earthen floors. These small structures have two to three rooms and one to two bedrooms. Residents usually have no windows and a plain doorway with no door. The small shacks are partly due to the employment and low income of many Haitian families. Most Haitians live on \$1 a day, and two-thirds of Haitian workers are unemployed. As a result, many are forced to live under these harsh conditions. In spite of that, Haitians are hard-working people; eager to make the best of the limited resources they have (“Haiti”).

Haiti’s quality planting material, production and marketing skills are lacking. According to the Organization for the Rehabilitation of the Environment (ORE), numerous reports, including one made by SISA-USAID in 1995, indicate that the Haitian farming system is currently dominated by the production of staple crops such as corn, beans and sorghum, utilizing nearly 80% of the available farmland. Trees occupy a small, rapidly dwindling percentage of land use. Livestock suffer from a lack of adequate, improved forage crop, and free-range grazing techniques contribute to the deterioration of the environment (“Valuable Solutions for the Needy”). Overall, Haiti has a low-income agricultural industry,

with low quantities of land given to tree and crop production. All this is due to the lack of technological and financial support.

Families survive on about 2.5 acres of land and barely raise enough crops to feed the family. Their diet consists of very high starch vegetables such as tomatoes, squash, corn, sweet potatoes, beans, and cassava. The limitation of dietary supplements essential for health is a major issue for the citizens of Haiti. Many children in the rural population are malnourished. Graphic symptoms includes: swollen bellies, scaly skin, and spindly limbs in starving children. The ignorance of health foods and poor capital leads to these severe health issues. The citizens of Haiti need to be educated on crop production and nutrient facts (“A Typical Haitian Home”).

Education is a privilege for all Haitians. Being enrolled in any level of school is a custom that is mostly expected of the upper-class. Citizens of rural areas are rarely enrolled in school, and 80% are likely to drop out. The teaching and learning in Haiti’s schools differ from the systems in the United States. Haitian schools require students to learn subjects in great detail. On a daily basis, students go through a routine learning and memorization process of the required subject. Unlike U.S. students who are require to research and analyze subjects to develop independent learning and study habits. All Haitian school are relatively free. The cost for education comes when the students must pay fees, buy supplies, and uniforms to attend classes. Most rural families make little money, therefore, can’t pay for these requirements (“Education”).

It is a terrible sight to watch a country fall in on itself. As a developing country, Haiti should make an effort to advance technologically and financially. With the limited capital and proper management of the country, Haiti is struggling to make the effort. Private organizations and foreign countries have stepped in to help Haiti make a turn for better days.

This paper is an effort to identify the problems Haitian farmers face as stewards of the land, and to provide some viable solutions to address the concerns. Hopefully, doing so could lead toward the adoption by farmers of sustainable agricultural practices or a sustainable agriculture system that provides food security for Haitians now as well as in the future.

Problems

This island country has many problems leading to a difficult life for many of its citizens. Some of these problems may prevent and possibly discourage the use of sustainable agriculture practices.

Problem 1. Low crop yield and environmental deterioration.

Deprived and undereducated farmers lead to low yields and environmental deterioration. Agriculture is a major part of many Haitian’s income. Unfortunately, agriculture has been compromised by drought and floods in the northeast over the last four years. Poor farming technique is a major reason that Haitians suffers from poverty. Lack of fertile soil, use of improper farming techniques, and the lack of affordable products, interferes with modern farming. Heavy machinery such as tractors, cultivators, and seeders, along with modern irrigation systems are very expensive. Seeing that most Haitian farmers don’t own any heavy equipment, they are forced to rely on primitive methods to raise crops. Farmers’ plant crop seed by hand, cultivate the soil with small tools they can afford, and are forced to rely on the rain fall to irrigate their land (“Soil Erosion”).

Along with poor farming practices, Haiti’s land is suffering due to deforestation. Approximately 3% of Haiti’s once forested country is still covered with trees. Trees hold the soil together and the leaves fallen from trees serve as the organic decomposers that protect top soil from rainfall. Without forestry the land is bare and sensitive to weathering. Deforestation has caused runoff to remain on the soil eroding the

land. This causes soil fertility, mudslides, and reduces water quality. In many areas massive flooding occurs. This makes the roads muddy and destroys rural area homes. Many people have been forced to move into overcrowded cities to stay clear of the flooding (“Erosion”).

Problem 2: Unsuitable Living Conditions and Poor Water Management

While not being able to irrigate crops is one problem, a greater concern is clean water for everyday needs. Citizens are in desperate need for clean water. Clean water is needed for human life, food security, and the health of ecosystems, but isn’t available for most Haitians. This problem is the effect of poor water management. The problem is not that Haiti doesn’t have water; it is that the regulation and filtering of the water is inadequate. Their poor living environment is exacerbated by the absence of water and sanitation services, making it difficult to irrigate the crops they have.

Sewage systems provide for a proper disposal of waste. This will keep waste off the street and from the open air. It also keeps disease and infection from contaminating water resources. Even if a sewage system is available it must be maintained in order to keep it operating properly. Haiti is the perfect example of an area with a sewage system that isn’t maintained and in the need of some updates. Clogged sewers are common in Haiti; clogged sewers cause flooding on the streets. This leaves citizens exposed to unpleasant and unsanitary environments (“Hope for Haiti”).

Problem 3: Poor waste management and health issues.

Without water management, sewer systems, and trash removal systems Haitians are forced to live alongside trash and debris. Trashy environments cause disease to spread amongst the citizens in Haiti. One major health issue is malnutrition. It has affected many rural families’ especially Haitian children. Other disease spreads include: typhoid, tuberculosis, worms, scabies and impetigo. These illnesses are easily prevented through proper treatment. Since most Haitians don’t have much money they can’t afford to receive medical care. With few getting treated for sickness, Haitians’ infection rate continues to increase. In addition to these problems, the country has the second highest AIDS and HIV prevalence of the world. The AID/HIV outbreak caused a collapse in Haiti’s travel industry.

Solutions

Solution 1: Aid from International Organizations to Haiti’s severely low yields.

Haitian farmers are in desperate need of help when it comes to buying supplies to farm. Some farmers can’t even afford the seeds needed to plant crops. To aid farmers in desperation, the United Nations Food and Agriculture Organization (FAO) has started distributing urgently needed seeds and tools to Haiti’s most vulnerable farmers. This donation has allowed farmers to better deal with the rising cost of food, fuel, and fertilizer. This will keep Haitian farmers in the market and able to produce for their families. Even with the generous donation, Haitian farmer continue to practice poor farming techniques (“Haitian farmers receive much-needed seeds and tools from UN agency”).

Improved farming techniques need to be instilled upon the Haitians. Crop rotation, nutrient management, and understanding the basics of field crop production will lead to a big turn around in yield. Currently, an organization called the Makouti Agro Enterprise, locally ran business, is working to provide agricultural services, inputs, and training to Haitian farmers. Their teachings have given rural families insight on how to improve food production for consumption and income. The Partners of the Americas and Global Giving organizations have teamed up with the Makouti projects to keep the strength of the much needed project. (“Haitian Agribusiness Helping Families Produce food in Cap Haitian”). The Ministry of Agriculture is responsible for the agriculture and rural development in Haiti. Laws that regulate the agriculture and rural development are under revision. In order for the country to have proper

waste recycling and sustainable mountain agriculture the Ministry of Environment is working on a system that will promote this. (“Natural Resource Aspects of sustainable Development in Haiti”) There is a need for more governmental organization should step in to help. Help from international organizations is great, but local government aid will bring more attention and concern to the plight of local farmers and the state of Haitian food and security.

Solution 2: An alternative to improve agriculture crop diversity.

New farm crops have been suggested to farmers to offer both economic and environmental benefits and address the dilemma of sustainability. The idea is to improve agriculture crop diversity by promoting the development of fruit trees. Planting mango, avocado, and citrus trees in Haitian communities, will create revenue for the grower, promote the concept of purchasing locally produce, and enhance food security for the Haitians. It will also amplify Haiti’s mango exportation and extend the avocado industry. By planting bamboo, they will have a renewable source of material for construction and crafts. By producing new crops and increasing crop yields, Haiti will be offered production and marketing assistance and farmers may be able to replace subsistence farming with successful commercial agriculture leading to increase food security for Haitians.

In response to this, the ORE has core programs that directly address issues of low-yield crops taking over the farming system and widespread degradation of the environment resulting in poverty. The ORE mission is to “create a shift in production, increasing the amount of land used for high-revenue crops; and secondly, to increase the profitability of staple crops, fruits, spices and vegetables by improved production and marketing...to supply the necessary improved staple crop seeds, help introduce and propagate commercial fruit and spice trees, support vegetable and tuber crop production and promote farmer-marketing programs. Profits from successful fruit, vegetable and tuber crop production increase land use for these crops. By using improved seeds, farmers can produce the same quantity of staple crops.” With the help of many programs, like the ORE, Haiti can obtain better farming methods and retain their economic stability (“Valuable Solutions for the Needy”).

Solution 3: A Path to a Healthier Haiti.

In order for a county to have a healthy society they must have the resources available. Haiti currently has poor drainage that causes limited farmland. Without land to produce crops the country can’t feed itself. This dilemma causes Haiti to be widely dependant on foreign trade. Increase government investment in agriculture, and in an improve infrastructure that provides for clean water, drainage, and proper waste management will contribute to a solution for solving this problem. If Haiti’s Ministry of Agriculture develops a plan that invests in improved farming techniques and agriculture diversification it will increase production. An increase in production will result in an increase in revenue. Capital increase will allow Haiti to provide medical centers and better living conditions. Since Haiti is lacking these features, poor nutrition is a serious crisis in Haiti and with more healthy Haitians the disease spread will begin to slow down.

Conclusion

Sustainable agriculture is important to all countries. It provides a means for foreign trade, food for the country and rich land. Sadly, in developing nations, this isn’t the case. In these areas agriculturalist usually have little or no money, no food for their families, and not much arable land. Haiti is a perfect example of a developing nation that is struggling to develop a strong agricultural community.

United Nations Food and Agriculture Organizations, and the Organization for the Rehabilitation of the Environment (ORE) are just a few of the organizations who have stepped up to aid Haiti’s stressed conditions. They have worked to give Haitians the resources they need. By providing medical care, farming supplies, and agricultural education, this assistance benefited farmers, thus improving the use of the land. Haiti has made some changes for the better; however, with all the help they are receiving they

still are in desperate need for more aid and education to help them develop a sustainable agriculture system. The assistance and aid given has only been a temporary fix. They must build on the assistance (aid and education) they are getting from these organizations. In order for Haiti to become a country with a permanent sustainable agriculture system, there must be revisions in their governments system. This will give families more control over their lives and allow them to better stewards of sustainable agriculture and more knowledgeable about food security. Additionally, non-governmental organizations (NGOs) and United Nations (UN) should assist Haiti to find ways to help themselves. If organizations take this initiative, Haiti can work to improve the fertility of soil, fight disease spread, build a sustainable agricultural system and increase their food security.

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